

ABSTRACT

CODY, CHRISTOPHER ANDREW. Understanding Factors That Influence Charter School Board Roles and Responsibilities. (Under the direction of Dr. RaJade M. Berry-James.)

There are numerous types of nonprofits serving various functions for countless people and employing millions of individuals. However, this dissertation focused on a specific type of nonprofit, charter schools. Charter schools are a growing influence on public education in America with approximately 6,175 charter schools serving nearly 2.3 million students in 42 states and the District of Columbia. Although the number of charter schools is continuously growing in the United States there is limited research examining charter school boards.

This dissertation provided more insight into charter schools' board of directors by better understanding their roles and responsibilities. The dissertation moved beyond prescribed board roles and responsibilities in the literature to understand the actual roles and responsibilities performed by charter school boards.

Based on a better understanding of actual roles and responsibilities performed by charter school boards, this dissertation examined what factors influence boards to perform some roles and responsibilities more frequently than others. Using nonprofit governance frameworks and original survey research, this study examined the relative importance of external environmental conditions, board attributes, and internal organization characteristics in accounting for differences among charter schools in performing board roles and responsibilities.

Based on frameworks from the nonprofit literature (Miller-Millesen, 2003; Ostrower and Stone, 2010), this dissertation tested a governance framework that categorizes charter school board roles and responsibilities based on the theoretical assumptions attached to

monitoring (agency theory), strategizing (stewardship theory), boundary-spanning (resource dependency theory), and conforming (institutional theory) roles and responsibilities. This study's framework examined and expanded on how variables associated with external environmental conditions, board attributes, and internal organizational characteristics influenced charter school boards in performing monitoring, strategizing, boundary-spanning, and conforming roles and responsibilities.

In order to analyze the framework, a national survey of charter school executive directors and principals was designed and conducted for this dissertation. The framework was examined using this study's survey administered to a stratified random sample (based on charter school state laws) of charter schools, drawn from the Center for Education Reform Charter School Database, that were in operation in the 2013-14 school year.

This dissertation's results showed limited variability in what roles and responsibilities charter school boards are performing more frequently than others. However, there were certain board roles and responsibilities being performed more than others. Specifically, charter school board roles and responsibilities associated with the categories of monitoring and strategizing and conforming are more prevalent compared to boundary-spanning roles and responsibilities.

Additionally, this dissertation attempted to identify factors that influenced charter school boards in actively performing some roles and responsibilities more so than others. The study showed that at least one of the variables within each of the categories of external environmental conditions, board attributes, and internal organization characteristics were associated with how actively charter school boards engaged in board roles and responsibilities. Overall, variables associated with board attributes had the strongest

relationship to how actively charter school boards performed their roles and responsibilities. Variables associated with external environmental conditions had almost no relationship to how active charter school boards performed their roles and responsibilities. Variables associated with internal organizational characteristics had some relationship to board roles and responsibilities but these results differed considerably from previous research examining nonprofits. Therefore, the type of nonprofit or the subsector of nonprofit needs to be considered when examining the influence external environmental conditions and internal organization characteristics have on board roles and responsibilities.

This dissertation contributed to the literature by providing an in-depth understanding of charter school board roles and responsibilities, building research surrounding how nonprofits board roles and responsibilities are grouped based on theory, and explaining how certain factors influence nonprofit boards.

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Understanding Factors That Influence Charter School Board Roles and Responsibilities

by
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DEDICATION

This dissertation is dedicated to my family.

To my wife, Oksana, this endeavor was a joint effort. Without your unconditional love and support this degree would not have been possible. You make me a better person.

To my parents, Mike and Kathy, your endless love and always believing in me provided an atmosphere that allowed me to pursue my dreams. “I will love you forever and I will like you for always.”

To my brother and sister-in-law, Mark and Rebecca, you are an amazing example and I am proud to be your little brother.

Thank you all.

BIOGRAPHY

A North Carolina native, Christopher Cody was born and raised in Clyde, North Carolina. He attended Wake Forest University and received a Bachelor of Arts in Religion in 2004. Upon completing his bachelor's degree, Christopher joined the United States Peace Corps and served as a volunteer in Mingechevir, Azerbaijan until August, 2007. After serving in the Peace Corps, Christopher attended Western Carolina University where he earned a Masters of Public Affairs degree in 2009. While a graduate student at Western Carolina University, he worked as an Employment Specialist and Evaluator for Goodwill Industries NWNC. Upon completing his master's degree, Christopher began North Carolina State University's Doctor of Philosophy program in Public Administration in the Fall of 2009 and served as a teaching assistant and instructor for a variety of political science and nonprofit courses. Also while a Ph.D. student, he worked as a Research Intern at the North Carolina Department of Public Instruction and served as the Director of Public Policy and Research at the Public School Forum of North Carolina. Christopher's research interests include nonprofit governance, volunteer motivation, charter schools, and school finance.

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TABLE OF CONTENTS

LIST OF TABLES.....	ix
LIST OF FIGURES.....	xiii
CHAPTER 1: INTRODUCTION	1
1.1 Introduction.....	1
1.2 The Charter School Movement	3
1.3 Boards of Directors.....	6
1.3.1 Charter School Boards	6
1.3.2 Boards of Nonprofit Organizations	9
1.4 Why Study Charter School Boards?.....	16
1.5 Research Questions.....	19
1.6 Significance of the Study	19
1.7 Summary and Preview of Upcoming Chapters.....	20
CHAPTER 2: LITERATURE REVIEW	23
2.1 Introduction.....	23
2.2 Nonprofit Governance.....	26
2.2.1 Foundational Research on Nonprofit Governance	28
2.2.2 Board Composition	30
2.2.3 Board Staff-Relationships	31
2.2.4 Board Effectiveness.....	32
2.3 Charter School Governance.....	33
2.4 Nonprofit Board Roles and Responsibilities	38
2.5 Theoretical Perspectives on Board Roles and Responsibilities	41
2.5.1 Agency Theory	45
2.5.2 Stewardship Theory.....	48
2.5.3 Resource Dependency Theory.....	49
2.5.4 Institutional Theory	52
2.6 Governance Frameworks of Factors Influencing Nonprofit Boards	58
2.6.1 Charter School Governance: A Contingency Based Framework.....	65
2.7 Factors Influencing Charter School Board Roles and Responsibilities.....	69
2.7.1 External Environmental Conditions	70
2.7.2 Board Attributes	75
2.7.3 Internal Organizational Characteristics	81
2.7.4 Control Variables	87
2.8 Summary of Research Hypotheses.....	88
2.9 Summary of Chapter 2.....	92
2.10 Preview of Chapter 3.....	92
CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY.....	93
3.1 Introduction.....	93
3.2. Research Design	94
3.2.1 Population and Sampling Frame	96
3.2.2 Sample Design.....	97
3.3 Instrument Design	101

3.3.1 Survey Administration and Data Collection	103
3.4 Operationalization of Variables	105
3.4.1 Dependent Variables	106
3.4.2 Independent Variables	109
3.4.3 Control Variables	123
3.5 Data Analysis.....	124
3.5.1 Nonresponse Bias, Missing Values, and Bivariate Correlations.....	124
3.5.2 Factor Analysis.....	125
3.5.3 Multiple Linear Regressions	125
3.5.4 Testing Assumptions of Multiple Linear Regression.....	126
3.6 Limitations of the Research Design.....	128
3.6.1 Content Validity	128
3.6.2 Construct Validity	129
3.6.3 Internal Validity	129
3.6.4 External Validity	130
3.7 Conclusion of Chapter 3.....	136
3.8 Preview of Chapter 4	137
CHAPTER 4: ANALYSIS OF THEORY-BASED TYPOLOGY.....	138
4.1 Introduction.....	138
4.2 Survey Response Rate	138
4.3 Comparison of Respondents and Non-Respondents	140
4.3.1 State Charter School Law’s Level of Autonomy	140
4.3.2 Type of School Based on Grade Levels	143
4.3.3 Student Enrollment.....	146
4.3.4 School Age	147
4.4 Missing Values Analysis.....	149
4.5 Descriptive Statistics for Dependent Variables: Charter School Board Roles and Responsibilities.....	150
4.6 Theory-Based Typology for Charter School Board Roles and Responsibilities	153
4.7 Conclusion of Chapter 4.....	158
4.8 Preview of Chapter 5.....	158
CHAPTER 5: ANALYSIS OF CONTINGENCY BASED FRAMEWORK.....	159
5.1 Introduction.....	159
5.2 Descriptive Statistics of Independent Variables	159
5.2.1 Resources and Funding	160
5.2.2 Institutional and Regulatory Environment	164
5.2.3 Board Size	164
5.2.4 Executive Director/Principal as Voting Member of Board	165
5.2.5 Board Demographic Characteristics.....	165
5.2.6 Corporate Board Members	166
5.2.7 Board Recruitment Criteria	167
5.2.8 Charter School Age	168
5.2.9 Charter School Size.....	169
5.2.10 Stability	170
5.2.11 Professionalization	171
5.2.12 Charter School Management.....	173

5.2.13 Control Variables	174
5.3 Bivariate Correlations	174
5.4 Framework Analysis: Multiple Linear Regressions	177
5.4.1 OLS Analysis of Monitoring and Strategizing Roles and Responsibilities	179
5.4.2 OLS Analysis of Boundary-Spanning Roles and Responsibilities	185
5.4.3 OLS Analysis of Conforming Roles and Responsibilities	192
5.5 Hypothesis Testing and Discussion	199
5.5.1 Hypothesis 1: Resources and Funding	199
5.5.2 Hypothesis 2: Institutional and Regulatory Environment	202
5.5.3 Hypothesis 3: Board Size	203
5.5.4 Hypothesis 4: Executive Director/Principal as Voting Member of the Board	205
5.5.5 Hypothesis 5: Percentage of Female Board Members	206
5.5.6 Hypothesis 6: Percentage of Racial and Ethnic Minority Board Members	208
5.5.7 Hypothesis 7: Percentage of Corporate Board Members	209
5.5.8 Board Recruitment Criteria	210
5.5.9 Hypothesis 8: School Age	213
5.5.10 Hypothesis 9: School Size	214
5.5.11 Hypothesis 10: Stability	215
5.5.12 Hypothesis 11: Professionalization	217
5.5.13 Hypothesis 12: Charter School Management	219
5.5.14 Control Variables	220
5.6 Summary of Chapter 5	224
5.7 Preview of Chapter 6	224
CHAPTER 6: CONCLUSION	225
6.1 Introduction	225
6.2 Overview of Research Questions	225
6.2.1 Research Question 1	226
6.2.2 Research Question 2	228
6.3 Summary of Findings	229
6.3.1 External Environmental Conditions	230
6.3.2 Board Attributes	233
6.3.3 Internal Organizational Characteristics	240
6.3.4 Overall Findings	247
6.4 Contribution to the Literature	248
6.4.1 Contribution to Charter School Governance Research	248
6.4.2 Contribution to Theory-Based Typology of Nonprofit Board Roles and Responsibilities	251
6.4.3 Contribution to Framework Examining Factors that Influence Nonprofit Boards	256
6.4.4 Contribution to Practitioners	261
6.5 Study Limitations	261
6.6 Directions for Future Research	263
REFERENCES	268
APPENDICES	282
Appendix A: Charter School State Law Rankings	283
Appendix B: Charter School Governance Survey	284
Appendix C: NCSU Institutional Review Board Approval	296

Appendix D: Emails Sent to Survey Participants	299
Appendix E: Descriptive Statistics for Control Variables	301
Appendix F: Analysis of Board Roles and Responsibilities with All Predictors (Including Board Size Squared)	303

LIST OF TABLES

Table 2.1: Miller-Millesen’s Theory-Based Typology of Board Roles and Responsibilities	42
Table 2.2: Theory-Based Typology of Charter School Board Roles and Responsibilities	44
Table 2.3: Independent Variables From Ostrower and Stone’s Framework Included in this Study’s Framework.....	64
Table 2.4: Summary of Hypothesized Variables	91
Table 3.1: Charter School Distributions by Level of Autonomy based on State Law ..	100
Table 3.2: Proportional Stratified Random Sample	101
Table 3.3: Theory-Based Typology of Charter School Board Roles and Responsibilities	108
Table 3.4: Summary of Cook’s D Statistics for Regression Models	127
Table 3.5: Summary of Durbin-Watson Statistics.....	127
Table 3.6: Descriptions and Coding for Dependent and Independent Variables.....	132
Table 4.1: Survey Response Rates	139
Table 4.2: Cross Tabulation: Charter School Law Autonomy Level for Respondents and Non-respondents of the Sample	141
Table 4.3: Chi-Square Test: Charter School Law Autonomy Level for Respondents and Non-respondents of the Sample.....	141
Table 4.4: Cross Tabulation: Charter School Law Autonomy Level for Respondents and the Population.....	142
Table 4.5: Chi-Square Test: Charter School Law Autonomy Level for Respondents and the Population	142
Table 4.6: Cross Tabulation: Type of School Based on Grade Level for Respondents and Non-respondents of the Sample	144
Table 4.7: Chi-Square Test: Type of School Based on Grade Level for Respondents and Non-respondents of the Sample.....	144
Table 4.8: Cross Tabulation: Type of School Based on Grade Level for Respondents and the Population.....	145
Table 4.9: Chi-Square Test: Type of School Based on Grade Level for Respondents and the Population	146
Table 4.10: T-test for Equality of Means: Student Enrollment for Respondents and Non-Respondents	147

Table 4.11: T-test for Equality of Means: Student Enrollment for Respondents and Population	147
Table 4.12: T-test for Equality of Means: School Age for Respondents and Non-Respondents	148
Table 4.13: T-test for Equality of Means: School Age for Respondents and the Population	148
Table 4.14: Descriptive Statistics for Dependent Variables: Charter School Board Roles and Responsibilities	153
Table 4.15: Factor Analysis for Charter School Board Roles and Responsibilities	155
Table 4.16: Revised Factor Analysis for Charter School Board Roles and Responsibilities	156
Table 4.17: New Theory-Based Typology of Charter School Board Roles and Responsibilities	157
Table 4.18: Distributions of Dependent Variables	158
Table 5.1: Student Fees and Charges	160
Table 5.2: Federal, State, and Local Allocated Dollars to the School.....	160
Table 5.3: Government Grants and/or Contracts	161
Table 5.4: Foundation Grants and/or Contracts	161
Table 5.5: Donations.....	161
Table 5.6: Endowment Income.....	162
Table 5.7: Student Fees and Charges: Dichotomous Variable.....	162
Table 5.8: Federal, State, and Local Allocated Dollars to the School: Dichotomous Variable	163
Table 5.9: Government Grants and/or Contracts: Dichotomous Variable.....	163
Table 5.10: Foundation Grants and/or Contracts: Dichotomous Variable	163
Table 5.11: Donations: Dichotomous Variable	163
Table 5.12: Endowment Income: Dichotomous Variable	163
Table 5.13: School Autonomy.....	164
Table 5.14: Board Size	164
Table 5.15: Executive Director/Principal/ as Voting Member of the Board.....	165
Table 5.16: Percent of Minority Board Members	165
Table 5.17: Percent of Female Board Members	166

Table 5.18: Corporate Board Members	166
Table 5.19: Percent of Corporate Board Members	167
Table 5.20: Board Recruitment Criteria	168
Table 5.21: Charter School Age	169
Table 5.22: Student Enrollment	169
Table 5.23 Operating Expenses in Dollars	169
Table 5.24: Organizational Stability: Large Scale Expansion of Programs	170
Table 5.25: Organizational Stability: Internal Staff Structure.....	171
Table 5.26: Organizational Stability Shift in Mission.....	171
Table 5.27: Organizational Stability Hiring New Executive Director/Principal.....	171
Table 5.28: Reliability Test of Organizational Stability	171
Table 5.29: Executive Director/Principal/ is a Paid Staff Member.....	172
Table 5.30: Executive Director/Principal has a School Administrator’s License	173
Table 5.31: Executive Director/Principal has a Professional Educator’s License.....	173
Table 5.32: Executive Director/Principal has an Advance Degree in Leadership, Administration, or Management.....	173
Table 5.33: Reliability Test of Professional Licenses/Degrees.....	173
Table 5.34: Charter School Management	174
Table 5.35: Collinearity Statistics for Highly Correlated Independent Variables.....	176
Table 5.36: OLS Analysis of Board Activity of Monitoring and Strategizing Roles and Responsibilities with All Predictors	181
Table 5.37: Analysis of Board Activity of Boundary-Spanning Roles and Responsibilities with All Predictors	188
Table 5.38: Analysis of Board Activity of Conforming Roles and Responsibilities with All Predictors	195
Table 5.39: Summary of Findings for Hypotheses	223
Table 6.1: External Environmental Factors Effect on Board Roles and Responsibilities	230
Table 6.2: Board Attributes Effect on Board Roles and Responsibilities	234
Table 6.3: Internal Organizational Characteristics Effect on Board Roles and Responsibilities	240

Table 6.4: Miller-Millesen’s Theory-Based Typology of Board Roles and Responsibilities	253
Table 6.5: Theory-Based Typology of Charter School Board Roles and Responsibilities	254
Table 6.6: New Theory-Based Typology of Charter School Board Roles and.....	255
Responsibilities	255
Table A-1: 2013 Charter School State Law Rankings and Scorecard	283
Table E-1: Number of Board Meetings	301
Table E-2: Length of Board Meetings (Hours).....	301
Table E-3: Type of School.....	301
Table E-4: School Location.....	301
Table E-5: Virtual Charter School	301
Table E-6: Number of Paid Staff	302
Table E-7: Percent of Low-Income Students	302
Table F-1: Analysis of Board Activity of Monitoring and Strategizing Roles and Responsibilities with All Predictors (Including Board Size Squared).....	303
Table F-2: Analysis of Board Activity of Boundary-Spanning Roles and Responsibilities with All Predictors (Including Board Size Squared).....	304

LIST OF FIGURES

Figure 1.1: Miller-Millesen’s (2003) Board Governance Framework.....	14
Figure 1.2: Ostrower and Stone’s (2010) Contingency Based Framework: Factors Influencing Nonprofit Board Roles and Responsibilities.....	16
Figure 1.3: Charter School Board Contingency Based Framework: Factors Influencing Charter School Board Roles and Responsibilities.....	18
Figure 2.1: Miller-Millesen’s (2003) Board Governance Framework.....	60
Figure 2.2: Ostrower and Stone’s (2010) Contingency Based Framework: Factors Influencing Nonprofit Board Roles and Responsibilities (Expanded Version)	62
Figure 2.3: Charter School Board Contingency Based Framework: A Conceptual Model Examining Factors Influencing Charter School Board Roles and Responsibilities	67
Figure 3.1: Charter School Board Contingency Based Framework: A Conceptual Model Examining Factors Influencing Charter School Board Roles and Responsibilities	95
Figure 5.1: Revised Contingency Based Framework: A Conceptual Model Examining Factors Influencing Charter School Board Roles and Responsibilities	178

CHAPTER 1: INTRODUCTION

1.1 Introduction

The nonprofit sector is crucial to society as it consistently serves economic and social roles and is a launching ground for innovation. Nonprofits come in all types and sizes, serving various functions for countless people and employing millions of individuals. While research on the entire nonprofit sector is valuable, it is also essential to examine specific types of nonprofits in order to understand the variability between different types of organizations. Charter schools are a type of nonprofit where more research will be valuable not only to the nonprofit field but various bodies of literature.

Charter schools are a growing influence on public education in America with approximately 6,175 charter schools serving approximately 2.3 million students in 42 states and the District of Columbia (Center for Educational Reform, 2013b; National Alliance for Public Charter Schools, 2013a). The motives and incentives for charter schools are often diverse. Charter schools offer a drastic approach to decentralized management in public education, due to their nonprofit status, that allows schools to become self-governing. It is argued that charter school characteristics, such as autonomy and decentralization, result in enhanced school quality (Wohlstetter et al., 1995). The self-governing factor of charter schools causes them to be at the center of conversations about education reform. However, there has not been a significant amount of research on the governance of charter schools.

A board of directors governs nonprofit organizations, which is “an organized group of people with the authority collectively to control and foster an institution that is usually administered by a qualified executive and staff” (Houle, 1997, 6). Charter schools are no

different from other nonprofits, in that a board of directors governs the organization. State charter laws typically require charter schools to have a board of trustees or board of directors governing the organization prior to receiving approval for a charter. As the foundation of a charter school, the board of directors is essential to the school's survival.

Although the number of charter schools is continuously growing in the United States, there is limited research examining charter school boards, which are the governing structure ultimately responsible for a school's outcomes (Land, 2002). Since the governance structure of a charter school is imperative to the outcomes of the organization, this dissertation seeks to provide more insight into charter schools and their board of directors by examining the factors that influence its decision making process. Previous literature on charter school governance and nonprofit governance focuses more on best practices for boards but not on what roles and responsibilities boards actually perform. This study filled a gap in the literature on charter school governance and expanded the literature on nonprofit governance by moving beyond best practices to understand what actual roles and responsibilities charter school boards perform. Also, this research analyzed why charter school boards perform certain roles and responsibilities more frequently than others. Specifically, this dissertation explained what factors cause differences in roles and responsibilities of some charter school boards as compared to others.

Prior to going more in depth on literature supporting the need to analyze factors that influence the governance aspects of charter schools, this chapter first provides overview information on charter schools and the movement behind their creation. Second, background information on charter school boards and all nonprofit boards sets the stage for the need to

study charter school governance beyond that of other nonprofit boards. Finally, the purpose of the dissertation is fully explained in terms of using previous nonprofit governance research to examine charter school board roles and responsibilities.

1.2 The Charter School Movement

The charter school movement first began with reform efforts in the late 1980s and early 1990s designed to decentralize public education. It is debatable who developed the concept of charter schools. Albert Shanker, former President of the American Federation of Teachers, created the term in a 1988 article on school restructuring (Shanker, 1988). Shanker develops the idea of a new school created by teachers, which could receive a charter to operate it for 5-10 years. However, it was Chubb and Moe (1990) that first formulates the concept of school choice, a key element of the charter school movement. Chubb and Moe's system of choice allows schools to be self-governing and operate without strict oversight. Though, it was not until 1991 that the first charter school opened in Minnesota.

Since 1991, forty-two states and the District of Columbia have passed charter school legislation. The charter school movement momentum grew in the 1990s due to skepticism over traditional public schools in relation to high dropout rates and low student performance. The passage of different charter school laws across the United States caused the charter school movement to be challenging to understand because it resulted in states creating diverse legal definitions of charter schools, which led to a diverse group of organizations. Fuller (2000) explains that charter schools are so diverse across the United States that "it's difficult to advance generalized claims about this far-flung movement" (4). There are even

contrasting definitions on charter schools among researchers, educational experts, and charter school advocates. Griffin and Wohlstetter (2001) define charter schools as:

[P]ublicly funded schools that may be developed by individuals or a group of individuals including teachers, administrators or other school staff, parents, or other members of the local community in which the charter school is located. Developers of charter schools are given flexibility to decide their own educational objectives and how to organize and manage the school (337).

Buckley and Fisler (2003) provide another definition by explaining charter schools are:

[R]elatively autonomous schools of choice that receive a charter or contract from public entity (such as a local board, a public university, or a state board of education). These contracts, usually lasting 3 to 5 years, provide school operators more autonomy than a district-run public school in exchange for enhanced accountability through the requirement that schools must prove their value to receive another contract (318).

Even though definitions of charter schools and charter school state laws vary, almost all definitions and laws attempt to incorporate the concepts of flexibility and accountability (Shober et al., 2006).

Charter schools are public schools that are available to all, paid for with tax dollars, and held to the similar accountability standards as traditional public schools. However, they have autonomy and flexibility in operation and design of curriculum, pedagogy, and management (Manno et al., 2000; Shober et al. 2006). Proponents of the charter school movement argue that the bureaucracy in traditional public schools hinders their ability to respond to the needs of the communities they serve. Charter school supporters argue that traditional public schools lack autonomy and are forced to focus on compliance and not performance, due to strict rules and regulations (Frazier, 2011). Miron and Nelson (2002) explain that charter schools' enhanced autonomy over curriculum, instruction, and operations allow for increased accountability in relationship to student performance. Also, charter

school supporters argue that the increased flexibility and autonomy permit charter schools to meet the needs of students and their parents by allowing administrators, teachers, and students to focus directly on goals set by their charters (Manno et al., 2000; Fuller, 2000).

Structurally, charter schools differ from traditional public schools because they can be created by anyone (e.g., parents, community organizations, etc.); they are exempt from many state and local regulations; students choose to attend the schools; and they are at higher risk of being closed if the school does not perform well (Manno et al., 2000). State charter school laws evolve over time and result in different levels of flexibility and accountability demands. While charter school laws are continually evolving since the first state law in 1991, the current charter school movement still pushes against the assumed homogeneity and uniformity that is associated with public education.

The increased autonomy and flexibility provided to charter schools through state legislation still requires a governing authority to ensure accountability standards and regulations are met within the schools. At the center of this authority and responsibility that exists between the state, parents, and students is the charter school board. It is the charter school board that has power over how the increased flexibility and autonomy will translate into increased performance. The considerable discretion given to charter school boards to make decisions affecting a school's performance results in a need for research to understand charter school boards and how they fulfill their roles and responsibilities.

Current research on the charter school movement primarily focuses on examining school and student performance (Bifulco and Ladd, 2006; Buddin and Zimmer, 2005; Sass, 2006). While this research is important, charter school studies need to expand beyond this

singular focus, especially since charter schools are typically nonprofit organizations led by a board of directors. This study attempted to expand beyond the traditional research of charter school performance and examine more closely the board of directors that are instrumental in creating an effective school. This dissertation examined the actual roles and responsibilities performed by charter school boards and what factors influence boards to perform certain roles and responsibilities more frequently than others. Specifically, this study examined how external environmental conditions, board attributes, and internal organizational characteristics influence charter school board roles and responsibilities. The next sections provide an overview of charter school boards and research on nonprofit boards and ends with an explanation for the need to study charter school governance beyond that of other nonprofit boards.

1.3 Boards of Directors

The following sections provide a brief overview of charter school boards and explain the lack of research on charter school board roles and responsibilities. Then, an overview of research on nonprofit board roles and responsibilities is discussed. Finally, an explanation is provided that describes the need for charter school board research beyond the research that already exists on nonprofit board roles and responsibilities.

1.3.1 Charter School Boards

In terms of authority over charter schools, the charter school board lies in the center of responsibility that exists between the state and parents/students (Sparks, 2009). State charter school laws usually require schools to have a board of directors prior to receiving a charter. States typically empower a charter-authorizing agency (i.e. school districts, state

education department, etc.) to grant charters to schools. Charter authorizing agencies approve and renew charters based on submitted applications, which typically request schools to have a board of directors already in place when applying for or renewing a charter.

The board of directors acts as the primary authority over a charter school's financial, legal, and academic well-being. Charter school boards are expected to provide guidance for the overall direction of the school, hire and supervise the leadership within the school, and guarantee that the school meets the goals of the organization. In some cases, a partnering organization (i.e., education management organization or charter management organization) may be involved in managing a charter school, but the board still holds the authority to hire and fire such a partner and still maintains legal authority over the charter school. While a charter school board is expected to maintain a certain amount of authority and responsibility over the organization, there is variation in roles and responsibilities of boards within different charter schools.

There is a lack of information on charter school boards, even though they are essential in deciding the successes and failures of the school (Silver, 2010). Research that is available focuses on board size, board roles and responsibilities, constituencies served, and environmental conditions. Scholars (Deal and Hentschke 2004; Graham 2004) state that charter school boards are usually small with around 5 to 12 voting members.

In terms of charter school board roles and responsibilities, the research that does exist shows that common board roles and responsibilities are monitoring school leaders, maintaining school partnerships, and providing financial oversight; however, charter school boards have difficulty performing some or all of these duties (Finn et al. 2000; Hill et al.

2002; Sparks 2009). Also, one scholar (Spark, 2009) finds that charter school board roles and responsibilities expand beyond the general practices of strategic planning, financial oversight, legal and ethical compliance, acquiring resources, and hiring an executive to include day-to-day management. Hill et al. (2002) explain that charter school boards, especially in their early years of governance, are occasionally confused and disorganized with regards to function and take on multiple roles and responsibilities typically not performed by a board.

Additional research shows that charter school boards benefit from representation of various constituencies including voting members that represent the racial and cultural communities of the school since they serve students and parents of the community (Spark, 2009). Finally, the environment that a charter school board performs their roles and responsibilities in is extremely diverse. Charter schools are granted autonomy depending on the bureaucratic regulation from the charter granting state. Thus, it should not be surprising that depending on the state the charter school resides in, charter school governance can resemble various complex and dynamic environments, encompassing legal, regulatory, funding, policy and political factors (Stone et al., 2010). Stone et al. also explain that funding environments are similarly complex in charter schools because they receive a mix of public funding as well as private funding.

While the above research provides some insight into the composition and workings of a charter school board, most of these studies focus on charter schools from specific states and generalizability to all charter schools is limited. There is very little research on charter school boards that examines all charter school in United States. This study did this by implementing

a national charter school survey in order to gain a comprehensive understanding what roles and responsibilities charter schools do perform. This dissertation extended charter school board research by examining what actual roles and responsibilities charter school boards perform and what factors (i.e. external environmental conditions, board attributes, and internal organizational characteristics) cause some boards focus on certain roles and responsibilities compared to other boards. This study used governance research examining the entire field of nonprofits and applied it solely to charter school governance.

1.3.2 Boards of Nonprofit Organizations

The research on charter school governance is limited. However, there is a growing body of research on governing boards of all nonprofit organizations. Research on boards of directors for nonprofit organizations provides for a better understanding of how to examine what factors influence roles and responsibilities performed by charter school boards.

A board of directors is charged with the responsibility of overseeing a nonprofit organization. Boards are therefore a topic of tremendous significance for scholarly, managerial, and public policy interest in the nonprofit sector (Ostrower and Stone, 2006). Early foundational research on board of directors focuses more on corporate board behaviors but was also applied to the nonprofit sector (Zald, 1965; Aldrich and Herker, 1976; Jensen and Mackling, 1976). While the 1960s through 1980s saw an expansion in nonprofit governance research, Middleton (1987) notes that empirical studies and scholarly analysis of nonprofit boards are still scarce. This sentiment is reemphasized twenty years later by Ostrower and Stone (2006), acknowledging major gaps in theoretical and empirical research about nonprofit boards. The emerging consensus in the literature that does exist on nonprofit

governance is that there is no “one size fits all” model for nonprofit boards and more research is needed to better understand what factors influence nonprofit boards to perform certain roles and responsibilities more frequently than others (Cornforth, 2003a; Miller-Millesen, 2003; Ostrower and Stone, 2006).

There is a small but growing body of research that suggests an increase in scholarly interest in understanding, not just describing, board governance (Ostrower and Stone, 2006). In recent years, nonprofit boards have received increased attention from scholars as well as governments, which often request that nonprofit boards review their governance practices. The increased focus from scholars and government on nonprofit governance is due to the fact that, “[n]onprofit boards are ultimately responsible for the organizations that they oversee, and are one of the primary vehicles through which citizens participate in the nonprofit sector” (Ostrower, 2007, 1).

A substantial development that somewhat reshaped the current thinking about nonprofit boards and their governance structure is the Sarbanes-Oxley Act of 2002 (Ostrower and Bobowick, 2006; Ostrower, 2007). The Sarbanes-Oxley Act of 2002 came directly after several corporate scandals, most notably Enron. The purpose of the Act was to strengthen corporate governance and discourage fraud in the private sector. However, the Act also caused nonprofit boards to be questioned. Scandals during this time period were prominent in the nonprofit sector and in 2004 the Senate Finance Committee issued a report requesting stronger nonprofit governance and explained that there were concerns about nonprofit governance failures (2007). Even though the Sarbanes-Oxley Act was never extended to include nonprofit organizations, it changed the expectations and standards for nonprofit

governance and caused several professional associations to create guidelines describing fundamental behaviors and operating procedures for nonprofit boards (2007). Although not every nonprofit board in the United States performs the same function, these guidelines provided by the government and nonprofit practitioners created a convergence on a set of similar board roles and responsibilities that are characteristic of “good” governance (Miller-Millesen, 2003).

The guidelines for good governance practices caused researchers and government to focus on what roles and responsibilities nonprofit boards should be concentrating on instead of what roles and responsibilities they were actually performing. Previous scholarly research on nonprofit boards examines ways good governance practices have the potential to positively affect organizational performance. However, research (Herman and Tulipana 1985; Bradshaw et al. 1992; Herman et al. 1997; Herman and Renz, 2000) is mixed on the relationship between good governance practices by nonprofit boards and organizational outcomes.

Ostrower and Stone (2001) and Miller (2003) suggest moving nonprofit governance research beyond good governance practices and their relationship to organizational performance. They argue that nonprofit governance research needs to develop theories on the subjective experiences of those who serve on nonprofit boards. Cornforth (2003b) and Miller-Millesen (2003) describe that a multiple theoretical explanation underlies the governance literature on nonprofit boards. They explain that normative roles and responsibilities of nonprofit boards need to be researched in the context of multiple theories. This dissertation uses Cornforth and Miller-Millesen’s suggestion and examines board roles

and responsibilities using a multiple theory approach, a concept discussed further in Chapter 2.

Beyond examining board roles and responsibilities with multiple theories, Ostrower and Stone's (2006) review of literature on nonprofit governance also attempts to move nonprofit board research beyond good governance practices. Ostrower and Stone (2001; 2006) and Miller-Millesen (2003) argue that it is necessary to supplement scholars' knowledge of what boards should look like and should do with more empirical evidence of their actual roles and responsibilities. They explain that there are several gaps in theoretical and empirical knowledge regarding nonprofits' board of directors' roles and responsibilities. Ostrower and Stone (2006, 2010) and Brown and Guo (2010) explain that the current literature on nonprofit governance presents several different roles and responsibilities for nonprofit boards and argue more research is needed on what factors influence boards to perform certain roles and responsibilities more frequently than others. This dissertation also uses Ostrower and Stone and Brown and Guo's suggestion and examines the factors that influence boards to perform certain roles and responsibilities more frequently than others, a concept discussed further in the next sections and Chapter 2.

A further review of the literature also emphasizes that nonprofit governance practices are diverse and influenced by their context (Miller-Millesen 2003; Ostrower and Stone 2006; 2010). The literature reveals that scholars are developing frameworks and examining empirical data to understand more systematically the differences that exist in nonprofit boards' roles and responsibilities (Cornforth, 2003a; Miller-Millesen, 2003; Ostrower and Stone 2001, 2006, 2010; Renz and Andersson, 2013; Cornforth, 2013). These scholars

explain that board attributes, internal organization conditions, and external environmental factors aid in explaining when boards perform certain roles and responsibilities more frequently than others. Based on this understanding, several scholars (Conforth, 2003a; Miller, 2003; Miller-Millesen, 2003; Ostrower and Stone 2001, 2010) respond to the need of moving beyond descriptive board research by developing frameworks to understand more systemically the correlates of the heterogeneity that exists in nonprofit board roles and responsibilities. This dissertation tested an adapted version of two of these frameworks (Miller-Millesen, 2003; Ostrower and Stone, 2010).

Miller-Millesen's (2003) framework examines how variables associated with the environmental factors, organizational factors and recruitment practices-composition influence board roles and responsibilities, as depicted in Figure 1.1. Miller-Millesen also examines in her framework how theory can be used to categorize board roles and responsibilities. She explains that agency theory, resource-dependency theory, and institutional theory assists in explaining how board roles and responsibilities are categorized into monitoring, boundary-spanning, and conforming roles and responsibilities. She then examines how variables associated with the environmental factors, organizational factors, and recruitment practices-composition influence nonprofits in performing monitoring, boundary-spanning, and conforming roles and responsibilities. This dissertation uses an adapted version of Miller-Millesen's theoretical understanding of board roles and responsibilities and her framework in order to test how certain factors influence charter school board in performing certain roles and responsibilities. The adapted framework is depicted in Figure 1.3 and discussed further in Chapter 2.

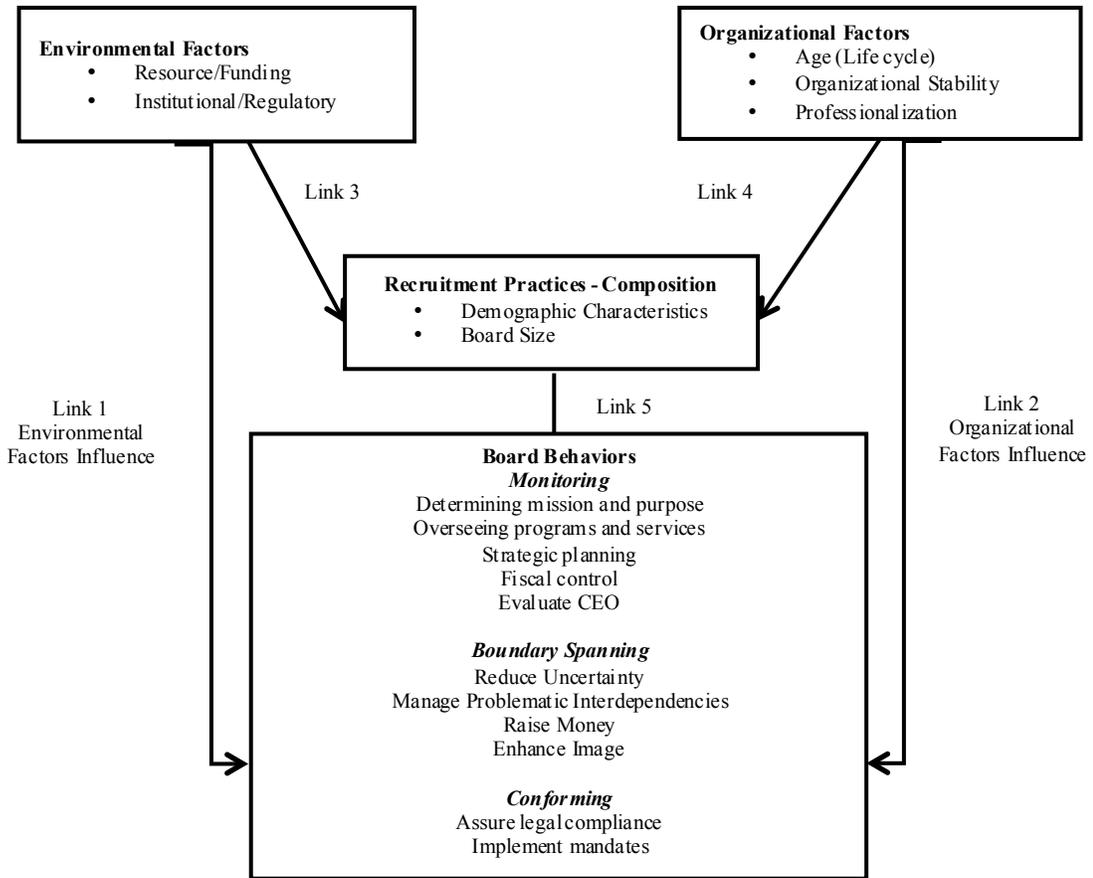


Figure 1.1: Miller-Millesen's (2003) Board Governance Framework

Ostrower and Stone's (2010) also develop a framework examining how factors influence board roles and responsibilities and tested it on a large representative study of nonprofit governance in order to make more valid generalizations about board roles and responsibilities. They expand on Kramer's (1985) perspective that a unitary model of board roles and responsibilities is inadequate because board roles and responsibilities vary depending on several internal and external variables. Ostrower and Stone develop a contingency based framework that includes both external and internal contingent factors, as

well as board attributes, in order to explain the level of engagement of typical nonprofit board roles and responsibilities, as depicted in Figure 1.2. They refer to their framework as a “contingency-based framework, meaning that the factors that influence boards are conditional on both the board’s and organization’s circumstance” (Ostrower and Stone, 2010, 902). Thus, within this dissertation the term contingency-based is referring to Ostrower and Stone’s definition and not the common use of contingency theory that “focus on the meso and micro levels for a wide variety of settings” (Garson, 2015a). Ostrower and Stone argue that the framework allows scholars to understand the basis for the variation between prescribed government functions and reality. This dissertation uses an adapted version of Ostrower and Stone’s framework, combined with Miller-Millesen’s (2003) framework, in order to test how certain factors influence charter school board in performing certain roles and responsibilities. The adapted framework is depicted in Figure 1.3 and discussed further in Chapter 2.

Since there is a lack of information regarding charter school board’s roles and responsibilities, applying frameworks similar to Miller-Millesen’s (2003) and Ostrower and Stone’s (2010) can assist in understanding why charter schools’ focus on certain board roles and responsibilities more frequently than others. This dissertation used an adapted version of Miller-Millesen’s and Ostrower and Stone’s frameworks, described in the next section, to expand the literature on charter school governance by analyzing more in-depth what factors influence the roles and responsibilities of charter school boards.

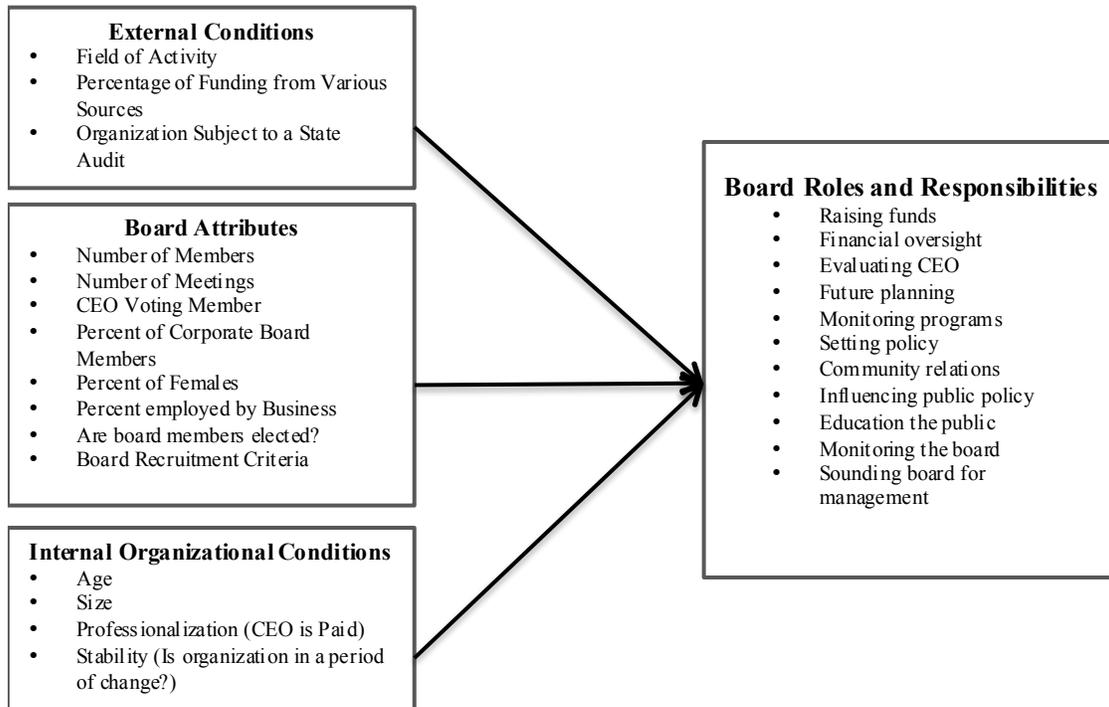


Figure 1.2: Ostrower and Stone’s (2010) Contingency Based Framework: Factors Influencing Nonprofit Board Roles and Responsibilities

1.4 Why Study Charter School Boards?

As stated in the previous section, research on governance in the nonprofit sector is growing and several frameworks have been developed that examine nonprofit boards and factors that influence their roles and responsibilities. While charter schools represent a subfield of the nonprofit sector, this study examined charter school governance research beyond the governance research of the overall nonprofit sector. Nonprofit governance research that focuses solely on charter school boards is necessary for two reasons. First, more studies using a national sample examine charter school board roles and responsibilities are needed.

Second, scholars (Ostrower and Stone, 2010) argue nonprofit board governance needs to be approached as a conditional phenomenon and expect different types of board roles and responsibilities to be influenced by certain factors based on the organization's specific circumstances. This dissertation tests this assumption by comparing previous research (Miller-Millesen, 2003; Ostrower and Stone, 2010) that examines these governance frameworks through the viewpoint of the overall sector to a specific type of nonprofit board, charter schools. Since previous scholars argue that nonprofit governance practices are strongly influenced by their context, this study provided research to show how boards of an individual type of nonprofit (i.e., charter schools) differ from board research on the overall sector. While charter school boards have many similarities with other nonprofits boards, this study examined how external environmental factors, board attributes, and internal organizational characteristics specific to charter schools influenced their boards roles and responsibilities differently compared to research on nonprofit board roles and responsibilities for the entire sector. In order to make this comparison, this dissertation used previous nonprofit board governance frameworks used to study the entire sector (depicted in Figure 1.1. and Figure 1.2) and adapted them to create a framework that provided a better understanding of charter school boards. The adapted framework for charter school boards is depicted in Figure 1.3. This framework examines how external environmental factors, board attributes and internal organizational characteristics influence charter school boards in perform their roles and responsibilities. The adapted framework is explained further in greater detail in Chapter 2.

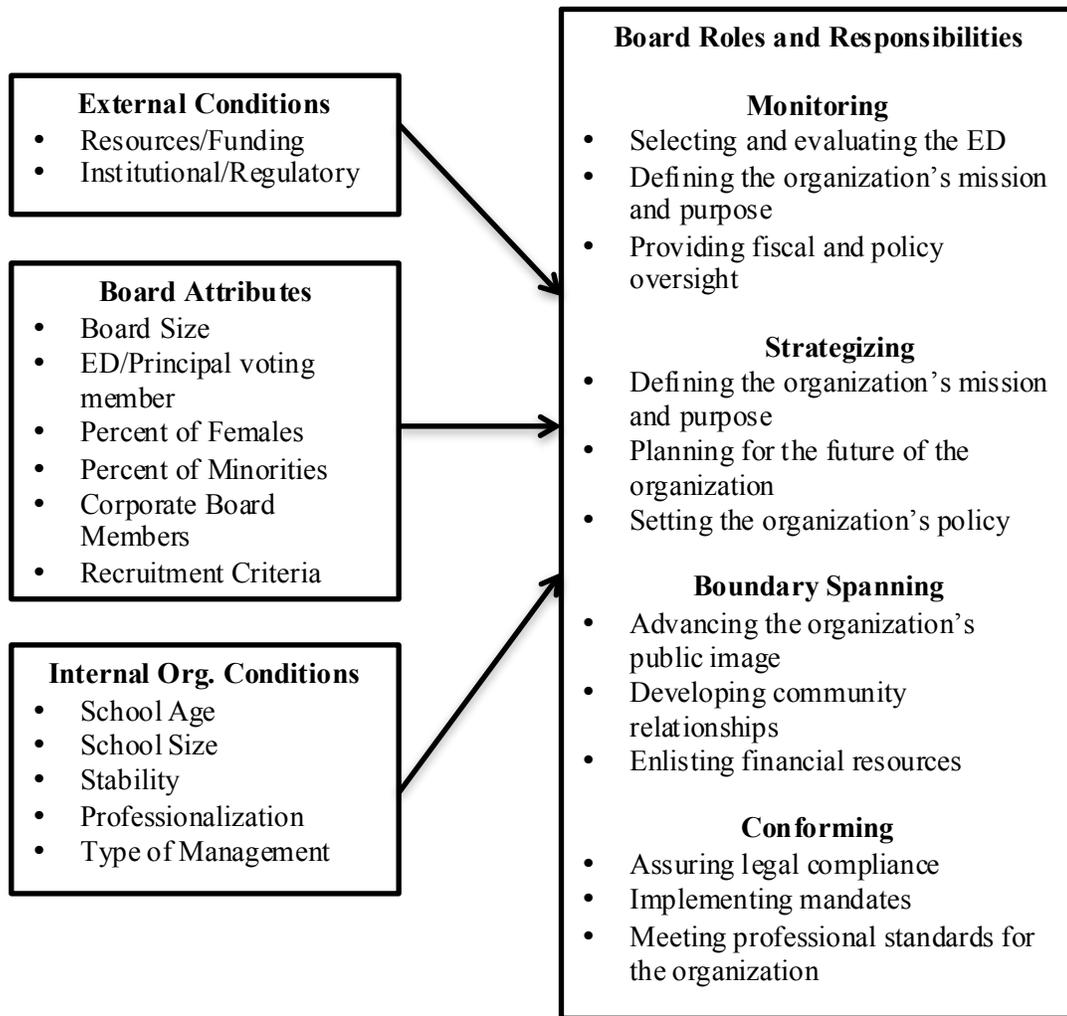


Figure 1.3: Charter School Board Contingency Based Framework: Factors Influencing Charter School Board Roles and Responsibilities

*Adapted from Miller-Millesen's (2003) and Ostrower and Stone's (2010) nonprofit board governance frameworks.

**In the framework the arrows indicate the independent variables associated with categories on the left affect one or more of the dependent variables associated with categories on the right.

1.5 Research Questions

The focus of this study was to better understand why charter school boards perform certain roles and responsibilities more frequently than others. The dissertation moves beyond prescribed board roles and responsibilities in the literature to understand the actual roles and responsibilities performed by charter school boards through answering the questions:

1. What are common roles and responsibilities performed by charter school boards?

Based on a better understanding of actual roles and responsibilities focused on by charter school boards, this dissertation examined what factors influence boards to perform some roles and responsibilities more frequently than others. Using nonprofit governance frameworks revealed in the literature and through original survey research, this study answered the following question:

2. What is the relative importance of external environmental conditions, board attributes, and internal organization characteristics in accounting for differences among charter schools in performing board roles and responsibilities?

1.6 Significance of the Study

This dissertation explored nonprofit board governance by examining charter schools and has two main contributions to the literature:

1. The research presented in this dissertation expanded the literature on charter school governance by explaining what roles and responsibilities are actually performed by charter school boards.
2. The study tested an adapted framework from the nonprofit literature (Miller-Millesen, 2003; Ostrower and Stone, 2010) on charter school boards examining how board

attributes, internal organizational characteristics, and external environmental factors influence board roles and responsibilities. The research examined the connection between resource and regulatory environments with charter school board roles and responsibilities. Also, this study examined the relationship among board characteristics (i.e. size, demographics, types of voting members, etc.) and organizational factors (i.e. age, school size, professionalization, stability, management, etc.) with charter school board roles and responsibilities.

1.7 Summary and Preview of Upcoming Chapters

Chapter 1 began by providing an overview of charter schools and the overall charter school movement. Then, Chapter 1 highlighted research on charter school boards and all boards within the nonprofit sector. This information led to an explanation of how research is lacking on charter school boards and using governance research on the entire nonprofit sector may provide an avenue for better understanding charter school board roles and responsibilities. Also, Chapter 1 described previously used frameworks analyzing nonprofit governance and provided an adapted framework to analyze charter school boards. This premise led to the research questions motivating the study. The research questions for this study examined what are common roles and responsibilities performed by charter school boards and assessed the relative importance of external environmental conditions, board attributes, and internal organization characteristics in accounting for differences among charter schools in performing board roles and responsibilities. Finally, Chapter 1 stated the contributions of the dissertation to nonprofit and charter school governance literature.

Chapter 2 reviews governance literature for charter schools and the entire nonprofit sector. Then, the chapter examines more in-depth board roles and responsibilities for all nonprofits and charter schools. These board roles and responsibilities are then examined through different theoretical understandings. Next, frameworks (Miller-Millesen, 2003; Ostrower and Stone, 2010), previously used to understand how factors influence nonprofit board roles and responsibilities are presented and adapted to develop a framework to examine how external environmental conditions, board attributes, and internal organizational characteristics influence charter school board to perform their roles and responsibilities. Finally, Chapter 2 identifies how individual variables within the categories of external environmental conditions, board attributes, and internal organizational characteristics may influence charter school board roles and responsibilities.

Chapter 3 provides a detailed discussion of the research design for the dissertation, including the population, sampling frame, and sample for the study. Then, Chapter 3 explains the instrument design, the survey administration process, and procedures for data collection. Chapter 3 also discusses the operationalization of the variables and again presents the major hypotheses for the dissertation. Finally, Chapter 3 provides an explanation of the data analysis method for the study and discusses any limitations of the research design.

Chapter 4 begins with providing analysis of the survey response rate and comparing survey respondents to non-respondents and the population. Then, Chapter 4 analyzes missing values in the data set. Finally, Chapter 4 discusses the results and presents the factor analysis examining charter school board roles and responsibilities.

Chapter 5 begins with an overview of all independent variables in the dissertation. Then, Chapter 5 assesses bivariate correlations for multicollinearity in the study. Also, Chapter 5 provides the analysis and explains the results of the charter school board framework using multiple linear regressions. The chapter explains what factors influence charter school boards in performing their roles and responsibilities. Finally, Chapter 5 tests the hypotheses proposed in Chapter 2 and explains the findings.

Chapter 6 provides a summary of the overall findings. Chapter 6 discusses how the dissertation contributed the charter school governance and overall nonprofit governance literature. Also, Chapter 6 explains limitations to the study. Finally, Chapter 6 provides directions for future research on charter school boards and boards for the entire nonprofit sector.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Past governance literature generally agrees that certain board roles and responsibilities are considered “good” governance (Axelrod, 1994; Houle, 1997, Ingram, 2003). However, research (Herman and Tulipana 1985; Bradshaw et al. 1992; Green and Griesinger, 1996; Herman et al. 1997; Herman and Renz, 2000) is mixed on the relationship between good governance practices prescribed for nonprofit boards and organizational outcomes. Several scholars (Cornforth, 2003a; 2003b, Miller-Millesen, 2003; Ostrower and Stone, 2010; Brown and Guo, 2010) argue that before a connection is made between board practices and organizational outcomes, research needs to focus on the actual practices of nonprofit boards and not the proposed good governance practices. These scholars argue that there is not a one-size fit all model for nonprofit governance and explain that nonprofit governance practices are actually diverse because boards are strongly influenced by their context.

Researchers (Cornforth, 2003a; Miller, 2003; Miller-Millesen, 2003; Ostrower and Stone, 2001; 2006; 2010) explain that more extensive frameworks need to be developed to understand the roles and responsibilities of nonprofit boards and more empirical data needs to be utilized in order to make valid generalizations about nonprofit board roles and responsibilities. These researchers argue that not only do frameworks need to understand what roles and responsibilities boards are performing but they need to examine what factors influence different types of boards to perform certain roles and responsibilities more frequently than others. Recently, frameworks have been developed and tested to understand

what roles and responsibilities nonprofit boards are performing and how board attributes, internal organization conditions, and external environmental factors influence boards to perform certain roles and responsibilities more frequently than others (Miller, 2003; Miller-Millesen, 2003; Ostrower and Stone, 2010; Brown and Guo, 2010). These studies range from large quantitative studies of the entire sector to small qualitative studies of specific types of nonprofit boards. The studies conclude that nonprofit boards need to be analyzed within the organizational contexts and the subsector of the nonprofit field that they represent because of the conditional nature of board governance. Ostrower and Stone (2010) explain that using these frameworks as

[O]rienting tools will hopefully prompt researchers to explore a wider range of influences, specify more clear what dimensions of board behavior are being examined, provided a broader context in which to place their own study findings in relationship to the multiple and context-dependent influences on boards (920).

This dissertation followed the guidance of Ostrower and Stone and used frameworks of board governance from the nonprofit field to better understand board roles and responsibilities of a specific type of nonprofit, charter schools. This study used an adapted version of Ostrower and Stone's framework, combined with Miller-Millesen's (2003) framework, in order to test how certain factors influence charter school board in performing certain roles and responsibilities. Since there is a lack of information regarding charter school boards' roles and responsibilities, applying frameworks similar to Miller-Millesen's (2003) and Ostrower and Stone's (2010) can assist in understanding why charter schools' focus on certain board roles and responsibilities more frequently than others. While charter schools represent a subfield of the nonprofit sector, more studies are needed that examine the actual

roles and responsibilities performed by charter school boards. Also, this dissertation tested scholars' (Ostrower and Stone, 2010) assumption that nonprofit board governance needs to be approached as a conditional phenomenon and expect different types of board roles and responsibilities to be influenced by certain factors based on the organization's specific circumstances. This study tested this assumption by comparing previous research (Miller-Millesen, 2003; Ostrower and Stone, 2010) that has examined these governance frameworks through the viewpoint of the overall sector to a specific type of nonprofit board, charter schools.

This dissertation used the nonprofit governance frameworks to examine two research questions regarding charter school boards. First, this study examined the common roles and responsibilities performed by charter school boards. By understanding the actual roles and responsibilities performed by charter school boards, this dissertation examined the factors that influence boards to perform some roles and responsibilities more frequently than others. Second, this study examined the relative importance of external environmental conditions, board attributes, and internal organization characteristics in accounting for differences among charter schools in performing board roles and responsibilities.

The purpose of this chapter is to provide the substantive theoretical and empirical background behind nonprofit and charter school governance and factors that influence boards to perform their roles and responsibilities. The remainder of this chapter is divided into nine sections:

1. A review of the governance literature in the field of nonprofits;
2. A review of charter school governance research;

3. An in-depth examination of board roles and responsibilities (the dependent variables of the study);
4. A discussion of how to categorize board roles and responsibilities based on theory;
5. A discussion of previous governance frameworks and how they were used to understand how certain factors (i.e. environmental external conditions, board attributes, and internal organizational characteristics) influence nonprofit board roles and responsibilities.
6. A discussion and proposed hypotheses of how variables within the categories of environmental external conditions, board attributes, and internal organizational characteristics may influence charter school board roles and responsibilities;
7. Summary of this dissertation's hypotheses;
8. Summary of Chapter 2; and
9. Preview of Chapter 3.

2.2 Nonprofit Governance

The following section provides a brief overview all nonprofit governance literature and explains connections this dissertation has to topics within general nonprofit governance literature. Boards are responsible for the nonprofit organization they oversee and serve as an important outlet for civic participation, and they aid in connecting individual institutions to the larger environment (Ostrower and Stone, 2006). The law of trusts and often the law of business corporations define how boards exist in a legal context (Middleton, 1997; Brody, 2006). The law of trusts defines standards barring self-dealing and allocation management responsibilities for boards. Also, the law of trusts holds trustees accountable for simple errors

in judgment on behalf of the organization (Ostrower and Stone, 2006). The law of business corporations “allows self-dealing with proper disclosure, delegation with proper oversight, and liability only for gross negligence” (613). While these two legal standards of governance define how boards legally exist in nonprofit organizations, it is the three dimensions of accountability that explain a board’s legal duties in a nonprofit.

The three duties of a nonprofit board that define the directors’ accountability are the duty of loyalty, care, and obedience. The duty of loyalty requires the board to act in the best interest of the organization and not in their self-interest, or someone else’s. The duty of care requires a board of directors to take reasonable care when making decisions for the organization by participating; being informed about matters; and exercising independent, good faith judgment in board decisions. Finally, duty of obedience requires the board to act in accordance with the organization’s mission (Brody, 2006; Ostrower and Stone, 2006). However, the laws of trusts and business corporations and the three fiduciary duties of directors provides little understanding on how these laws and duties are reflected in the actual practices of boards. Also, while a governing board holds ultimate accountability for the governance of the organization and organization’s governance system, it almost always involves other actors (Renz and Andersson, 2013). Over the past 50 years, a growing body of research has moved the nonprofit field beyond simply understanding the legal context of boards and into examining how boards perform their duties in practice and the relationships involved in performing these duties.

2.2.1 Foundational Research on Nonprofit Governance

One of the first attempts to theorize about governing boards was by Zald (1965), who focused on the power and roles of both for-profit and nonprofit boards. Zald's research examined how board members' access to external resources, links to the community, and knowledge of the sector might affect the power and influence of individual board members in their organization. Also, he studied the relationship between CEOs/executive directors (ED) and boards by researching how they operated during different organizational life cycles.

Aldrich and Herker (1976) built upon Zald's mostly prescriptive research by analyzing the concept of "boundary spanning" roles among for-profit and nonprofit board members. They explain that boards should focus on processing information and providing external representation for the organization. Aldrich and Herker argue that the more boards cross the boundaries between the inside and outside of the organization, it easier it will be for the organization to develop new innovations and partnerships, which will help maintain the legitimacy of the organization.

Jensen and Meckling's (1976) research was also fundamental in early board literature by examining the relationship between boards and the organization's CEOs/EDs. They explain that CEOs/EDs will often act in their own best interests, conflicting with the interests of the boards, and that CEOs/EDs will be more risk-averse in the short term for fear of losing their job. Jensen and Meckling contributed to the body of knowledge on nonprofit governance by explaining the need for separation of control and decision-making among board members and executives.

Kramer (1985) was also important to the growth of board literature by examining the issue of board and ED relationships, specifically in the nonprofit sector. He found that these relationships are contingent on unique circumstances of each organization. Kramer proposed a contingency framework that examines organizational conditions, such as the size of the organization, organizational complexity, professionalization, and reliance on governmental funds, in order to explain the division of roles and responsibilities between boards and EDs. Also, Kramer noted that board attributes such as size, turnover, and meeting frequency affected the relationship between boards and EDs.

While the above research began to explain how certain factors affect board governance, other scholars (Axelrod, 1994; Carver, 1997; Houle, 1997; Ingram, 2003) also led the way in early nonprofit governance research. They examined characteristics of traditional practices for good governance such as determining an organization's mission; purpose; and policies; evaluating programs; selecting the ED; and overseeing financial resources. Recently, scholars built off foundational literature on nonprofit governance by focusing mostly on five main areas of interests: board composition; board-staff relationships; board effectiveness; board roles and responsibilities; and theories of board governance. A brief synopsis of the research for three of these areas (board composition and characteristics; board staff relationships; and board effectiveness) is provided in the next sections. An overview of theories of board governance is provided later in Chapter 2. Also, since the main focus of this dissertation is on board roles and responsibilities a more thorough discussion of this subject is provided later in Chapter 2.

2.2.2 Board Composition

Board composition accounts for much of the growth in nonprofit governance literature during the past 25 years and gains attention because the assumption that who serves on the board matters (Ostrower and Stone, 2006; Stone and Ostrower, 2007). Literature on board composition exists for larger, more affluent institutions compared to smaller, community-based organizations. A review of the literature by Ostrower and Stone (2006) found numerous studies (Abzug and Simonoff, 2004; Kang and Cnaan, 1995; Middleton, 1987; Moore and Whitt, 2000; National Center for Nonprofit Boards [NCNB], 2000; Odendahl and Youmans, 1994; Ostrower, 1995; 2002; 2007; Zald, 1967) explaining that nonprofit boards are composed mostly of white men from upper-middle-class or upper-class backgrounds. Additional studies show that board composition varies depending on the type of institution but suggest that organizational size, prestige, and area of activity are important components of a board (Abzug, 1996; Abzug et al., 1993; Abzug and Simonoff, 2004; Kang and Cnaan, 1995; Middleton, 1987; Moore and Whitt, 2000; NCNB, 2000; Odendahl and Youmans, 1994; Ostrower, 1995, 2002; 2007; Ostrower, and Stone, 2006; Zald, 1967). Also, research shows that nonprofit boards are larger than corporate boards (Oster, 1995; Ostrower, 2002, Ostrower and Stone, 2006) and usually have anywhere between twelve and thirty members (Bowen, 1994).

Finally, literature on board composition has emphasized the influence of board diversity to an organization (Bradshaw et al., 1996, Ostrower, 2007). Recently, board composition literature has focused more on boards of nonprofits in other countries or boards of specific types of nonprofits (Iecovich, 2005; Garrett, 2007; de Andres-Alonso et al., 2009).

However, few studies exist that link board composition to overall organizational effectiveness and even fewer studies exist examining how board composition influence board behaviors. This dissertation expanded board composition research by providing additional insight on how board composition influence nonprofit boards to perform their roles and responsibilities.

2.2.3 Board Staff-Relationships

The relationship between the board and staff is another area of nonprofit governance research that is examined extensively. A review of the nonprofit governance literature finds that studies have examined the determinants of board-staff power arrangements (Kramer, 1981, 1987; Murray et al., 1992; Zald, 1969; Caers, et al., 2006). These studies found that individual, organizational, and environmental factors influence how boards or EDs dominate the decision-making process in an organization.

Another area of study in board-staff relationship research is how the ED's roles and responsibilities are defined in the organization (Heimovic and Herman, 1990; Heimovics et al., 1995; Herman, 1990; Du Bois et al. 2009). These studies find the role of the ED as responsible for most main events in the organization, which often led to the ED providing board-centered leadership. A large contribution of the board-staff relationship research is emphasizing when the ED or the board takes on governance responsibilities in a nonprofit organization (Ostrower and Stone, 2006). This dissertation extended this area of research by providing more information on the relationship between characteristics of the ED and how boards perform their roles and responsibilities in the organization.

2.2.4 Board Effectiveness

Nonprofit performance and accountability is increasingly gaining more attention as the sector continues to grow (Ostrower and Stone, 2006; Stone and Ostrower, 2007). Studies of board effectiveness and its links to organizational performance (Bradshaw et al., 1992; Brown, 2005; 2007; Callen et al., 2010; de Andres-Alonso et al., 2006; Herman and Renz, 2008; Hoye, 2006; Nobbie and Brudney, 2003; Taylor et al., 1991) are growing in attempts to better understand nonprofit accountability, but several studies (Bradshaw et al., 1992; Green and Griesinger, 1996; Herman and Renz, 2000; 2008; Herman et al., 1997; Stone and Cutcher-Gershenfeld, 2002) show that effectiveness is an elusive concept to define. Scholars' review of board effectiveness literature leads to the conclusion that while, "interests to explore the connection between governance and organizational effectiveness exists, much more work remains to be done to establish the nature and causal direction of these relationships" (Stone and Ostrower, 2007, 422). This dissertation did not directly address board effectiveness. However, the study did assume that prior to understanding board effectiveness, it is important to expand empirical and theoretical research on the actual roles and responsibilities of a board. The above sections provided a brief overview of the literature on nonprofit governance and alluded to concepts that are discussed further in this Chapter. A further discussion on additional topics within nonprofit governance literature that his dissertation is directly speaking to is provided later in Chapter 2. The next section provides a brief overview of the governance literature on the specific type of nonprofit studied in this dissertation, charter schools.

2.3 Charter School Governance

In this section an overview of charter school governance literature is provided, with emphasis placed on research that focuses on charter school board roles and responsibilities. Charter schools exist in complex political, institutional, and legal environments that could significantly affect their governance practices, but little is known about their board roles and responsibilities and how these practices compare to other nonprofit boards (Stone et al. 2012). The current literature on charter school governance is mostly made up of case studies or small quantitative studies focusing on charter schools in a few states. The following subsection will review charter school governance research, specifically examining board roles and responsibilities and then briefly address the gap this dissertation fills in charter school governance literature.

Since the charter school model is new and most schools are still in their first fifteen years of operation, then it should be understandable that charter school governance research is limited. While research is scarce, Miron and Horn (2003) were two of the first scholars to focus on charter school governance by exploring the composition of boards, the structure of board meetings, the relationship between boards and staff, and the training of board members. They find that most charter school boards are made up of a mix of professional and community members, with new board members being nominated usually by a current member, and that board turnover was often low. Miron's and Horn's research also shows that most boards were made up of founding board members. Issues that were often addressed by boards, in the thirteen schools researched, included the budget, mission statements, fundraising, building maintenance, personnel, staff evaluation, and policy development.

Miron and Horn's (2003) research addresses specific governance issues by showing that most charter school boards did not micromanage the day-to-day operations of their schools. However, there were a few cases where the board did micromanage or the school director/principal had too much power. Their study also reported a significant level of confusion over roles and responsibilities among board members, specifically new board members who felt they lacked sufficient training.

Sullins and Miron (2005) add to the research on charter school boards by presenting a case study of four Ohio charter schools, in which they found significant differences in each charter school's board structures and roles. They find that all the schools were different when it came to board size, composition, and community involvement. Sullins and Miron also find instability in the governance of schools during the initial start-up years of charter schools, due to limitations in fundraising and developing community partnerships. However, the generalizability of this study is extremely limited since it only examined four charter schools in Ohio.

Ascher et al.'s (2003) research on New York City charter schools find that board roles and responsibilities were often misunderstood, which had a negative effect on the schools. In their evaluation of eight charter schools, they found the relationships and collaboration between the boards, staff, and external environment varied significantly. These varying relationships and how effective the charter school boards operated were often due to the school being new, a start-up organization, or a traditional public school conversion school. Only three boards out of the eight examined by Ascher et al. were classified as having clear roles, which meant they had transparent governance structures, formalized roles

for board members, institutional partners, and a well-defined division of responsibility between the board and school staff. The remaining boards were defined as in the process of board role clarification or were experiencing challenges, due to lack of board structure and often too much reliance on institutional partners, causing the charter school board to be incapable of governing their school effectively.

Hill et al. (2002) empirically based research of charter school governance came to many of the same conclusions as Miron and Horn (2003) and Ascher et al. (2003). From their research on 150 charter schools in six different states, they came to three different conclusions. First, the development of a new charter school board and establishing divisions of labor between the new board and school staff are extremely challenging. Second, they find that in order for a charter school to be successful a clear division of labor between board and school staff is necessary. Finally, they find that after the initial start-up period of a school most schools regularize internal relationships and establish a division of labor on the basis of which the board and staff hold each other accountable. These findings led Hill et al. (2002) to argue that acceptable role limitations between the board and staff (specifically for founding members) tend to lead to a more stable board and staff relationship, as well as overall higher organizational effectiveness.

Recently, additional studies have examined the characteristics, composition and practices of charter school boards. Sparks (2009) finds that charter school boards appear to evolve in a similar manner as comparable institutions with governing bodies. He also explains that charter school founders continue to play a strong role at all leadership levels. Finally, Sparks finds that charter schools struggle to balance an array of accountability

pressures and that no common model of charter school governance exist among charter schools. Frazier (2011) also recently examined the relationships among the characteristics, composition, and practices of charter school boards of directors, but this study related these concepts to the general success of charter school. She found that age and professional diversity of charter school board members positively impact charter schools' academic outcomes.

Finally, a leading scholar in nonprofit governance research (e.g., Stone 1996; Stone & Ostrower 2007; Stone & Ostrower, 2006; 2010) extended her research into charter school governance literature. Stone et al. (2012) find examining Minnesota charters that charter school boards are small and homogeneous, especially relating to age, gender, race, and professional background. Stone and colleagues find that charter schools are mostly insider boards, including community representatives and parents. Compared to national boards, they are smaller, younger, include more females, and have less business experts. However, they are not more racially diverse compared to national boards. Stone et al. also find that the types of charter authorizers are not associated with different governance practices at the organization.

Stone et al. (2010) explain that at charter school governance can take place in various complex and dynamic environments, encompassing legal, regulatory, funding, policy and political factors. In terms of governance, charter schools must comply with federal regulations for tax-exempt entities, state nonprofit corporation law, and state charter school governance law. Stone et al. (2012) also explain that funding environments are similarly diverse in charter schools because they receive a mix of public funding as well as private

funding. They find that charter school boards in Minnesota are very accountable to meeting demands of their institutional environments, specifically in terms of having a written conflict of interest policy and fiscal management activities. However, charter school boards are less engaged in community outreach and are not actively engaged in fundraising.

The previously described studies show that charter school boards usually oversee and provide guidance to the leadership within the schools but the research also clearly demonstrate how there are significant differences in charter schools' board roles and responsibilities. While the studies conclude that the roles and responsibilities of charter school boards, such as monitoring school leaders, maintaining school partnerships, and providing financial oversight, are important to organizational success, there are many charter school boards that have difficulty performing or implementing some or all of these duties (Finn et al., 2000; Hill et al., 2002; Miron and Horn, 2003; Ascher et al., 2003; Spark, 2009). While the previously described literature provides some insight into board compositions, staff-board relationships, and board roles and responsibilities of charter schools, this research is comprised mostly of case studies, state specific research, and lacks substantial empirical research. Conclusions from this research are limited in their generalizability for all charter school boards.

This dissertation fills a gap in the literature by executing a study that uses a national charter school sample to define the common roles and responsibilities performed by charter school boards. This moves the charter governance literature forward by providing a clear understand of what roles and responsibilities charter school perform. Also, an area in the charter school governance literature that lacks research is analyzing the circumstances that

cause charter school board to perform their roles and responsibilities. This dissertation also fills a gap in the charter school governance literature by providing an enhanced understanding of how external environmental conditions, board attributes, and internal organization characteristics account for differences among charter schools in performing board roles and responsibilities. Through analyzing a national sample this dissertation provided results on charter school boards that are more generalizable to all charter schools than any previous study.

The next sections of Chapter 2 begin to address how this dissertation filled the gap in the charter school governance research through combining the nonprofit sector's previous knowledge on board roles and responsibilities with that of charter schools boards. The next sections discuss nonprofit board roles and responsibilities and frameworks that were developed to study nonprofit boards. Finally, in the upcoming sections the research on nonprofit board roles and responsibilities and nonprofit board governance frameworks are adapted to study charter school boards for this dissertation.

2.4 Nonprofit Board Roles and Responsibilities

This section begins by providing a brief overview of research on nonprofit board roles and responsibilities and then provides a theoretical understanding of how board roles and responsibilities are categorized for this study. Common assumptions exist on what are traditional roles and responsibilities for boards; however, "research literature has established that there is much variation across and within nonprofit boards regarding which roles and responsibilities are more likely to be performed" (Ostrower & Stone, 2006, 618). Stone and Ostrower (2007) explain that there is not an extensive amount of research on nonprofit board

roles and responsibilities, despite the fact that it is crucial to better understand nonprofit governance. Ostrower and Stone's (2006) review of nonprofit governance literature explains that studies on board roles and responsibilities examine substantial differences between actual board behaviors and traditional prescriptive lists of board responsibilities. (Holland, 2002; Miller, 2002). Also, additional studies (Fenn 1991; Harris, 1989) on board behaviors find a mismatch between the board and staff perceptions on what the actual roles and responsibilities are of the board.

A small but growing subset of research on boards examine the extent that board attributes, organizational characteristics (Brown and Guo, 2010; Miller, 2003; Miller-Millesen, 2003; Ostrower and Stone, 2010), and environmental factors (Bernstein, 1991; Brown and Guo, 2010; Grønbjerg, 1990; Miller, 2003; Miller-Millesen, 2003; Saidel and Harlen, 1998; Smith and Lipsky, 1993; Stone, 1996, Ostrower and Stone, 2010) influence board roles and responsibilities, power, and composition. This dissertation extended this small subset of research in nonprofit governance by examining how environmental factors, board attributes, and organizational characteristics influence charter school board roles and responsibilities. Prior to understanding what factors influence charter school board roles and responsibilities (reviewed later in Chapter 2), it is important to explain what board roles and responsibilities were examined in this dissertation.

Previous studies (Axlerod, 1994; Houle, 1997; Ingram, 2003, Miller, 2003; Miller-Millesen, 2003) and the more recent studies (Brown and Guo, 2010; Ostrower and Stone 2010) outlined certain board responsibilities that encompass the general focus of nonprofit board of directors. Twelve board roles and responsibilities that are represented, to some

degree, in previous nonprofit and charter school research and are examined in this dissertation are:

- Selecting and evaluating the Executive Director/Principal;
- Overseeing the organization's mission and purpose;
- Providing fiscal and policy oversight;
- Defining the organization's mission and purpose;
- Planning for the future of the organization through strategy and planning;
- Setting the organization's policy;
- Advancing the organization's public image;
- Developing community relationships;
- Enlisting financial resources;
- Assuring legal compliance;
- Implementing mandates; and
- Meeting professional standards for the organization.

These twelve board roles and responsibilities provide a basis for typical functions of modern nonprofit board of directors (Brown and Guo, 2010; Miller, 2003; Miller-Millesen, 2003; Ostrower and Stone, 2006). However, the presence of these roles and responsibilities in a nonprofit organization's board are often determined by the specific needs of the organization (Bradshaw et al., 1992; Miller-Millesen, 2003; Ostrower and Stone, 2006, 2010), a concept discussed later in Chapter 2. These twelve board roles and responsibilities represent the dependent variables with in this study. This study examined how active charter school boards are in performing each of these twelve roles and responsibilities. The next

section provides a more in-depth analysis of these twelve board roles and responsibilities and explains how they were categorized based on theory for this dissertation.

2.5 Theoretical Perspectives on Board Roles and Responsibilities

The literature on nonprofit board roles and responsibilities is full of prescriptive information about the kinds of activities that should be part of a board's roles and responsibilities. Recent literature (Miller-Millesen, 2003; Brown, 2005) on nonprofit governance moves research beyond the common roles and responsibilities ascribed to nonprofit boards and explains board roles and responsibilities in the context of theoretical frameworks. Hillman and Dalziel (2003) explain that two of the most commonly used theoretical explanations for board roles and responsibilities are agency theory (Fama and Jensen, 1983; Miller-Millesen, 2003; Cornforth, 2004, Caers et al. 2006) and resource dependency theory (Pfeffer and Salancik, 1978; Miller-Millesen, 2003; Ostrower and Stone 2006; 2010; Brown and Guo, 2010). However, scholars have used additional theories to explain board governance: institutional theory (Miller-Millesen, 2003; Guo, 2007; Ostrower and Stone, 2010; Brown and Guo, 2010); stewardship theory (Low, 2006; Van Slyke, 2007); stakeholder theory (Mason et al., 2007); democratic theory (Cornforth and Edwards, 1999; Guo, 2007; Guo and Musso, 2007); group/decision processes theories (Zander, 1993; Brown, 2005); strategic management theory (Cornforth and Edwards, 1999); and transactional cost/economic contracts theory (Speckbacher, 2008; Jergers, 2009).

Recently, scholars (Miller-Millesen, 2003; Cornforth, 2004) argue that is unlikely a grand theory will be found that explains all aspects of nonprofit governance. These scholars argue that using multi-theory approach drawing from numerous theories will be more useful

in helping the field understand boards and their roles and responsibilities. Several researchers (Miller-Millesen, 2003; Cornforth, 2004; Guo and Acar, 2005; Wellens and Jegers, 2011; Van Puyvelde et al., 2012) suggest different multi-theory approaches to understanding nonprofit board governance. This study tested one of these multi-theory approaches with the dependent variable of this study.

This dissertation tested Miller-Millesen’s (2003) multi-theory approach examining board roles and responsibilities. She explains that there are three dominant theories – agency theory, resources dependency theory, and institutional theory – that best explain various normative roles and responsibilities for nonprofit boards. Table 2.1 shows Miller-Millesen’s theoretical typology and categories for nonprofit board roles and responsibilities. This study used an adapted version of Miller-Millesen’s theoretical typology to understand if the roles and responsibilities of charter schools examined in this study (listed previously in Section 2.4) can be grouped based on a multi-theory approach.

Table 2.1: Miller-Millesen’s Theory-Based Typology of Board Roles and Responsibilities

Monitoring (Agency Theory)	Boundary-Spanning (Boundary-Theory)	Conforming (Conforming)
<ul style="list-style-type: none"> • Determine Mission and Purpose • Oversee Programs and Services • Strategic Planning • Fiscal Control • Evaluate CEO 	<ul style="list-style-type: none"> • Reduce Uncertainty • Manage Problematic Interdependencies • Raise Money • Enhance Image 	<ul style="list-style-type: none"> • Assure Legal Compliance • Implement Mandates

This dissertation used an adapted version of Miller-Millesen's theory-based typology (this study also uses an adapted version of Miller-Millesen's (2003) board governance framework explained further in this Chapter) in order to include other board roles and responsibilities examined in the literature (Cornforth, 2003a, Ostrower and Stone, Brown and Guo, 2010) and to expand the multi-theory approach to include stewardship theory. Stewardship theory was included in the multi-theory approach because scholars (Eisenhardt, 1989; Davis et al., 1997; Miller, 2003; Van Slyke, 2007; Steinberg, 2010; Van Puyvelde et al., 2012), including Miller-Millesen, argue that agency theory does not explain all of the possible relationship between the principal (e.g., charter school board) and the agent (e.g., ED/principal). Van Puyvelde et al. (2012) state that based on previous scholars (Eisenhardt, 1989; Steinberg, 2010) applying agency theory to nonprofit organizations one may conclude that, "the presence of multiple principals with different objectives hinders the potential of agency theory to resolve questions of nonprofit accountability" (432). They recommend complementing agency theory with other theoretical perspectives. This dissertation did this by expanding on Miller-Millesen's (2003) theoretical board typology to include stewardship theory along with agency theory.

Agency theory assumes there is a goal conflict between a principal and an agent and because of this conflict, the principal needs to develop an incentive scheme or information system to make sure the agent is not opportunistic. In the case of the theory-based typology regarding charter schools, the board performs monitoring roles and responsibilities to ensure the ED/principal furthers the interest of the charter school. However, Davis et al. (1997) argue that these assumptions of agency theory limit the generalizability of it and argue that

an additional theory is necessary. They explain that stewardship theory is needed because it “defines situations in which managers are not motivated by individuals goals, but rather are stewards whose motives are aligned with the objectives of their principals” (21). In a principal-steward (e.g., ED/principal) relationship the focus for the principal is on developing strategies for long-term goal alignment (Van Slyke, 2007). In Miller-Millesen’s (2003) theory-based typology monitoring (e.g., overseeing program and services) and strategic (e.g., strategic planning) roles and responsibilities are examined under solely agency theory. This study examined these concept separately using agency and stewardship theory to better understand if the principal and agent/steward relationships are different based on the roles and responsibilities performed by the charter school boards. Table 2.2 depicts the theory-based typology for board roles and responsibilities examined in this study.

Table 2.2: Theory-Based Typology of Charter School Board Roles and Responsibilities

Monitoring (Agency Theory)	Strategizing (Stewardship Theory)	Boundary Spanning (Resource Dependency Theory)	Conforming (Institutional Theory)
<ul style="list-style-type: none"> • Selecting and evaluating the ED/principal • Overseeing the organization’s programs/ services • Providing fiscal and policy oversight 	<ul style="list-style-type: none"> • Defining the organization’s mission and purpose • Planning for the future of the organization through strategy and planning • Setting the organization’s policy 	<ul style="list-style-type: none"> • Advancing the organization’s public image • Developing community relationships • Enlisting financial resources 	<ul style="list-style-type: none"> • Assuring legal compliance for the organization • Implementing mandates for the organization • Meeting professional standards for the organization

While this dissertation asked respondents how active they were in performing the twelve roles and responsibilities (the dependent variables of the study), the study attempted to factor these roles and responsibilities based on theoretical understanding provided in Table 2.2. The results of how the theory-based typology factors is discussed further in Chapter 4. The following subsections discuss in-depth the theoretical understanding of board roles and responsibilities shown in Table 2.2 and explain the reasons behind assigning the twelve roles and responsibilities to each of their respective theoretical categories.

2.5.1 Agency Theory

Agency theory (Fama and Jensen, 1983; Jensen and Meckling, 1976) emphasizes how ownership is separated from control over an organization (Fligstein and Freeland, 1995) and it is the underlying theory for most of the research on corporate boards (Golden-Biddle and Rao, 1997; Zahra and Pearce, 1989). A principal-agent relationship is one where the principal assigns control to an agent who is expected to act in a manner consistent with the interests of the principal (Jensen and Meckling, 1976). When applied in charter schools or other nonprofits, the board delegates control to the ED/principal. The ED/principal is expected to act in ways that further the interests of the organization. However, agency theory explains that the ED's/principal's interests will not always align with the interests of board and the ED/principal will engage in activities for their own self-interest.

Kosnik (1987) explains these self-interest behaviors include personal use of organizational resources, short-term risk-adverse strategies, and enhancing prestige and power through the pursuit of diversification. Fama and Jensen (1983) argue that in order to minimize agency problems, decisions need to be controlled separately from management so

that decisions expected to benefit managers are protected against opportunistic actions. Fama and Jensen also note that in an organization, an independent board is a way to guarantee the interests of the principal and agents are united.

Miller-Millesen (2003) emphasizes that agency theory explains how boards act as monitoring devices and provides the basis for several normative nonprofit board roles and responsibilities. In the context of agency theory, the board roles and responsibilities examined in this dissertation that provided a monitoring function are: selecting and evaluating the ED; overseeing the organization's programs/services; and providing fiscal and policy oversight.

Agency theory applies to selecting and evaluating the ED because organizational performance will be maximized when an independent board effectively monitors the ED's tendency to behave in his/her self-interest. The conflict between the board and ED is usually over the power distribution between the two entities. Research focuses on two major issues when board actions are independent of managerial influence: the ratio of inside directors to outside directors (Bainbridge, 1993; Fredrickson et al., 1988; Hoskisson et al., 1994) and the separation of CEO and board chair roles (Anderson and Anthony, 1986; Finkelstein and D'Aveni, 1994; Mallette and Fowler, 1992; Westphal and Zajac, 1995). Miller-Millesen (2003) explains that these two concerns center on whether the board is an effective control entity or a rubber stamp for management initiatives. Thus, agency explains the board role of selecting and evaluating the ED because while the executive is hired for his/her expertise, it is the board that has the responsibility to monitor for managerial opportunism and to ensure the organizations engages only in defined activities.

In terms of overseeing the organization's programs and policies, Miller-Millesen (2003) explains that the board's role in defining the organization's mission and purpose lays the foundation for the board to monitor the organization's programs and policies. Agency theory is reflected here because it is the board's fundamental role to evaluate whether the organization's programs and policies align with the organization's mission and purpose (Ingram, 2003; Miller, 2003). Miller (2003) argues that without the board's monitoring programs and policies, the organization may not manage them in a way that reflects their mission.

A nonprofit board has legal fiduciary duties to ensure proper fiscal oversight for the organization. The board is responsible for monitoring to ensure that organizational resources are allocated in a manner that is consistent with the organization's bylaws and mission. Thus, Miller (2003) explains that agency theory explains board involvement in providing fiscal oversight by formulating budgets to ensure resources are used on decisions reflecting the organization's mission.

As described above, agency theory provides a useful perspective in explaining how board roles and responsibilities take on the functions of monitoring. Through the lens of agency theory, a charter school board's roles and responsibilities should focus on monitoring decisions that are initiated by the management of the organization. Based on agency theory, this dissertation examined how active charter school boards are in performing the roles and responsibilities of selecting and evaluating the ED, overseeing the organization's programs and services, and providing fiscal and policy oversight.

2.5.2 Stewardship Theory

Stewardship theory (Donaldson and Davis, 1991; Muth and Donaldson, 1998) begins from opposite assumptions to agency theory and assumes managers want to do a good job and act as effective stewards of an organization. Stewardship theory “defines situations in which managers are not motivated by individual goals, but rather are stewards whose motives are aligned with the objectives of their principals” (Davis et al., 1997, 21). Stewardship theory assumes that relations are based on trust, reputation, collective goals, and involvement resulting in outcome alignment that is based on relational reciprocity. In a principal-steward (e.g., ED/principal) relationship the focus for the principal is on developing strategies for long-term goal alignment (Van Slyke, 2007). The roles and responsibilities of a board in a principal-steward relationship are not to ensure managerial compliance or conformance but to improve organizational performance through primarily advancing the strategy of the organization (Cornforth, 2003b).

Stewardship theory is evident in various models of governance (Cornforth, 2003b). Carver’s (1990) policy governance model for nonprofit organizations explains that the real roles and responsibilities of boards are to make policy, articulate the mission, and sustain the vision of the organization. In the context of stewardship theory, the board roles and responsibilities examined in this dissertation that provided a strategizing function are: defining the organization’s mission and purpose; planning for the future of the organization through strategy and planning; and setting the organization’s policy.

Nonprofit board governance literature explains that a main responsibility of the board is to define the organization’s mission and purpose and ensure that decisions in the

organization align with the mission (Axelrod, 1994; Houle, 1997; Ingram, 2003). For stewardship theorists, board involvement in defining the organization's mission and purpose allows the board to establish a future direction and plan for the organization. Also, stewardship theory suggests that a board engaging in strategic planning is essential to the organization's mission and purpose. Stewardship theory explains that since the board is not actively involved in the daily operations of the organization, short-term and long-term planning by the board, along with setting policy, can assist the organization by guiding it in new directions

As described above, stewardship theory provides a useful perspective in explaining how board roles and responsibilities take on the functions of strategizing. Through the lens of stewardship theory, a charter school board's roles and responsibilities should focus on defining the charter school's purpose and developing a strategic plan to guide the future of the school. Based on stewardship theory, this dissertation examined how active charter school boards are in performing the roles and responsibilities of defining the organization's mission and purpose, planning for the future of the organization through strategy and planning, and setting the organization's policy.

2.5.3 Resource Dependency Theory

Resource dependency theory emphasizes that the ability to acquire and maintain resources is essential to the survival of the organization (Pfeffer and Salancik, 1978). Pfeffer and Salancik argue that resource dependency theory explains how an organization's strategy, structure, and survival are dependent upon the availability of resources and asymmetrical dependency relationships with external institutions (Hodge and Piccolo, 2005). Miller-

Millesen (2003) notes that the way resource dependency theory is applied to the study of nonprofits is different from the way it is used in corporate governance research. She states that, “nonprofit board’s roles in linking the organization with its environment entails coordinating with a fairly broad array of constituents.” (534). This differs from corporate governance because the private sector involves “securing access to capital and enhancing coordination among firms” (534). Overtime, resource dependency theory has become a dominant theoretical perspective used to guide research on nonprofit boards (Harlan and Saidel, 1994; Jun and Armstrong, 1997; Middleton, 1987; Miller, 2003; Miller-Millesen, 2003; Ostrower and Stone, 2010; Pfeffer, 1973, Provan, 1980; Provan et al., 1980).

Zald (1969; 1970) and Pfeffer (1972; 1973) provided the initial framework for viewing boards as being essential to reducing environmental uncertainty and providing access to resources. These studies were followed by other scholars (Harlan & Saidel, 1994; Provan, 1980; Provan et al., 1980) who used resource dependency theory to explain how a “nonprofit board’s ability to span boundaries and co-opt resources from the environment can increase agency power relative to those organizations competing for the same resources” (Miller-Millesen, 2003, 533). The board roles and responsibilities in this dissertation that reflect a resource dependency perspective to span boundaries and co-opt resources from the environment are: advancing the organization’s public image; developing community relationships; and enlisting financial resources.

Resource depending theory explains a nonprofit board as boundary spanners through performing the role of enlisting financial resources. Miller-Milleson (2003) uses the work of Middleton (1987) to explain how the board acting as boundary spanners translates into the

role of enlisting financial resources for the organization. In the board's role of enlisting financial resources, they perform three primary functions:

1. A board needs to reduce organizational uncertainty by developing exchange relationships with external constituents in order to decrease the number of organizational resource dependencies while increasing organizational resources;
2. A board needs to ensure the organization remains adaptive by gathering and interpreting information from the external environment, through processing complex information that so the organization remains competitive;
3. The board needs to protect the organization from environmental interference by passing on only information essential to the organization's operation (Middleton, 1987; Miller-Millesen, 2003).

Resource dependency theory also explains a nonprofit board as boundary spanners through advancing the organization's public image and developing community relationships. Miller-Millesen (2003) again uses the work of Middleton (1987) to explain how the board acting as boundary spanners translates into the role of advancing the organization's public image and developing community relationships. The board's roles and responsibilities of advancing the organization's public image and developing community relationships are primary functions of the board to represent the organization to external constituencies (Middleton, 1987; Miller-Millesen, 2003). A board acts as boundary spanners by integrating the organization with its social environment and its community/public (Houle, 1997). Also, the board is a link between the organization and its stakeholders, clients, and community and the board serves as ambassadors of the organization (Ingram, 2003).

In the theoretical context of resource dependence, the board of directors facilitates exchanges that reduce interdependencies in the organization's environment (Miller-Millensen, 2003). Board members can act as personal and professional contacts for the organization and gain information and reduce uncertainty within the organization by acquiring resources. Miller-Millensen explains that resource dependency theory "highlights the board's boundary-spanning responsibilities" (522), which provides ways that power and influence can affect resource allocation decisions.

As described above, resource dependency theory provides a useful perspective in explaining how board roles and responsibilities take on the functions of boundary spanning. Through the lens of resource dependency theory, a charter school board's roles and responsibilities should focus on building relationships for the school and reducing uncertainty in the school through acquiring resources. Based on resource dependency theory, this dissertation examined how active charter school boards are in performing the roles and responsibilities of advancing the organization's public image, developing community relationships, and enlisting financial resources.

2.5.4 Institutional Theory

Nonprofit organizations are dependent on exchanges with their environments (Meyer and Rowan, 1977; Pfeffer and Salancik, 1978; DiMaggio and Powell, 1983). They are not closed systems; instead, they are open to and dependent on the flow of resources from external sources. Organizational theory in this context prescribes that the behaviors of nonprofits, including their internal structures and process of decision making, cannot exclude organizational environments in which they operate and with which they interact on multiple

levels (Meyer and Rowan, 1977; Pfeffer and Salancik, 1978; DiMaggio and Powell, 1983, Grønbjerg, 1993). Within organizational theory, institutional theory relates specifically to the issue of organizational behaviors and structures dependent upon their environment.

Institutional theory explains how the institutional environment shapes conventional behaviors in organizations. Additionally, institutional theory examines why organizations conform to institutional norms and explains ways in which organizational structure and processes reflect isomorphic pressures (DiMaggio and Powell, 1983; Meyer and Rowan, 1977; Zucker, 1983; 1987). Meyer and Rowan (1977) explain that organizations are reflections of rationalized institutional myths either in the form of norms or legal practices and that “institutionalization” represents the organizational processes of conforming to these myths. Meyer and Rowan argue that in modern societies, formal organizations incorporate the practices and procedures defined by “prevailing rationalized concepts of organizational work and institutionalized in society” (340), which assist in increasing the organizations legitimacy and ability to survive.

Institutional theory assumes that the same type of organizations become overtime isomorphic to those in their environment. Institutional isomorphism occurs through coercive, mimetic, or normative developments (DiMaggio and Powell, 1983). However, according to DiMaggio and Power (1983) these isomorphic pressures are difficult to separate in an empirical analysis. In regards to nonprofit boards, Miller-Millesen (2003) explains that isomorphic pressures cause boards to conform to their external environment in order to meet regulations or professional standards and to be deemed legitimate.

Coercive isomorphism stems from political influence and results from both formal and informal pressures exerted on organizations by other organizations that they are dependent on and by cultural expectations from society (DiMaggio and Powell, 1983). Miller-Millesen (2003) explains that coercive isomorphism occurs in nonprofit boards by responding to external mandates that emanate from the legal environment. Mimetic isomorphism results from standard responses to uncertainty causing organizations to model themselves after other organizations (DiMaggio and Powell, 1983). Organizations mimic other organizations so that they are perceived as being more legitimate and successful. Miller-Millesen (2003) explains that nonprofits boards conform to other boards due to mimetic isomorphic pressure, such as adopting board roles and responsibilities of other boards from more legitimate and successful organizations or sectors. Nonprofit boards conforming to business-like trends from the corporate world, compared to value laden trends, in the nonprofit sector is an example of mimetic isomorphism because nonprofit boards view corporations as exemplifying the best practices (Steckel, et al., 1987).

Finally, Normative isomorphism is associated with professionalization and is defined as “the collective struggle of members of an occupation to define the conditions and methods of their work to control ‘the production of producers’ and to establish a cognitive base and legitimation for their occupational autonomy” (DiMaggio and Powell, 1983, 152). Through training, education, and credentials, professionals are the key to developing the normative basis for organizational structures and processes that represents legitimacy. Thus, normative isomorphism causes organizations to adopt certain practices due to professional bodies with which the organization is connected in order to gain normative approval and legitimacy

(Meyer and Rowan, 1977). Miller (2003) explains that normative isomorphism occurs when nonprofit boards meet professional standards and engaging in expected behaviors laid out in the normative literature on good governance.

Institutional isomorphism, understood through coercive, mimetic and normative pressures, is useful in understanding why nonprofit boards conform to specific behaviors, specifically expectations described in normative governance literature (Miller-Millesen, 2003). Miller-Millsen explains that there is little research that applies institutional theory to the study of boards. This dissertation addresses this gap in the literature by examining how institutional theory causes nonprofit boards to conform to the roles and responsibilities of assuring legal compliance and implementing mandates. In the context of institutional theory, the board roles and responsibilities examined in this dissertation that provided a conforming function are: assuring legal compliance; implementing mandates; and meeting professional standards for the organization.

Institutional theory explains that nonprofit boards conform to their legal environment through its behavior of assuring legal compliance. Assuring legal compliance includes responsibilities such as adhering to local, state, and federal laws, filing required forms and document, adhering to provision in the bylaws, and avoiding conflict-of-interest situation (Ingram, 2003; Miller-Millesen, 2003). The coercive nature of the legal environment, with regards to the board's responsibility for ensuring adherence to legal and ethical standards, explains why board roles include assuring legal compliance. Also, in terms of mimetic and normative pressures, nonprofit boards conform to assuring legal compliance to gain

legitimacy because this behavior is performed in other nonprofits boards and is prescribed in good governance literature.

Institutional theory explains that nonprofit boards conform to their environment by implementing mandates. Coercive compliance causes boards to implement external mandates due to the influence funding agents (i.e. government, foundations) may exert in connection to the organization obtaining donations, grants, etc. Also, in terms of mimetic and normative pressures, nonprofit boards conform to implementing mandates because they want to attract outside legitimacy and success, as exemplified by other organizations or prescribed in good governance literature.

As described above, institutional theory provides a useful perspective in explaining how board roles and responsibilities take on the functions of conforming. Through the lens of institutional theory, a charter school board conforms to their external environment in order to meet regulations or professional standards and to be deemed legitimate. Based on institutional theory, this dissertation examined how active charter school boards are in performing the roles and responsibilities of assuring legal compliance, implementing mandates, and meeting professional standards for the organization.

This dissertation used an adapted version of Miller-Millesen's theoretical typology (See Tables 2.1 and 2.2) to understand if the roles and responsibilities of charter school board can be grouped based on a multi-theory approach. The four theoretical perspectives of agency theory, stewardship theory, resource dependency theory, and institutional theory, are used to categorize what roles and responsibilities charter boards perform. These four organizational perspectives carry different theoretical assumptions that have the capacity to

explain charter school board roles and responsibilities. Since nonprofit board literature suggests there is no one-size-fits-all model of board governance, combining these theories could shed more light on charter school board roles and responsibilities. While this dissertation asked respondents how active they were in performing the twelve roles and responsibilities (the dependent variables of the study), the study attempted to factor these roles and responsibilities into four categories based on the theoretical understanding provided in Table 2.2. The factored categories are used in this study as the dependent variables. The results of how the theory-based typology factored is discussed further in Chapter 4.

By factoring the twelve roles and responsibilities into categories, this study examined how variables associated with external environmental conditions, board attributes, and internal organizational characteristics influence monitoring, strategizing, boundary-spanning, and conforming roles and responsibilities for charter school boards. Miller Millesen (2003) explains that categorizing board roles and responsibilities in regard to theory can aid in understanding conceptual links among board roles and responsibilities and environmental factors, board attributes, and organizational characteristics. The next section explains the frameworks used in this study to understand how external environmental conditions, board attributes, and internal organizational characteristics influence board roles and responsibilities. The next section provides an overview of previous frameworks used in examining variables that influence nonprofit roles and responsibilities and then presents the framework that was used in this study to examine how external environmental conditions, board attributes, and internal organizational characteristics influence charter school boards to perform their roles and responsibilities.

2.6 Governance Frameworks of Factors Influencing Nonprofit Boards

A review of the literature on nonprofit governance practices show that board roles and responsibilities are diverse and influenced by their context (Cornforth 2003a; Miller-Millesen 2003; Ostrower and Stone 2006; 2010). Recently, scholars are developing frameworks to understand more systematically the differences that exist in nonprofit boards' roles and responsibilities (Cornforth, 2003a; Miller-Millesen, 2003; Ostrower and Stone 2001, 2006, 2010). These scholars explain that board attributes, internal organization conditions, and external environmental factors influence boards to perform certain roles and responsibilities more frequently than others. Several frameworks (Conforth, 2003a; Miller, 2003; Miller-Millesen, 2003; Ostrower and Stone 2001, 2010) have been developed to examine how board attributes, internal organization conditions, and external environmental factors influence boards to perform their roles and responsibilities.

This dissertation tested an adapted version of two of these frameworks (Miller-Millesen, 2003; Ostrower and Stone, 2010) in order to expand the governance literature on charter schools and test the applicability of these frameworks on a specific type of nonprofit. Ostrower and Stone (2010) state that studies need to approach nonprofit board governance as a conditional phenomenon and expect different types of board roles and responsibilities to be influenced by certain factors based on the organization's specific circumstances. This dissertation tests this assumption by using frameworks in the nonprofit governance literature and applying them to charter school boards. By using these frameworks to analyze charter school boards a more thorough understanding of charter school boards can be gained and a

comparison can be made of how factors influence charter school boards compared to other nonprofits boards examined in the literature.

The first framework that this study borrowed is Miller-Millesen's (2003) governance framework. Based on a qualitative study (Miller, 2003) of twelve nonprofit boards in New York and Connecticut, Miller-Millesen (2003) developed a framework of what categories of variables associated with the environmental factors, organizational factors, and recruitment practices-composition influence board roles and responsibilities, as depicted in Figure 2.1. As previously described, Miller-Millesen also examines in her framework how theory can be used to categorize board roles and responsibilities. She explains that agency theory, resource-dependency theory, and institutional theory assists in explaining how board roles and responsibilities are categorized into monitoring, boundary-spanning, and conforming roles and responsibilities. Miller-Millesen's entire framework then explains how categories of variables associated with the environmental factors, organizational factors, and recruitment practices-composition influence nonprofits in performing monitoring, boundary-spanning, and conforming roles and responsibilities.

As previously discussed in Sector 2.5, this dissertation borrows from Miller-Millesen (2003) by using an adapted version of her theoretical understanding of board roles and responsibilities in order to group charter school board roles and responsibilities (the dependent variable of this study) into categories that can be examined within the study. Also, this dissertation borrows from her framework by including all of Miller-Millesen's categories of variables associated with environmental factors, organizational factors and recruitment practices-composition.

Finally, based on her qualitative study (Miller, 2003), Miller-Millesen proposed some hypotheses of how categories of variables associated with the environmental factors, organizational factors, and recruitment practices-composition influence nonprofits in performing monitoring, boundary-spanning, and conforming roles and responsibilities. These hypotheses (discussed in Section 2.7) are also tested in this dissertation in order to analyze how factors (e.g., environmental factors) might influence charter school boards differently compared to other nonprofits boards examined in the literature.

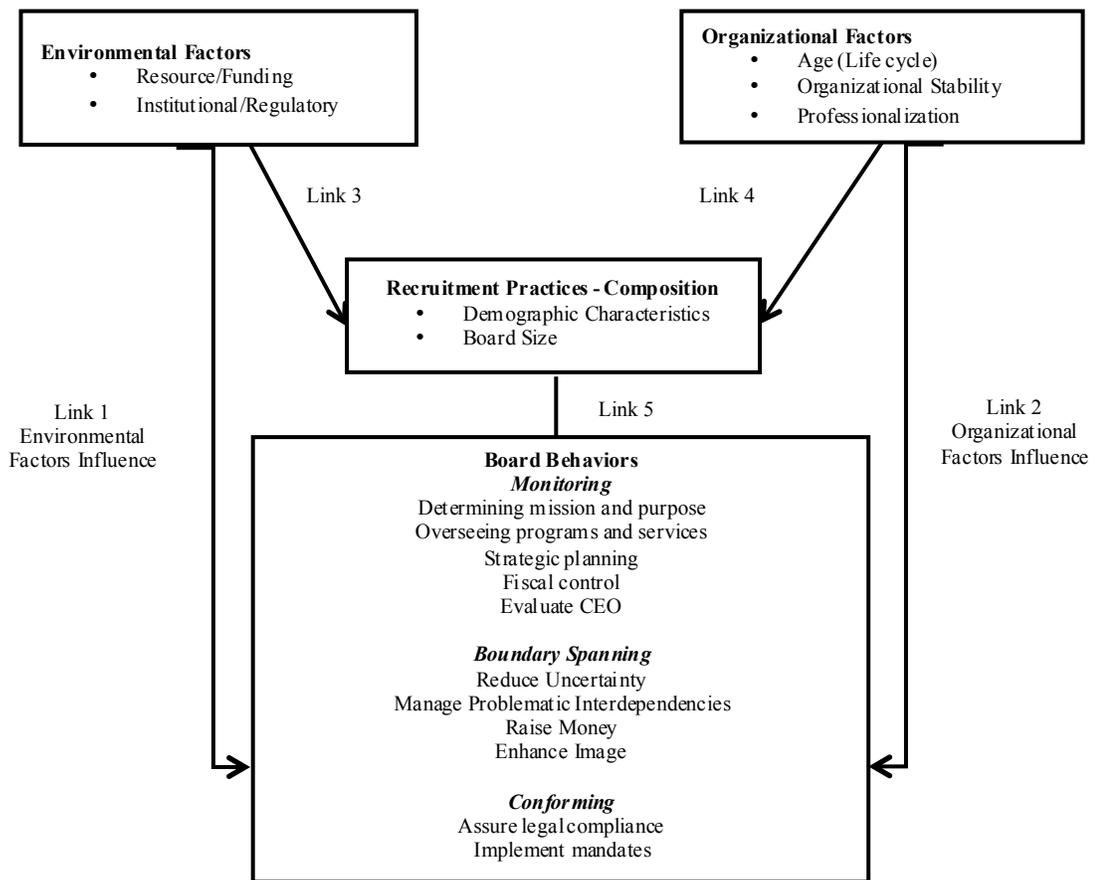


Figure 2.1: Miller-Millesen's (2003) Board Governance Framework

This dissertation also borrowed from Ostrower and Stone's (201) contingency-based governance framework, depicted in Figure 2.2. Ostrower and Stone (2010) build off previous governance frameworks (Ostrower and Stone, 2001; Miller-Millesen, 2003) to develop and test how external conditions, board attributes, and internal organizational conditions influence board roles and responsibilities. Ostrower and Stone explain that they have "proposed a framework – not a model and certainly not a theory of boards" (920). They state that,

"[Their] framework offers a way to organize this endeavor so that individual researchers will have some common point of reference which they can place their results. This in turn will help us to aggregate different results and draw more general conclusion that can strengthen theory" (920).

Ostrower and Stone's (2010) framework was adapted from Zahara and Pearce's (1989) research on a corporate board that is based on several assumptions:

1. The board is a conceptualized part of the organization and the environment;
2. Major components of the framework include both external (legal and institutional environments; nonprofit field of activity, funding environment, etc.) and internal (organizational age, size, degree of professionalism, life cycle) contingent factors;
3. Board attributes relate to board roles and responsibilities;
4. Board roles influence board effectiveness; and
5. Board effectiveness contributes to general organizational effectiveness.

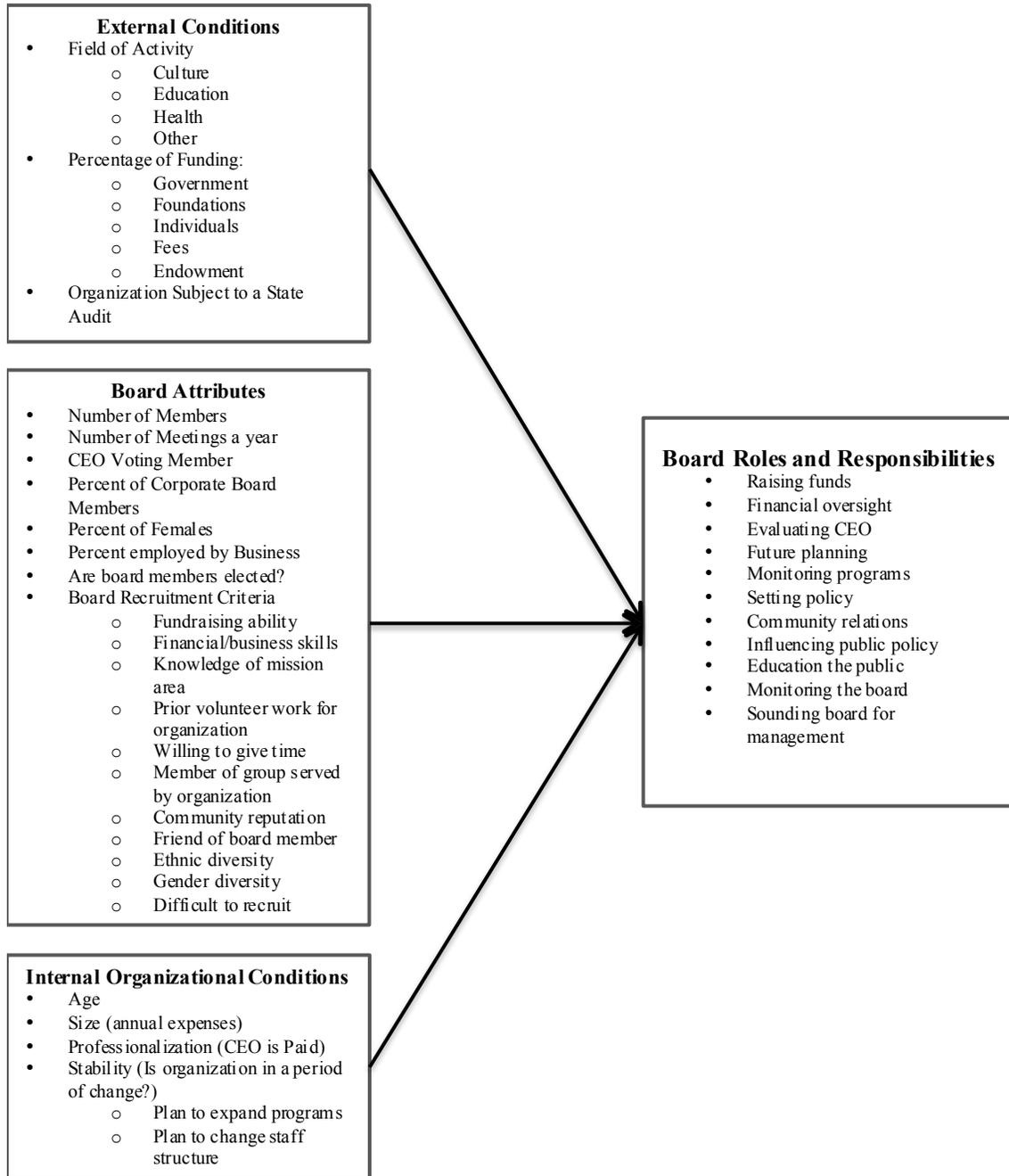


Figure 2.2: Ostrower and Stone’s (2010) Contingency Based Framework: Factors Influencing Nonprofit Board Roles and Responsibilities (Expanded Version)

Ostrower and Stone's empirical analysis of their framework focused on how internal, external, and board variables were associated with levels of engagement in board roles and responsibilities. They examined their framework using the Urban Institute's National Survey of Nonprofit Governance (Ostrower, 2007) administered to a stratified random sample (based on organizational size) of nonprofits drawn from the Urban's Institute's 2002 NCCS-GuideStar National Nonprofit Research Database of public charities that file Internal Revenue Service Form 990. This means that all sample respondents had at least \$25,000 in annual receipts.

This dissertation borrowed from Ostrower and Stone's framework by including several of the independent variables (when appropriate for the analysis on charter schools) associated with the categories of external conditions, board attributes, and internal organizational conditions. Specifically, the dissertation's charter school governance framework, in some manner, includes the variables described in Table 2.3 from Ostrower and Stone's framework. This dissertation also borrowed from Ostrower and Stone's framework to include several of the board roles and responsibilities they examined in their study. However, since Ostrower and Stone examine only individual board roles and responsibilities in their study, this dissertation relied more on Miller-Millesen's (2003) categorization of board roles and responsibilities in order to expand on the literature regarding the theoretical understanding of board roles and responsibilities.

Table 2.3: Independent Variables From Ostrower and Stone’s Framework Included in this Study’s Framework

External Environmental Conditions	Board Attributes	Internal Organizational Characteristics
<ul style="list-style-type: none"> • Percentage of Funding from: <ul style="list-style-type: none"> ○ Government ○ Foundations ○ Individuals ○ Fees ○ Endowment 	<ul style="list-style-type: none"> • Number of Voting Members • Number of board meeting per year • Is CEO a voting board members • Percentage of members on corporate boards • Percentage of female members • Percentage of minority members • Board recruitment criteria: <ul style="list-style-type: none"> ○ Fundraising ability ○ Financial/business skills ○ Knowledge of mission area ○ Prior volunteer work for organization ○ Willing to give time ○ Member of group served by organization ○ Community reputation ○ Friend of board member ○ Ethnic diversity ○ Gender diversity 	<ul style="list-style-type: none"> • Age • Size (annual expenses) • Professionalization <ul style="list-style-type: none"> ○ Is the CEO a paid professional staff member • Stability <ul style="list-style-type: none"> ○ Plan to expand programs ○ Plan to change staff structure

Results from Ostrower and Stone’s (2010) framework using the Urban Institute’s National Survey of Nonprofit Governance (Ostrower, 2007) is discussed in detail in Section 2.7 and their findings aided this study in proposing hypotheses of how certain factors influence charter school board roles and responsibilities. Also, Ostrower and Stone in their study examine Miller-Millesen’s (2003) proposed hypotheses, which is also addressed in Section 2.7 and assisted in developing hypotheses for this dissertation.

Finally, since there is a lack of information regarding charter school board’s roles and responsibilities, applying frameworks similar to Miller-Millesen’s (2003) and Ostrower and Stone’s (2010) can assist in understanding why charter schools focus on certain board roles and responsibilities more frequently than others. This dissertation used an adapted version of Miller-Millesen’s and Ostrower and Stone’s frameworks to expand the literature on charter school governance by analyzing more in-depth what factors influence the roles and

responsibilities of charter school boards. Also, this dissertation tested an adapted version of these frameworks (Miller-Millesen, 2003; Ostrower and Stone, 2010) in order to test the applicability of these frameworks on a specific type of nonprofit. This dissertation tests the assumption that nonprofit board governance is a conditional phenomenon by applying frameworks previously used in the nonprofit governance literature and applying them to charter school boards. By using these frameworks to analyze charter school boards a thorough understanding of charter school boards can be gained and a comparison can be drawn of how factors influence charter school boards compared to other nonprofits boards examined in the literature. The next section explains the adapted framework that was used in this dissertation to examine how external environmental factors, board attributes, and internal organizational characteristics influence charter school boards to perform their roles and responsibilities.

2.6.1 Charter School Governance: A Contingency Based Framework

As described in Chapter 1 and 2, research on governance in the nonprofit sector is growing and several frameworks have been developed that examine nonprofit boards and factors that influence their roles and responsibilities. While charter schools represent a subfield of the nonprofit sector, this study examined charter school governance research beyond the governance research of the overall nonprofit sector. Nonprofit governance research that focuses solely on charter school boards using a national sample are needed in order to examine in-depth charter school board roles and responsibilities. Also, a study on charter school boards provides research to show how or if boards of an individual type of nonprofit (i.e. charter schools) differ from research on the overall sector.

As previously described, this dissertation adapted and expanded Miller-Millesen's theoretical typology of board roles and responsibilities to examine how active charter school boards are in performing monitoring, strategizing, boundary-spanning, and conforming roles and responsibilities (based on the individual roles and responsibilities described in Table 2.2.). This study also adapted and expanded Miller-Millesen's (2003) and Ostrower and Stone's governance frameworks to examine how external environmental conditions, board attributes, and internal organizational characteristics influence charter school boards to perform their roles and responsibilities. The adapted charter school governance contingency based framework, depicted in Figure 2.3, based on Miller-Millesen's (2003) theoretical board typology and Miller-Millesen's (2003) and Ostrower and Stone's nonprofit governance frameworks was used to answer this dissertation's research questions:

1. What are common roles and responsibilities performed by charter school boards?
2. What is the relative importance of external environmental conditions, board attributes, and internal organization characteristics in accounting for differences among charter schools in performing board roles and responsibilities?

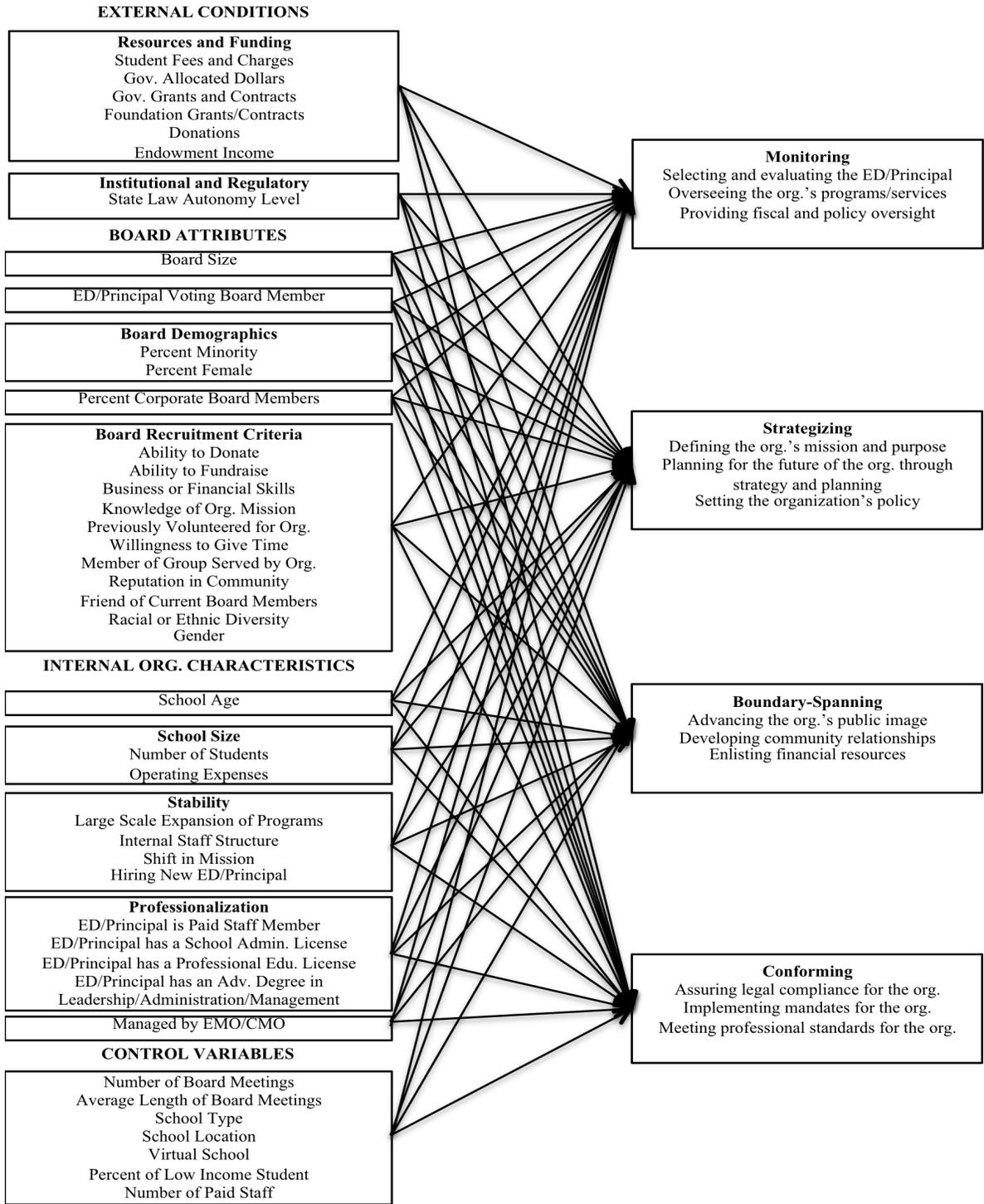


Figure 2.3: Charter School Board Contingency Based Framework: A Conceptual Model Examining Factors Influencing Charter School Board Roles and Responsibilities

This dissertation's contingency based framework on charter school governance categorizes charter school board roles and responsibilities (the dependent variables in this study) based on the theoretical assumptions attached to monitoring, strategizing, boundary-spanning, and conforming roles and responsibilities. Also, this study's framework examines and expands on how variables (the independent variables of this study) associated with the categories of external environmental conditions, board attributes, and internal organizational characteristics influence charter school boards in performing monitoring, strategizing, boundary-spanning, and conforming roles and responsibilities. However, while previous nonprofit governance frameworks were used to guide this study's framework on charter school governance, where appropriate, the variables in this dissertation's framework were adjusted to resemble items that relate to charter schools and their board.

The next section goes into detail on this dissertation's framework examining how external environmental conditions, board attributes, and internal organizational characteristics influence charter school boards in performing monitoring, strategizing, boundary-spanning, and conforming roles and responsibilities. In the next section, previous research is presented, when possible, regarding how individual variables (as depicted in Figure 2.3) associated external environmental conditions, board attributes, and internal organizational characteristics has been shown to influence nonprofit board roles and responsibilities. In the next section, based on previous nonprofit governance research (Miller-Millesen 2003; Ostrower and Stone, 2010) hypotheses are proposed for this dissertation to explain how variables associated with the categories of external environmental conditions, board attributes, and internal organizational characteristics influence charter school board

roles and responsibilities. Also, control variables incorporated in the study are discussed in the next section.

2.7 Factors Influencing Charter School Board Roles and Responsibilities

The following section examines, as depicted in Figure 2.3, examines how variables associated with external environmental conditions, board attributes, and internal organizational conditions influence charter school boards to perform monitoring, strategizing, boundary-spanning, and conforming roles and responsibilities. Based on previous governance literature, when possible, hypotheses are presented that explain how variables associated external environmental conditions, board attributes, and internal organizational characteristics influence charter school board roles and responsibilities.

As discussed in the next sections, when possible, this dissertation tests Miller-Millesen's (2003) hypotheses that are based on her nonprofit governance framework. Since Miller-Millesen's framework did not incorporate all the variables within this dissertation's framework, this study also relied on Ostrower and Stone's (2010) research to develop hypotheses describing how variables associated with external environmental conditions, board attributes, and internal organizational conditions influence charter school boards to perform monitoring, strategizing, boundary-spanning, and conforming roles and responsibilities. However, Ostrower and Stone's framework also does include all of the same variables of this study, specifically their research does not include conforming board roles and responsibilities. Thus, since this is an exploratory study trying to understand charter school board roles and responsibilities and a comparison study between this dissertation's framework and previous nonprofit governance framework, when previous research did not

provide evidence to define hypotheses for variables this study examined the variables in an exploratory nature and did not provide hypotheses. The remainder of the sections in this chapter examines more closely how the variables associated with external environmental conditions, board attributes, and internal organizational characteristics influence charter school boards' roles and responsibilities.

2.7.1 External Environmental Conditions

The first set of independent variables that are examined, based on Figure 2.3, focuses on external environmental conditions, which includes resources and funding and the institutional and regulatory environment for charter schools. Ostrower and Stone (2010) argue that understanding the funding relationship and the public-policy environment of an organization is crucial to examining board behavior. Stone et al. (2012) expand on this for charter schools by arguing that their funding environments are diverse, being a mix of public funding as well as private funding, and needs to be examined in relationship to board roles and responsibilities. Also, Stone et al. explain that the public policy environment of a charter school can influence school-level governance too. This study examined external environmental factors in terms of resources and funding and the public policy environment for charter schools in order to gain more insight into how certain external environmental conditions influence charter school board roles and responsibilities.

Resources and Funding

Research (Harlan and Saidel, 1994; Pfeffer, 1973; Zald, 1967) shows that the types of activities and functions performed by nonprofit boards, specifically boundary-spanning roles, are influenced by the degree to which the organization is reliant on external funding sources

(e.g., government or private funding). Scholars and leading resource dependency theorists (Pfeffer, 1972, 1973; Pfeffer and Salancik, 1978) developed general propositions on how environmental resources would affect board roles and responsibilities. They predict that in complex environments when organizations are dependent on the environment for resources, the board is more likely to focus on external roles (e.g., boundary-spanning and conforming). However, they explain that when organizations are less dependent on external environmental resources boards are more likely to engage in internal functions (monitoring and strategizing).

Additional research (Middleton, 1987; Miller-Millesen; 2003; Brown and Guo, 2010) draws from Pfeffer and Salancik's theoretical assumptions to build a more complete understanding of how board roles and responsibilities relates to environment uncertainty. They explain that in order for the organization to acquire resources from the environment boards perform boundary-spanning and conforming roles and responsibilities. Miller-Millesen (2003) expands on Pfeffer and Salancik's theoretical argument by explaining how a nonprofits' funding environment will influence their boundary-spanning roles. She argues that nonprofit boards would be more likely to focus on boundary-spanning and conforming functions than on monitoring (and strategizing) board roles and responsibilities when a proportion of income raised from external sources are high. However, she explains that if a proportion of income obtained from external sources were low for the organization, then nonprofit boards are more likely to focus on monitoring (and strategizing) functions.

Ostrower and Stone (2010) use the previous theoretical arguments from Pfeffer and Salancik (1978) and Miller-Millesen (2003) and test their assumptions empirically. However,

instead of examining external funding as one concept, they divide it into two forms: government funding and private funders. They find that dependence on government funding is significantly related to levels of board activity in externally oriented roles but is mostly unrelated to internally oriented roles. Ostrower and Stone also find that greater reliance on private funders (individuals and foundations) are significantly related to boundary-spanning board roles and responsibilities. Also, their study explains that reliance on various funding sources are generally unrelated to internally monitoring activities. These findings offer only partial support for Miller-Millesen's arguments linking external funding sources to boundary spanning board roles and responsibilities. Miller-Millesen argues that external funds are related to greater activity with boundary-spanning and conforming roles and responsibilities. However, Ostrower and Stone find this to be somewhat true but the relationships differs depending on the type of external funding (government versus private).

In terms of charter schools, Stone et al. (2010) finds that charter school boards are far less active in fulfilling the boundary-spanning roles and responsibilities of enlisting financial resources compared to other nonprofits. This is largely due to the fact that charter schools receive most of their resources through allocated funding from government. However, other research on charter school boards do not expand beyond this in understanding why boards are diverse in performing boundary-spanning roles and responsibilities.

This study reexamined theoretical arguments and hypotheses provided by Miller-Millesen (2003) about how external funding influences board roles and responsibilities. Based on the categorization of external funding (government versus private) by Ostrower and Stone (2010) the following hypotheses were examined in terms of charter schools.

Hypothesis 1a: Charter school boards raise their activity level with regard to performing boundary-spanning and conforming roles and responsibilities and lower their activity level with regard to performing monitoring and strategizing roles and responsibilities when the school receives government funding.

Hypothesis 1b: Charter school boards raise their activity level with regard to performing boundary-spanning and conforming roles and responsibilities and lower their activity level with regard to performing monitoring and strategizing roles and responsibilities when the school receives private funding.

Institutional and Regulatory Environment

While funding relationships are important, the environment of an organization includes additional factors. In terms of institutional and regulatory environment, this dissertation examined how the public policy environment influenced charter school board roles and responsibilities. Government regulations and institutional pressures can influence board composition, roles, and policies (Abzug and Galaskiewicz, 2001; Ostrower, 2007; Ostrower & Stone, 2010). Since nonprofits are held accountable to government as well as additional stakeholders, these entities influence the types of activities of a board. Institutional theory provides some understanding on how organizations face pressures from the public policy environment to adopt certain practices to demonstrate legitimacy (DiMaggio and Powell, 1983; Meyer and Rowan, 1977).

Institutional theory explains that the same type of organizations overtime become isomorphic to those in their environment. Institutional isomorphism occurs through coercive, mimetic, or normative developments (DiMaggio and Powell, 1983). With regard to nonprofit boards, Miller-Millesen (2003) explains that isomorphic pressures cause boards to conform to their external environment in order to meet regulations or be deemed legitimate.

Specifically, it is coercive isomorphic pressure that provides insight on how the public policy environment influences board behaviors.

Coercive isomorphism stems from political influence and results from both formal and informal pressures exerted on organizations by other organizations that they are dependent on (DiMaggio and Powell, 1983). Miller-Millesen (2003) explains that coercive isomorphism occurs in nonprofit boards by responding to external mandates that emanate from the legal environment. Boards respond to their public policy environments through performing conforming roles and responsibilities, such as insuring legal compliance, implementing mandates, and meeting professional standards. However, if the public policy environment provides more freedom and autonomy to the organization then the board would be less active in conforming roles and responsibilities. Also, the practitioner-oriented literature explains that the public policy environment puts a lot of pressure on organizations to fulfill their legal and ethical responsibilities through basic monitoring roles (Miller-Millesen, 2003).

Ostrower and Stone (2010) and Stone et al. (2012) argue that many legal regulations that impact nonprofits are at the state level. In the case of charter schools, the legal directives from the state would constitute charter school boards becoming isomorphic due to coercive pressures. The core of the charter movement is the agreement that charter schools are granted autonomy from bureaucratic regulation in exchange for results-based accountability (Chubb and Moe, 1990). Autonomy involves the removal of constraints that allow charter schools to self-manage (Wohlstetter et al., 1995). Wohlstetter et al. explain that state legislative conditions differ in the degree of autonomy afforded to school, which results in different

charter school practices and performances. Wohlstetter et al. argue that higher levels of autonomy (less restrictive government laws) result in freedom to exercise more choice in organizational policy-making. Thus, based off charter school research and theoretical arguments proposed by Miller-Millesen (2003), since she does not provide hypotheses on how public policy environment influences board behavior, the following hypothesis was examined in this dissertation.

Hypothesis 2: Charter school boards raise their activity level with regard to performing monitoring and strategizing roles and responsibilities and lower their activity level with regard to performing conforming roles and responsibilities when state legislation provides higher levels of autonomy from bureaucratic constraints.

2.7.2 Board Attributes

The second set of independent variables that were examined, based on Figure 2.3, focused on board attributes, which includes board size, the executive director as a voting board member, board demographic characteristics, the amount of corporate board members, and board recruitment criteria. Miller-Millesen's (2003) nonprofit governance framework behavior includes only board composition in terms of size and demographics as a link to board roles and responsibilities. While she includes these two variables in her model, she does not provide hypotheses on how these variables influence board behaviors.

Ostrower and Stone (2010) explains that researchers for years have been interested in the question who serves on nonprofit boards but there is limited information how these board characteristics affect board behaviors. While research shows that nonprofit boards are larger than corporate boards and usually are made up of older, white males that come from upper-class backgrounds (Middleton, 1987; Ostrower, 2007; Osterower and Stone, 2006, 2010), one

needs to understand how this information relates to actions of boards. Ostrower and Stone (2010) expand on this in their contingency-based framework by examining how board attributes influence board roles and responsibilities. This study follows the lead of Ostrower and Stone by examining how board attributes – board size, executive director as voting member, board demographics, number of members that sit on corporate boards, and board recruitment - influence board roles and responsibilities. Hypotheses proposed in the following subsection, when possible, are based on Miller-Millesen’s theoretical arguments and Ostrower and Stone’s (2010) findings from testing their contingency-based nonprofit governance framework. By developing hypotheses based on these studies, this dissertation was able to compare how board attributes influence charter school board roles and responsibilities compared to other boards in the nonprofit sector.

Board Size

Resource dependency theory suggests that board size and composition are likely to vary with the amount of complexity and uncertainty in the external environment (Pfeffer and Slancik, 1978, Boyd, 1990, Miller-Millesen, 2003). If a nonprofit board is trying to reduce environmental uncertainty then it is likely to have a large board size because the organization would hope that more board members would result in more links to important resources in the external environment (Miller-Millesen, 2003). However, other scholars argue that board size is often unrelated to board activity except a positive association with the roles and responsibilities of fundraising (Abzug et al., 1993; Bowen, 1994; Ostrower, 2002). These findings assume that organizations use large boards as a fundraising tool, which caused

fundraising, compared to the other boundary-spanning roles and responsibilities, to have a positive association with organizational size.

The first-ever national representative study of nonprofit governance, examining over 5,100 nonprofit organizations of varied sizes, types, and locations, found that board size was generally positively associated with board activity in carrying out boundary-spanning roles and responsibilities. (Ostrower, 2007; Ostrower and Stone, 2010). Ostrower and Stone's study supports previously described theoretical research that find that board size does have positive association with boundary-spanning roles and responsibilities, including fundraising. However, Ostrower and Stone find no relationship between board size and other roles and responsibilities of a nonprofit board. Based on the above review, the following hypotheses present a resources dependency theoretical understanding, proposed by Miller-Millesen, of how board size influences boundary-spanning roles and responsibilities and builds off Ostrower and Stone's study to explain how board size influences the other board roles and responsibilities.

Hypothesis 3a: Charter school board size will not have any relationship to the activity level of the charter school board in performing monitoring, strategizing, or conforming roles and responsibilities.

Hypothesis 3b: The larger the size of the charter school board, the greater the activity level of the charter school board in performing boundary-spanning roles and responsibilities.

Executive Director as a Voting Board Member

The private sector practice of including the CEO as a voting board member is adopted widely throughout the nonprofit sector. While Miller-Millesen (2003) does not include this variable in her nonprofit governance framework, Ostrower (2007) shows it to be quite

influential in board roles and responsibilities. Research shows that an ED serving as a voting member on a nonprofit board is associated negatively with numerous monitoring and strategizing board roles and responsibilities (Ostrower, 2007; Ostrower and Stone, 2010). Also, Ostrower and Stone find that an ED serving as a voting board members on a nonprofit board is negatively associated with certain roles and responsibilities related to boundary-spanning (e.g., community relations). Ostrower and Stone explain that having an ED as a voting board member undermines the governance role of the board. Thus, based on this research the following hypotheses are proposed.

Hypothesis 4a: Charter school boards lower their activity level with regard to performing monitoring roles and responsibilities when the ED/principal is a voting member of the board.

Hypothesis 4b: Charter school boards lower their activity level with regard to performing strategizing roles and responsibilities when the ED/principal is a voting member of the board.

Hypothesis 4c: Charter school boards lower their activity level with regard to performing boundary-spanning roles and responsibilities when the ED/principal is a voting member of the board.

Demographic Characteristics of the Board

Attention to the board composition, specifically board diversity, is a growing research interest in nonprofit governance literature (Ostrower and Stone, 2006). Ostrower and Stone explain more research is needed on all types of board diversity, but previous research focuses more on gender than ethnic and racial diversity. Previous research on nonprofit boards concludes that they are mostly made up of white, male, and upper-middle to upper class individuals (Abzug and Simonoff, 2004; Kang and Cnaan, 1995; Middleton, 1987; Moore and Whitt, 2000; National Center for Nonprofit Boards [NCNB], 2000; Odendahl and

Youmans, 1994; Ostrower, 1995, 2002, 2007; Zald, 1967). These studies typically have only focused on large nonprofit organizations. However, Ostrower (2007) found that not only do larger nonprofit organizations predominantly have white, male members but smaller organizations do too.

Ostrower (2007) and Ostrower and Stone (2010) went beyond the prescriptive nature of examining minorities and gender on boards to also understand how racial/ethnic and gender diversity influence board roles and responsibilities. Ostrower and Stone assume prior to their empirical research that higher levels of racial/ethnic and gender diversity would provide additional connections to the nonprofit's environment and result in raising the activity level of a board's boundary-spanning roles and responsibilities. However, they find that a higher percentage of board members from ethnic and minority groups was not associated with any board roles and responsibilities. Ostrower and Stone also examine gender diversity amongst nonprofit boards and find that a higher percentage of female board members was positively associated with certain boundary spanning roles and responsibilities. They also find that the higher percentage of female board members was positively associated with certain strategizing roles and responsibilities (e.g., future planning). Thus, based on this research the following hypotheses are proposed in regard to the demographic composition of charter school boards.

Hypothesis 5a: The higher the percentage of female board members on a charter school board, the greater the activity level of a charter school board in performing strategizing board roles and responsibilities.

Hypothesis 5b: The higher the percentage of female board members on a charter school board, the greater the activity level of a charter school board in performing boundary-spanning board roles and responsibilities.

Hypothesis 6: The higher the percentage of racial and ethnic minorities on a charter school board will not have any relationship to activity level of the charter school board in performing any board roles and responsibilities.

Corporate Board Members

Corporate board members who sit on nonprofit boards act as an outlet through which developments and practices in the private sector are brought to the nonprofit sector. While Miller-Millesen (2003) does not incorporate nonprofit board members sitting on corporate boards as a variable in her governance framework, Ostrower (2007) in one of the few studies that have examined this concept empirically find that having members that sit on corporate boards raises the activity level of the board with regard to performing financial oversight. Since few studies have empirically examined this variable in the nonprofit sector and Ostrower (2007) and Ostrower and Stone (2010) only find a relationship with financial oversight by the board (a monitoring role and responsibility), then the following hypothesis is proposed based on the limited empirical evidence.

Hypothesis 7: The higher the percentage of corporate board members that sit on a charter school board, the greater the activity level of a charter school board in performing monitoring roles and responsibilities.

Board Recruitment Criteria

Ostrower and Stone (2010) argue that a set of board attributes in need of more examination is recruitment criteria used to select new board members. Recruitment criteria were not included in Miller-Millesen's (2003) governance framework. However, Ostrower and Stone explain that, "recruitment criteria was consistently related to levels of board engagement in roles and responsibilities" (913). They find a varying range of relationships

between charter school boards' recruitment criteria and board roles and responsibilities. Since research is mixed on how certain recruitment criteria is positively associated with some board roles and responsibilities and negatively related to other board roles and responsibilities, this dissertation examined this variable through a more exploratory lens and did not propose hypotheses regarding how types of board recruitment criteria influence board roles and responsibilities.

2.7.3 Internal Organizational Characteristics

The third set of independent variables that were examined, based on Figure 2.3, focused on internal organizational characteristics, which included organizational age, size, stability, professionalization, and type management. Since boards do not operate in a vacuum separate from the organization, board roles and responsibilities are influenced by and must respond to internal contingencies from the organization (Ostrower and Stone, 2010). Ostrower and Stone explain that along with board attributes, internal organizational characteristics in their study have the strongest relationship to board engagement. Since previous research emphasizes the importance of examining how internal organizational characteristics influence nonprofit board roles and responsibilities, it was necessary to study them in the context of charter school boards.

Organization Age and Size

Ostrower and Stone (2006; 2010) find in a review of the literature that organizational age and size is explained as being two of the most important variables when it comes to describing how certain factors affect board behaviors. They explain that a series of older studies (Kramer 1965, 1981, 1985, 1987; Zald 1967, 1969) all show that organization size

and age are great predictors of board power. One of the more notable studies from this group is from Zald (1969), which contends that board functions change with different phases of development (life-cycle changes).

Miller-Millesen (2003) includes age (life-cycle changes) in her board governance framework but does not propose any hypotheses regarding the variable. However, Ostrower and Stone (2010) do examine board age and size in more detail in their contingency-based governance framework. They explain that caution needs to be taken with earlier findings and that a more complete picture of internal organization contingencies, along with age and size, need to be considered before fully concluding what characteristics actually influence board roles and roles and responsibilities. Ostrower and Stone expands on previous studies to include and control for more internal characteristics and found that organization age is only positively associated with certain strategizing board roles and responsibilities (e.g., setting policy). They also find that organizational size was positively associated with boards carrying out certain monitoring and strategizing board roles and responsibilities but negatively associated with how active boards are in performing boundary-spanning roles and responsibilities. Thus, based on Ostrower and Stone's research the following hypotheses were proposed in regard to organizational age and size and their influence on board roles and responsibilities.

Hypothesis 8: The older the charter school, the greater the activity level of the charter school board in performing strategizing roles and responsibilities.

Hypothesis 9a: The larger the size of the charter school (based on annual expenses), the greater the activity level of the charter school board in performing monitoring and strategizing board roles and responsibilities and the lower the activity level in performing boundary-spanning roles and responsibilities.

Hypothesis 9b: The larger the size of the charter school (number of students), the greater the activity level of the charter school board in performing monitoring and strategizing board roles and responsibilities and the lower the activity level in performing boundary-spanning roles and responsibilities.

Stability

Board roles and responsibilities change with different phases of the organization (in time of crisis, transformation, and when organizational identity is questioned) (Zald, 1969). Miller-Millesen (2003) explains that agency theory (Fama and Jensen, 1983; Jensen and Meckling, 1976) emphasizes how the separation of ownership from control over an organization can explain how stability in an organization influences board roles and responsibilities. A principal-agent relationship is one where the principal assigns control to an agent who is expected to act in a way consistent with the interests of the principal (Jensen and Meckling, 1976). For example, in charter schools or other nonprofits, the board assigns control to the ED/principal and the ED/principal is expected to act in ways that furthers the interests of the organization. Miller (2003) expands on agency theory by explaining that the board is regarded as the ultimate form of control, specifically through their roles and responsibilities of monitoring the organization.

However, Daily and Schwenk (1996) noted in their empirical investigation of corporations that when organizations are going through significant change or are in a crisis, it is beneficial to have power centered in the executive position, not the board. This allows for the external environment and stakeholders to believe the organizational leadership is stable

and builds confidence in the organization from others. Based on Daily and Schwenk's research, Miller-Millesen (2003) concludes that the principal-agent relationship changes when the organization's stability is called into question. She explains that a typical principal-agent relationship between the ED and board is more likely to occur when the organization is stable, resulting in nonprofits boards more likely engaging in monitoring board roles and responsibilities when the organization is stable. However, Ostrower and Stone (2010) tested Miller-Millesen's argument and found that indicators of change were unrelated to board monitoring roles and responsibilities. While Ostrower and Stone's empirical analysis did not coincide with Miller-Millesen's argument on the relationship between board monitoring roles and responsibilities and organizational stability, this dissertation reexamined Miller-Millesen's hypothesis to gain more insight on this relationship. To that end, the following hypothesis was tested.

Hypothesis 10a: Charter school boards raise their activity level with regard to performing monitoring roles and responsibilities when the organization is stable.

Miller-Millesen (2003) also examines organizational stability in relationship to boundary-spanning activities. Resource dependency theory explains that external information is essential in reducing environmental uncertainty (Pfeffer and Salancik, 1978). In regard to nonprofit boards, resource dependent theory explains that boards perform boundary-spanning roles and responsibilities during times of environmental uncertainty. However, Miller-Millesen argues that when the environment is stable and the organization is not experiencing changes, the need for external information would be quite low. Based on this analysis, she explains that nonprofit boards are more likely to engage in boundary-spanning roles and

responsibilities when the external environment is complex or when the organization is going through a crisis. Ostrower and Stone (2010) examine Miller-Millesen's assumption and found mixed support with regard to boundary-spanning roles and responsibilities. They find that boards of organizations going through a change were more likely to engage in community relationships but found no relationship to engagement in fundraising. Through testing the following hypothesis, this dissertation reexamined Miller-Millesen's hypothesis to gain more insight on the relationship between organizational stability and boundary-spanning roles and responsibilities.

Hypothesis 10b: Charter school boards raise their activity level with regard to performing boundary-spanning roles and responsibilities when the organization is unstable.

Professionalization

Early literature on organizational professionalization and board roles and responsibilities note that the more professionalized an organization is, the more power the ED has overseeing the organization compared to the board (Mintzberg, 1983; Kramer, 1985). Mintzberg and Kramer both state that while agency theory explains the board-executive power relationships, this relationship varies with organizational factors such as professionalization. Similarly, in a study by Johnson et al. (1993), a negative relationship was found between educated managers and professionalized organizations and board involvement in strategic decision-making. These scholars argue that professionalization serves as the EDs ability to manage the organization and is a signal to the board that their involvement is not necessary (Johnson et al. 1993). Miller-Millesen (2003) built off the theoretical and empirical research of previous scholars and concludes that the more professionalized an organization

is, the more likely the nonprofit board is not be involved in monitoring board roles and responsibilities. Miller-Millesen also explains that when an organization is professionalized and board members are not focusing their attention on monitoring board roles and responsibilities, they can center their attention on boundary-spanning roles and responsibilities to support and promote the needs of the organization

Ostrower and Stone's (2010) use their contingency-based governance framework to analyze Miller-Millesen's assumptions and find different results on professionalized organizations. They find that professionalization, which they measured as the ED getting paid, is positively associated with some monitoring roles and responsibilities (e.g., financial oversight, evaluating executive director) but negatively associated with other monitoring and (e.g., monitoring programs) and boundary-spanning roles and responsibilities (e.g., fundraising and community relations). Thus, their study shows some drastic differences from pervious studies and the theoretical assumptions made by Miller-Millesen. For the purpose of this dissertation, the hypotheses proposed by Miller-Millesen were reexamined. To that end, the following hypotheses were proposed for this dissertation.

Hypotheses 11a: Charter school boards lower their activity level with regard to monitoring roles and responsibilities when the executive staff is professionalized.

Hypotheses 11b: Charter school boards raise their activity level with regard to boundary-spanning roles and responsibilities when the executive staff is professionalized.

Charter School Management

Examining board behavior through the type of management system of the organization is one factor that is very limited in research since it is a type of characteristic to

charter schools. However, the previous section on executive staff professionalization provides insight on how boards act if an Educational Management Organization (EMO) or Charter Management Organization (CMO) manages the charter school. Since EMOs and CMOs are established and professionalized organizations (Spark, 2009), charter schools managed by these entities have boards that are less involved in monitoring board roles and responsibilities and more involved in boundary-spanning roles and responsibilities, based on Miller-Millesen's (2003) theoretical hypotheses for professionalization. Thus, based on professionalized organization research and due to a lack of research on EMO and CMO's relationship to board roles and responsibilities, the following hypotheses were proposed.

Hypotheses 12a: Charter school boards lower their activity level with regard to monitoring roles and responsibilities when the school is managed by an EMO or CMO.

Hypotheses 12b: Charter school boards raise their activity level with regard to boundary-spanning roles and responsibilities when the school is managed by an EMO or CMO.

2.7.4 Control Variables

Variables that have intervening effects between the independent and dependent variable or antecedent effects on the independent and dependent variable are known as controls. In other terms, control variables are held constant within the model in order to determine if there is a significant relationship between the independent and dependent variables. This dissertation identified several control variables from the nonprofit governance literature and charter school literature.

Ostrower and Stone's (2010) contingency-based governance framework that examines influences on nonprofit board roles and responsibilities incorporate a few

additional antecedent variables that need to be accounted for in this dissertation's framework. They include in their study questions that account for how many board meetings occur in a year and how long board meetings last. These control variables were included in this study's because it is assumed that boards that do not meet often and boards that meet for a short period of time are not going to be active in the board roles and responsibilities prescribed in Chapter 2.

In charter school literature (Bifulco and Ladd, 2006; Sass, 2006), certain school and student population variables are often controlled for in research. The type of school (e.g., elementary, middle, high school, etc.); location of school (e.g., rural, suburban, or urban); if the school is a virtual school; the number of paid staff; and the percent of low-income students served by the school are variables that are consistently controlled for in charter school research. Based on prior research, these variables were also controlled for in this dissertation.

2.8 Summary of Research Hypotheses

Provided below is a summary of the hypotheses that were tested in this dissertation. Also, Table 2.4 provides a summary of hypothesized variables on board roles and responsibilities. Table 2.4 explains the bodies of research that influenced the development of each hypothesis. Table 2.4 also shows the predicted sign (positive or negative) of each hypothesis, explaining how the independent variables influence the dependent variables.

Hypothesis 1a: Charter school boards raise their activity level with regard to performing boundary-spanning and conforming roles and responsibilities and lower their activity level with regard to performing monitoring and strategizing roles and responsibilities when the school receives government funding.

Hypothesis 1b: Charter school boards raise their activity level with regard to performing boundary-spanning and conforming roles and responsibilities and lower their activity level with regard to performing monitoring and strategizing roles and responsibilities when the school receives private funding.

Hypothesis 2: Charter school boards raise their activity level with regard to performing monitoring and strategizing roles and responsibilities and lower their activity level with regard to performing conforming roles and responsibilities when state legislation provides higher levels of autonomy from bureaucratic constraints.

Hypothesis 3a: Charter school board size will not have any relationship to the activity level of the charter school board in performing monitoring, strategizing, or conforming roles and responsibilities.

Hypothesis 3b: The larger the size of the charter school board, the greater the activity level of the charter school board in performing boundary-spanning roles and responsibilities.

Hypothesis 4a: Charter school boards lower their activity level with regard to performing monitoring roles and responsibilities when the ED/principal is a voting member of the board.

Hypothesis 4b: Charter school boards lower their activity level with regard to performing strategizing roles and responsibilities when the ED/principal is a voting member of the board.

Hypothesis 4c: Charter school boards lower their activity level with regard to performing boundary-spanning roles and responsibilities when the ED/principal is a voting member of the board.

Hypothesis 5a: The higher the percentage of female board members on a charter school board, the greater the activity level of a charter school board in performing strategizing board roles and responsibilities.

Hypothesis 5b: The higher the percentage of female board members on a charter school board, the greater the activity level of a charter school board in performing boundary-spanning board roles and responsibilities.

Hypothesis 6: The higher the percentage of racial and ethnic minorities on a charter school board will not have any relationship to activity level of the charter school board in performing any board roles and responsibilities.

Hypothesis 7: The higher the percentage of corporate board members that sit on a charter school board, the greater the activity level of a charter school board in performing monitoring roles and responsibilities.

Hypothesis 8: The older the charter school, the greater the activity level of the charter school board in performing strategizing roles and responsibilities.

Hypothesis 9a: The larger the size of the charter school (based on annual expenses), the greater the activity level of the charter school board in performing monitoring and strategizing board roles and responsibilities and the lower the activity level in performing boundary-spanning roles and responsibilities.

Hypothesis 9b: The larger the size of the charter school (number of students), the greater the activity level of the charter school board in performing monitoring and strategizing board roles and responsibilities and the lower the activity level in performing boundary-spanning roles and responsibilities.

Hypothesis 10a: Charter school boards raise their activity level with regard to performing monitoring roles and responsibilities when the organization is stable.

Hypothesis 10b: Charter school boards raise their activity level with regard to performing boundary-spanning roles and responsibilities when the organization is unstable.

Hypotheses 11a: Charter school boards lower their activity level with regard to monitoring roles and responsibilities when the executive staff is professionalized.

Hypotheses 11b: Charter school boards raise their activity level with regard to boundary-spanning roles and responsibilities when the executive staff is professionalized.

Hypotheses 12a: Charter school boards lower their activity level with regard to monitoring roles and responsibilities when the school is managed by an EMO or CMO.

Hypotheses 12b: Charter school boards raise their activity level with regard to boundary-spanning roles and responsibilities when the school is managed by an EMO or CMO.

Table 2.4: Summary of Hypothesized Variables

Categories of Variables		Board Research	Hypothesis	Hypothesized Sign			
				Monitoring	Strategizing	Boundary Spanning	Conforming
Resources /Funding	Government Funding	Miller-Millesen, 2003	H1A	-	-	+	+
	Private Funding	Miller-Millesen, 2003	H1B	-	-	+	+
Institutional /Regulatory	Level of Autonomy Based on State Law	Miller-Millesen, 2003	H2	+	+		-
Board Size	Size of Charter School Board	Ostrower & Stone, 2010	H3A				
			H3B			+	
ED as Voting Board Member	ED as Voting Board Member	Ostrower & Stone, 2010	H4A	-			
			H4B		-		
			H4C			-	
Demographics of Board	Percentage of Females Members	Ostrower & Stone, 2010	H5A		+		
	Percentage of Minority Members	Ostrower & Stone, 2010	H5B			+	
Corporate Board Members	Percentage of Corporate Board Members	Ostrower & Stone, 2010	H6				
Board Recruitment Criteria	Board Recruitment Criteria	Ostrower & Stone, 2010	H7	+			
Organization Age	Age	Ostrower & Stone, 2010	H8		+		
Organization Size	Size	Ostrower & Stone, 2010	H9A	+	+	-	
			H9B	+	+	-	
Stability	Stability of Organization	Miller-Millesen 2003	H10A	+			
			H10B			+	
Professionalization	Professional ED/Principal	Miller-Millesen 2003	H11A	-			
			H11B			+	
Charter School Management	School Managed by CMO/EMO	Miller-Millesen 2003	H12A	-			
			H12B			+	

2.9 Summary of Chapter 2

Chapter 2 reviewed governance literature for charter schools and the entire nonprofit sector. Also, the chapter examined more in-depth board roles and responsibilities for all nonprofits and charter schools. These board roles and responsibilities were then examined through different theoretical understandings. Next, frameworks (Miller-Millesen, 2003; Ostrower and Stone, 2010), previously used to understand how factors influence nonprofit board roles and responsibilities, were presented and adapted to develop a framework to examine how external environmental conditions, board attributes, and internal organizational characteristics influence charter school board to perform their roles and responsibilities. Finally, Chapter 2 identified how individual variables within the categories of external environmental conditions, board attributes, and internal organizational characteristics may influence charter school board roles and responsibilities.

2.10 Preview of Chapter 3

Chapter 3 provides a detailed discussion of the research design for the dissertation, including the population, sampling frame, and sample for the study. Then, Chapter 3 explains the instrument design, the survey administration process, and procedures for data collection. Chapter 3 also discusses the operationalization of the variables and again presents the major hypotheses for the dissertation. Finally, Chapter 3 provides an explanation of the data analysis method for the study and discusses any limitations of the research design.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter provides a detailed discussion of the research design and methods used to analyze the research questions and hypotheses regarding what factors influence charter school boards' roles and responsibilities. Nonprofit governance literature, as reviewed in Chapter 2, provides nonprofit governance frameworks (Miller-Millesen, 2003; Ostrower and Stone, 201) that are adapted and used within this dissertation to research charter school boards. This dissertation examines what actual roles and responsibilities are practiced by charter school boards, in order to expand research beyond the best common practices of charter school boards that are prescribed in the literature. By answering this central research question, this study also explains the relative influence of environmental conditions, board attributes, and internal organizational characteristics in accounting for difference among charter schools in their board roles and responsibilities.

The remainder of this chapter is divided into seven sections:

1. Discussion of the research design for the dissertation, including the population, sampling frame, and sample for the study;
2. Examination of the instrument design, survey administration, and data collection procedures;
3. Discussion of the operationalization of the variables and again presents the major hypotheses for the dissertation;
4. Explanation of the data analysis methods for this research and discussion of assumptions met for statistical procedures;

5. Discussion of the limitations of the research design;
6. Summary of Chapter 3; and
7. Preview of Chapter 4

3.2. Research Design

This study employed a quasi-experimental design to test the relationships in a contingency-based charter school governance framework. The study used statistical analysis to examine the hypothesized relationships between charter schools' environmental conditions, board attributes, and internal organizational characteristics on the one hand and school board roles and responsibilities on the other. As outlined in Chapters 1 and 2, this research expands on Miller-Millesen's (2003) governance framework and hypotheses regarding nonprofit board roles and responsibilities and Ostrower and Stone's (2010) contingency-based framework regarding factors that influence nonprofit board actions to the area of charter school boards. Depicted in Figure 3.1, the research examines the framework describing how a charter school's environmental conditions, board attributes, and internal organizational characteristics influence the charter school's board roles and responsibilities.

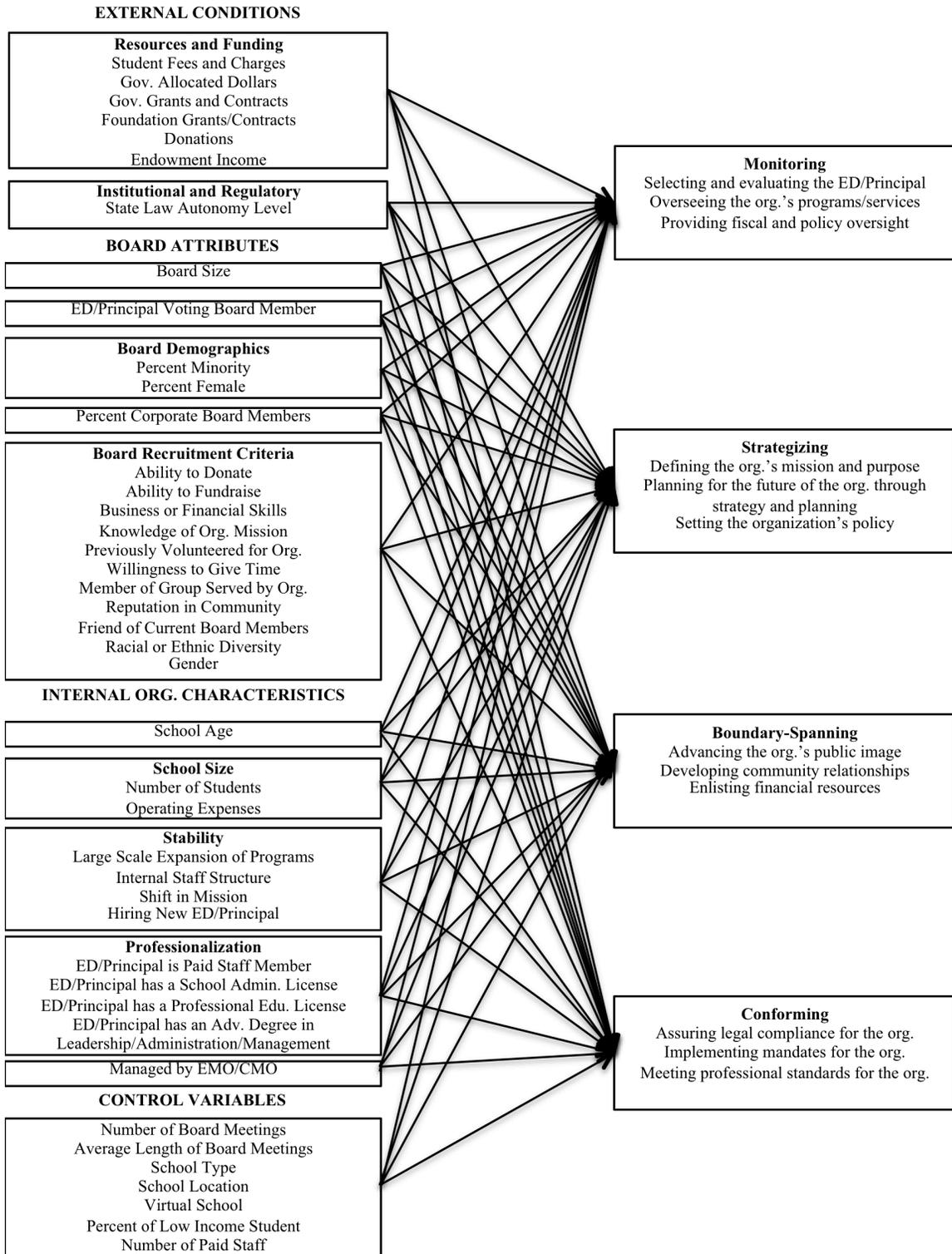


Figure 3.1: Charter School Board Contingency Based Framework: A Conceptual Model Examining Factors Influencing Charter School Board Roles and Responsibilities

3.2.1 Population and Sampling Frame

In a study, the target population is a set of units of analysis for which the researcher wants to make inferences by using sample statistics (Groves et al., 2009). Since populations change over time, the time the survey is implemented affects the actual target population. For the present study, the target population was charter schools in the United States during the 2013-14 school year. A typical school year spans from late August to early July.

The “sampling frame” identifies the potential units of analysis of the target population, from which the sample is taken. The sampling frame for this study was the national list of charter schools accessible through the Center for Education Reform Charter School Database (2013a). The national charter school list, acquired through the Center for Education Reform, provided a list of 6,175 charter schools that were in operation in the 2013-14 school year as of March, 2014.

While the units of analysis for this study are charter schools, the observation unit for the study was executive directors (EDs) or principals of the charters schools. In this study, EDs/principals were surveyed in order to collect information on the charter schools. The national list of charter schools provided contact information and links to the charter schools’ websites but did not provide email addresses for EDs/principals. However, the contact information and the website links provided were used to acquire email addresses for the EDs of charter schools in order for them to be surveyed in this study (discussed more in-depth later on in Chapter 3). Finally, Table A-1 in Appendix A further details the sampling frame by showing the charter schools’ locations throughout the fifty states and the District of Columbia.

3.2.2 Sample Design

Typically, in survey research a sample of a target population is studied for “purposes of making estimated assertions about the nature of the total population of which the sample has been selected” (Babbie, 1990, 65). Probability sampling enhances the likelihood of accomplishing this based on random selection. Random selection is the process in which each unit of analysis from the target population has an equal chance selection independent of any other events in the selection process. While survey research often utilizes the sampling design of simple random sampling, in certain studies it is necessary to use alternative sampling designs. This dissertation is one of those studies and employed the sampling method of stratified sampling.

While simple random sampling ensures a degree of representativeness and permits an estimate of error, stratified sampling obtains a greater degree of representativeness and thus decreases the probable sampling error (Babbie, 1990). According to Babbie, sampling error can be reduced in two ways in the sample design. First, smaller sampling error is produced by a large sample compared to a small sample. Second, smaller sampling errors are produced with samples from a homogeneous population compared to a heterogeneous population. Stratified sampling is based on the second concept of reducing sampling error. Instead of selecting the sample from the target population as a whole, a sample is drawn from each of the homogenous subsets of the population. The first step in stratified sampling is to organize the target population into homogeneous subsets where heterogeneity exists between the groups, and then select the sample from each subset (Babbie, 1990). In this dissertation, the homogenous subsets of all national charter schools were based on the institutional/regulatory

environment independent variable, which measured level of autonomy provided to the charter school based on state charter laws. The need for stratified sampling in this dissertation was due to the variability in the number of charter schools that exist in states with laws that grants high levels of autonomy compared to states with laws that are more restrictive.

The Center of Education Reform since 1996 has released an annual state-by-state report card, grading each state's charter school legislation. These ratings rank the laws based on which states have the fewest and weakest restrictions on the formation and operation of charter schools (Chi and Welner, 2008). The state laws with the highest rankings have high levels of autonomy from bureaucratic controls and the state laws with the lowest rankings have lower levels of autonomy and are constrained more by bureaucratic regulations. Scholars (Wohlsteetter et al., 1995) acknowledge that state laws can represent high, medium, and low levels of autonomy. This dissertation classified state laws based on high, medium, and low levels of autonomy.

The Center for Education Reform (2013a) charter school rankings were used to classify the states based on levels of autonomy, which were the classifications for subsets used in the stratified sampling. The Table A-1 in Appendix A presents every state with a charter school law as of March, 2014; the number of charter schools in that state for the 2013-14 school year as of March, 2014; the state ranking for their charter school law given by the Center for Education Reform, and the numerical score that corresponds with the state law ranking. The total amount of points a state law could score for their ranking is 55. The

range for the charter school laws that exist in the United States during the 2013-14 school goes from a score of 45 (Washington D.C.) to a score of 8 (Kansas).

The Center for Education Reform (2013a) uses these rankings to classify 5 levels of charter school law. The state laws that are the least restrictive and provide the most amount of autonomy for charter schools are in category A and have scores between 49 and 40; category B scores range from 39 to 30; category C scores range from 29 to 20; and category D scores range from 19 to 10. Finally, category F scores, which include state laws that have the strictest restrictions and provide the least amount of autonomy to charter schools, range from 10 to 0. However, as shown in Table A-1 in Appendix A, to obtain appropriate group sizes, this dissertation collapsed the Center for Education Reform categories A and B into the category high, referring to the level of autonomy provided by state law. This study labeled Center for Education Reform's category C as medium, and labeled categories D and F as low. It is based on these three categories – high, medium, and low – that the population was stratified. Table 3.1 depicts each stratum and describes in each stratum the number of states, the number of charter schools from the target population, and the percent of charters school from target population.

Table 3.1: Charter School Distributions by Level of Autonomy based on State Law

	Level of Autonomy Based on State Law	Number of States	Number of Charter Schools	Percent of Charter Schools from Target Population
	High	14	3,896	63.51%
	Medium	18	*1,921	31.31%
	Low	11	318	5.18%
Total		43	*6,135	100%

*The medium level stratum and the total charter school population in the table reflects 40 less charter schools compared to the total number of charter schools in the U.S. provided Center for Education Reform (Appendix A). This is due to 40 charter schools from North Carolina (represented in the medium stratum) being administered the pretest and not eligible for the study.

Stratified Random Sample

The target population was grouped into discrete groups based on the stratification variable of level of autonomy based on state law. Based on the relative proportion of the population represented by a given group, the sample size was allocated to each group. With a target population of 6,175 charter schools, Dillion's (2000) population to sample size conversion table and formula suggest that an adequate sample size for the 95% confidence level with a 3% sampling error would be 910 charter schools. However, to ensure that adequate numbers of responses were achieved for this dissertation the study oversampled by tripling the sample size to 2,730 charter schools. The adequate sample size was tripled in order to ensure an acceptable sample was collected from each stratum and to maintain the use of proportional sampling. The other option would have been to use disproportional sampling but this reduces the benefits of stratified sampling and may have produced less precise standard error estimates (Garson, 2013b). Table 3.2 depicts the allocation of the sample size across the strata based on the relative proportion of the target population represented by

each given group. These are the samples that the surveys were administered to in each stratum.

Table 3.2: Proportional Stratified Random Sample

	Level of Autonomy Based on State Law	Number of Charter Schools	Percent of Charter Schools from Target Population	Stratum Sample Size
	High	3,896	63.51%	1,734
	Medium	1,921	31.31%	855
	Low	318	5.18%	141
Total		6,135	100%	2,730

3.3 Instrument Design

This dissertation implements an adapted version of Miller-Millesen’s (2003) governance framework and Ostrower and Stone’s (2010) contingency-based governance framework in order to examine what factors influence charter school board roles and responsibilities. Ostrower and Stone’s contingency-based framework on factors that influence board roles and responsibilities utilizes the Urban Institute’s 2005 National Survey of Nonprofit Governance (Ostrower, 2007) to measure the variables included in their framework. The Urban Institute’s survey was administered to a stratified random sample; based on organizational size, of nonprofits from the Urban Institutes 2002 NCCS-GuideStar National Nonprofit Research Database of public charities that file Internal Revenue Service form 990. The Urban Institute’s survey was mailed to the nonprofit’s CEOs/Executive Directors (EDs). The survey contained 78 items; however, it was not necessary for Ostrower

and Stone to utilize all the survey items from the Urban Institute's survey in their contingency-based framework.

The contingency-based framework used in this study is an adapted version from Ostrower and Stone's framework because other frameworks (Miller-Millesen, 2003) and additional variables unique to charter schools needed to be included in this study's framework. Since this study adapted Ostrower and Stone's framework to research charter school board roles and responsibilities, the study also utilized the Urban Institute's survey to design a governance survey for charter schools.

The charter school governance survey (see Appendix B) for this study used some of the same survey items that were used in the Urban Institute survey to account for the variables from Ostrower and Stone's contingency-based framework. Some survey items from the Urban Institute survey used in the charter school governance survey were modified for data analysis procedures. However, any design changes made to survey items that were transferred from the Urban Institute survey to this dissertation's survey maintained their original intent. Survey items from Urban Institute survey that were not used in Ostrower and Stone's contingency-based model were not transferred to the charter school governance survey. Survey items were also reworded to reflect the unit of analysis (charter schools) and observation unit (EDs/principals of charter schools) for the charter school governance survey. Finally, several survey items were added to the charter school governance survey that were not included in the Urban Institute survey in order to capture the necessary data for the expanded framework utilized in this study. The charter school governance survey administered for this dissertation is found in Appendix B. While not presented in Appendix

B, this study used the survey research program Qualtrics to design the survey in order to administer it online through a link provided in an email to EDs/principals of charter schools.

3.3.1 Survey Administration and Data Collection

After receiving approval from the Institutional Review Board (IRB) at North Carolina State University (See Appendix C), the survey was first pretested through a random sample of 40 charter schools in North Carolina to examine the validity of the survey instrument. Out of the 40 EDs/principals that were administered the survey, 15 took the survey (37.5% response rate) and 11 completed the entire survey (27.5% response rate). Based on the respondents' answers to the survey items and the overall survey, only a few minor changes needed to occur to the final survey administered for this dissertation.

The major change to the survey instrument that occurred following the pretest was to the survey item examining external funding. It was revised from an open-ended question to a question that asks the respondent to identify what percent of funding they receive each category compared to their overall revenue. Also, an additional category was added to the question to account for government allocated funds compared to government grant and contract funds. These changes occurred due to respondents not answering the survey items correctly or not answering the open-ended survey items altogether. The errors in answering these survey items were likely because they did not have the information readily available.

A few survey items were added and dropped between the pretest survey and final survey. These additions and deletions of survey items depended on the need for the items to represent a variable in the framework. Finally, minor changes occurred to how survey items were asked between the pretest and final survey, most notably the dependent variable was

changed from a 5-point likert scale (not active to very active) to a sliding scale (0-not active to 10-very active). This change was made for easier interpretation of the variable during data analysis. To that end, the survey administered for this dissertation met the necessary qualifications of function and structure based on an evaluation of the pretest and the accompanied changes made to the survey based on the pretest.

After changes were made to survey instrument based on the pretest the stratified sample of 2,730 charter schools, which did not include the 40 charter schools used for the pretest, were administered the charter school governance survey. The survey was emailed to the EDs/principals of each charter school. The survey was administered online through Qualtrics. Web-based survey research provides an easy-to-use, cost effective survey method that results in a potential for higher response rates, accurate data entry, and faster survey turnarounds (Berry, 2005). The survey was given through an email link provided to potential respondents. Email addresses were collected for potential respondents through contact information and organization websites provided for each charter school through the Center for Education Reform Charter School Database (2013a).

The survey administration process began with potential respondents receiving an email (Appendix D, email 1) that informed them of their selection as a potential respondent for the survey; provided them with a detail explanation of the reason for the survey; and informed them the survey met IRB guidelines. The first email also informed potential respondents that they would receive a second email in two days providing the link for the survey. The second email (Appendix D, email 2) was sent to potential respondents again informing them of their selection as a potential respondent for the survey; explaining the

purpose for the survey; informing them that the survey meets IRB guidelines; and included the survey link to take the questionnaire, as well as an attached copy of the informed consent document (Appendix B). The second email provided a secured survey link specific to the respondent, ensuring only the intended respondent answered the questionnaire. The period for taking the survey was four weeks and potential respondents who had not taken the survey throughout these four weeks received four reminders (with survey links) requesting that they take the survey. This was done to obtain a higher response rate.

The emails were sent to the EDs/principals of the 2,730 charter schools in the stratified sample. After taking into account the emailed surveys that were returned or were sent to failed email addresses, the actual sample size was reduced to 2,356 charter schools. The survey response rate was 19.02% with 448 respondents returning the survey. The survey response rate is comparable to national charter school surveys that have been administered by the National Alliance of Public Charter Schools and the Center for Education Reform (Center for Education Reform, 2014; National Alliance for Public Charter Schools, 2013b). An analysis of the response rate and the differences between the respondents and non-respondents is addressed in Chapter 4.

3.4 Operationalization of Variables

The intent of the survey items was to capture each variable in the contingency-based framework so they may be analyzed. Since the Urban Institute's survey was designed with the intentions of reporting findings on nonprofit governance (Ostrower, 2007), then the survey represents a somewhat accurate measurement of Ostrower and Stone's (2010) original framework. To that end, since the charter school governance survey adapted the Urban

Institute's survey items to represent the framework for this dissertation, it is expected the questionnaire accurately measures the variables examined in this study. A detailed discussion follows regarding on how the dependent, independent, and control variables were operationalized in this dissertation.

3.4.1 Dependent Variables

Board Roles and Responsibilities

The dependent variables for this study were charter school board roles and responsibilities. Literature on nonprofit governance suggests a wide array of roles and responsibilities for nonprofit boards (Miller-Millesen, 2003; Cornforth, 2004; Brown and Guo, 2010). Several theories have been proposed to better understand the roles of boards in the nonprofit sector. However, as argued by Miller-Millesen (2003), along with other scholars (Cornforth, 2004; Ostrower and Stone, 2010; Renz and Andersson, 2013), it is unlikely one grand theory will ever capture all the roles and responsibilities ascribed and practiced by nonprofit boards. Miller-Millesen notes that there are three dominant theories – agency theory, resource-dependency theory, and institutional theory – that best explain various normative roles and responsibilities for nonprofit boards. She further explains that a multi-theory approach is needed to understand board behaviors because each theory alone provides an incomplete picture of board roles and responsibilities. As a result of Miller-Millesen's research, additional theories have been proposed to understand board roles and responsibilities. This research used the theoretical framework examined by Miller-Millesen but includes the addition of stewardship theory (Davis et al., 1997; Muth and Donaldson, 1998) to better place board roles and responsibilities in a theoretical context. Several scholars

(Cornforth, 2004; Van Slyke, 2006; Van Puyvelde, 2012) argue that including stewardship theory in governance research emphasizes that certain roles and the responsibilities of the board are primarily strategic.

A review of the literature in Chapter 2 identified twelve traditional board roles and responsibilities that explain the general focus of nonprofit boards:

1. Selecting and evaluating the ED/principal;
2. Overseeing the organization's programs/services
3. Providing fiscal and policy oversight
4. Defining the organization's mission and purpose;
5. Planning for the future of the organization through strategy and planning;
6. Setting the organization's policy;
7. Advancing the organization's public image;
8. Developing community relationships;
9. Enlisting financial resources (i.e. fundraising);
10. Assuring legal compliance for the organization;
11. Implementing mandates for the organization; and
12. Meeting professional standards for the organization.

Miller-Millesen (2003), based on agency, resource dependency, and institutional theories, develops a theoretical typology to categorize some of these activities as monitoring; boundary-spanning; and conforming roles and responsibilities. Expanding on Miller-Millesen's theoretical typology, this research also included stewardship theory to categorize some of the board activities as strategizing. Thus, the dependent variable of charter school

board roles and responsibilities was examined in this study based on the theoretical categories shown in Table 3.3.

Table 3.3: Theory-Based Typology of Charter School Board Roles and Responsibilities

Monitoring (Agency Theory)	Strategizing (Stewardship Theory)	Boundary Spanning (Resource Dependency Theory)	Conforming (Institutional Theory)
<ul style="list-style-type: none"> • Selecting and evaluating the ED/principal • Overseeing the organization's programs/ services • Providing fiscal and policy oversight 	<ul style="list-style-type: none"> • Defining the organization's mission and purpose • Planning for the future of the organization through strategy and planning • Setting the organization's policy 	<ul style="list-style-type: none"> • Advancing the organization's public image • Developing community relationships • Enlisting financial resources 	<ul style="list-style-type: none"> • Assuring legal compliance for the organization • Implementing mandates for the organization • Meeting professional standards for the organization

These roles and responsibilities, excluding conforming roles and responsibilities, are examined in the Urban Institute survey (Ostrower, 2007) based on how actively involved the board is for each function. Since the framework for this dissertation expanded on Urban Institute Survey and Ostrower and Stone's research, the dependent variables were operationalized in a similar manner. In the charter school governance survey (Appendix B, Q15) EDs/principals were asked how actively involved was the charter school's board in carrying out the functions described above. A sliding scale (0-not active to 10-very active) was provided for the survey respondent to analyze each board function and determine how actively involved their board was for each behavior. Table 3.6 explains how the dependent variable was operationalized in the study.

3.4.2 Independent Variables

Resources and Funding

The Urban Institute's survey identifies resources and funding from the nonprofits surveyed by asking each organization to identify what percent of their revenue comes from certain categories. Ostrower and Stone (2010) utilizes this in their framework to analyze not only how each funding category influences board roles and responsibilities but also to examine Miller-Millesen (2003) hypotheses on how external funding affects board functions. Miller-Millesen proposes a hypothesis that nonprofit boards would be more likely to focus on boundary-spanning roles and less likely to focus on monitoring roles when a proportion of income obtained from external sources are high. Miller-Millesen also proposes the hypothesis that reliance on internally generated funds promotes greater attention to internally oriented board roles and responsibilities (e.g., monitoring and strategizing). Ostrower and Stone (2010) tested Miller-Millesen's hypotheses but instead of examining external funding as one concept, they looked at it as government funding and private funding. They find that government funding is related to an increase in board activity in boundary spanning activities but mostly unrelated to internally oriented roles. Also, they find that greater reliance on private funders (e.g., foundations and individuals) is related to an increase in board activity in boundary-spanning activities. However, they did not find any support that reliance on internally generated funds promotes greater attention to internally oriented board roles and responsibilities. Based on this research and the literature presented in Chapter 2, the hypotheses below are proposed.

This dissertation operationalized the variable following the example from the Urban Institute's survey and assesses charter school resources and funding by asking ED/principals what percentage of their organization's funding, from the previous fiscal year, came from (Appendix B, Q44):

- Student Fees and charges (Internal Funding);
- Federal, State, and Local allocated dollars to the school (Government Funding);
- Government grants and contracts (Government Funding);
- Foundation grants and contracts (Private Funding);
- Donations (individuals and corporate) (Private Funding);
- Endowment Income (Internal Funding).

The respondents were asked to explain what percent of their revenue came from each category based on a scale ranging from 0% (1) to 75-100% (6). Table 3.6 depicts how this variable is described and coded for this dissertation. In examining how funding influences board roles and responsibilities, the variable was categorized based on school, government funding and external funding. This variable was used to examine Hypotheses 1a and 1b below.

Hypothesis 1a: Charter school boards raise their activity level with regard to performing boundary-spanning and conforming roles and responsibilities and lower their activity level with regard to performing monitoring and strategizing roles and responsibilities when the school receives government funding.

Hypothesis 1b: Charter school boards raise their activity level with regard to performing boundary-spanning and conforming roles and responsibilities and lower their activity level with regard to performing monitoring and strategizing roles and responsibilities when the school receives private funding.

Institutional and Regulatory Environment

The institution and regulatory variable in this dissertation deviated from how it is examined in Ostrower and Stone's (2010) framework. In this dissertation, the environment variable was based on the public policy environment of charter schools, and not the general environment of all nonprofits. Specifically, this environment variable examined the state charter school law based on the amount of autonomy from bureaucratic controls that is afforded to the school. Wohlstetter et al (1995) argue that higher levels of autonomy result in freedom to exercise more choice in organizational policy-making. This would result in charter school boards in states that provide more autonomy to be more actively involved monitoring and strategizing roles and responsibilities. Also, Miller-Millesen (2003) explains that nonprofit boards are more likely to perform conforming roles and responsibilities when they have to respond to external mandates that emanate from the legal environment. However, charter schools in states with higher levels of autonomy would not have to respond as much to external mandates from the legal environment, which would result in charter school boards less likely to perform conforming roles and responsibilities. Based on this research and the literature presented in Chapter 2, the hypothesis below is proposed.

The study operationalized this variable using the Center of Education Reform's annual state-by-state report card, grading each state's charter school legislation. The laws are ranked based on which states have the fewest and weakest restrictions on the formation and operation of charter school (Chi and Welner, 2008). The state laws with the highest rankings have high levels of autonomy and the state laws with the lowest rankings have lower levels of autonomy. Scholars (Wohlsteetter et al., 1995) acknowledge that state laws can represent

high, medium, and low levels of autonomy. This dissertation classified the environment variable on state laws based on high, medium, and low levels of autonomy.

The Center for Education Reform (2013b) charter school rankings are used to classify this variable based on the levels of autonomy provided by state laws. The table in Appendix A presents every state with a charter school law as of January, 2013; the number of charter schools in that state for the 2012-13 school years as of January, 2013; the state ranking for their charter school law given by the Center for Education Reform; and the numerical score that corresponds with the state law ranking. The Center for Education Reform (2013b) uses these rankings to classify 5 levels of charter school law. The state laws that have the weakest restrictions and provides the most amount of autonomy for charter schools are in category A and have scores between 49 and 40; category B scores range from 39 to 30; category C scores range from 29 to 20; and category D scores range from 19 to 10. Finally, category F scores, which include state laws that have the strictest restrictions and provide the least amount of autonomy to charter schools, range from 10 to 0. However, as shown in Appendix A's table, this dissertation collapsed the Center for Education Reform categories A and B into the category high, referring to the level of autonomy provided by state law. This study labeled Center for Education Reform's category C as medium, and labeled categories D and F as low. It is based on these three categories – high, medium, and low – that the variable was identified in the study.

In the charter school governance survey (Appendix B, Q31) the respondent was asked in what state the charter school is located. The respondent's answer was then classified as high, medium, or low levels of autonomy based their state's charter school law ranking from

the Center for Education Reform (See Appendix A). Table 3.6 depicts the institutional and regulatory environment variable for this study's framework. The variable was used to examine the Hypothesis 2 below.

Hypothesis 2: Charter school boards raise their activity level with regard to performing monitoring and strategizing roles and responsibilities and lower their activity level with regard to performing conforming roles and responsibilities when state legislation provides higher levels of autonomy from bureaucratic constraints.

Board Size

The influence board size has on board roles and responsibilities are examined throughout governance literature (Abzug et al., 1993; Bowen, 1994; Ostrower, 2002). Also, Miller-Millsen (2003) uses resource dependency theory to hypothesize how board size affects board roles and responsibilities. Miller-Millsen argues that board size is often unrelated to board activity except a positive association with certain roles and responsibilities associated with boundary-spanning. Ostrower and Stone (2010) examine Miller-Millesen's hypothesis in their framework by using the Urban Institute's survey data to understand how board size influences board behaviors. They found board size is generally unrelated to board roles and responsibilities except for certain boundary-spanning activities (e.g., fundraising). Based on this research and the literature presented in Chapter 2, the hypotheses below are proposed.

The study operationalized this variable by adapting the Urban Institute's survey item analyzing board size. The charter school governance survey asked the potential respondent (Appendix B, Q1) how many voting board members currently serve on the board. Table 3.6

explains how the variable was examined and coded in this study. The variable was used to test Hypotheses 3a and 3b below.

Hypothesis 3a: Charter school board size will not have any relationship to the activity level of the charter school board in performing monitoring, strategizing, or conforming roles and responsibilities.

Hypothesis 3b: The larger the size of the charter school board, the greater the activity level of the charter school board in performing boundary-spanning roles and responsibilities.

Executive Director/Principal as Voting Member of the Board

The ED/principal as a voting member of the board was measured using the same method of the Urban Institute survey, since this is a variable examined in Ostrower and Stone's (2010) framework. Ostrower and Stone (2007; 2010) explain that an ED serving as voting member on a nonprofit board is negatively associated with all board roles and responsibilities related to monitoring and strategizing because it undermines the governance role of the board. Also, they found that an ED serving as a voting member on a nonprofit board is negatively associated with only certain roles and responsibilities related boundary-spanning (e.g., community relations). Based on this research and the literature presented in Chapter 2, the hypotheses below are proposed.

The dissertation operationalized this variable by asking the respondent (Appendix B, Q5) if the ED/principal is a voting member of the board. Table 3.6 also explains how the variable was operationalized in this study. The variable was used to examine the Hypotheses 4a, 4b, and 4c below.

Hypothesis 4a: Charter school boards lower their activity level with regard to performing monitoring roles and responsibilities when the ED/principal is a voting member of the board.

Hypothesis 4b: Charter school boards lower their activity level with regard to performing strategizing roles and responsibilities when the ED/principal is a voting member of the board.

Hypothesis 4c: Charter school boards lower their activity level with regard to performing boundary-spanning roles and responsibilities when the ED/principal is a voting member of the board.

Board Demographic Characteristics

Board composition is a growing research interest in nonprofit governance literature (Ostrower and Stone, 2006). Previous research on nonprofit boards concludes that they are mostly made up of white, male, and upper-middle to upper class individuals (Abzug and Simonoff, 2004; Kang and Cnaan, 1995; Middleton, 1987; Moore and Whitt, 2000; National Center for Nonprofit Boards [NCNB], 2000; Odendahl and Youmans, 1994; Ostrower, 1995; 2002; 2007; Zald, 1967). These studies typically have only focused on large nonprofit boards. However, Ostrower (2007) finds that not only do larger boards predominantly have white, male members but smaller boards do too. Ostrower and Stone (2010) in their framework examine board demographics beyond the prescriptive nature and attempt to understand how racial/ethnic and gender compositions on boards influence board behaviors. Ostrower and Stone examine these concepts in their framework using the Urban Institute survey data. They found that the higher percentage of female board members was positively associated with roles and responsibilities related to boundary-spanning and strategizing. Also, they found that a higher percentage of board members from ethnic and minority groups was not associated with any board roles and responsibilities. Based on this research and the literature presented in Chapter 2, the hypotheses below are proposed.

The dissertation operationalized these employing the survey items from the Urban Institute survey to examine how racial/ethnic and gender composition affects board functions. The charter school governance survey asked (Appendix B, Q21 & Q22) how many board members are Hispanic/Latino, White, African-American/Black, Asian or Other and asked how many board members are male or female. These numbers were computed to a percentage in the study based on the number of charter school board members. Table 3.6 explains how these variables were described and coded. These variables were used to examine Hypotheses 5a, 5b, and 6 below.

Hypothesis 5a: The higher the percentage of female board members on a charter school board, the greater the activity level of a charter school board in performing strategizing board roles and responsibilities.

Hypothesis 5b: The higher the percentage of female board members on a charter school board, the greater the activity level of a charter school board in performing boundary-spanning board roles and responsibilities.

Hypothesis 6: The higher the percentage of racial and ethnic minorities on a charter school board will not have any relationship to activity level of the charter school board in performing any board roles and responsibilities.

Corporate Board Members

The number of board members that sit on corporate boards was measured using the same method as the Urban Institute survey, since this was a variable examined in Ostrower and Stone's (2010) framework. Ostrower and Stone find that the higher the percentage of corporate board members that sit on a nonprofit board the more active the nonprofit board is in performing financial oversight, a monitoring role and responsibility. This finding shows that corporate board members who sit on nonprofit boards act as an outlet through which practices in the private sector are brought to the nonprofit sector. Also, Ostrower and Stone

find that the percentage of corporate board members that sit on a nonprofit board variable is not associated to any other board roles and responsibilities. Thus, based on this understanding and previous literature presented in Chapter 2, the hypotheses below are proposed.

The study operationalized this variable by asking respondents (Appendix B, Q24) how many board members also sit on corporate boards. Table 3.6 explains how the variable was operationalized in this study. The variable was used to examine Hypothesis 7 below.

Hypothesis 7: The higher the percentage of corporate board members that sit on a charter school board, the greater the activity level of a charter school board in performing monitoring roles and responsibilities.

Board Recruitment Criteria

Ostrower and Stone (2010) argue that a set of board attributes in need of more examination is recruitment criteria used to select new board members. However, in their study research is mixed on how certain recruitment criteria are associated with certain board roles and responsibilities. Ostrower and Stone use the Urban Institute's survey data to account for the board recruitment variables in their framework. This dissertation used the Urban Institute's question that asked (Appendix B, Q20) how important the following criteria were for selecting new board members.

- Ability to donate
- Ability to fundraise
- Business or financial skills
- Knowledge of the organization's mission area
- Previous volunteer work for the organization

- Willingness to give time
- Membership in group served by the organization
- Reputation in the community
- Friend or acquaintance of one or more current board members
- Racial or ethnic diversity
- Gender

Each board criterion was examined separately in regard to its influence on board behaviors. A sliding scale (0-not important to 10-very important) was used for the survey respondent to analyze each board recruitment category. Table 3.6 describes how recruitment criteria were operationalized in this study. Also, this dissertation examined the board recruitment variables through a more exploratory lens and did not propose hypotheses regarding how board recruitment criteria influences board behaviors.

School Age

Ostrower and Stone (2006, 2010) find in a review of the literature that organizational age is an important variable when it comes to predicting power. One of the more notable studies is from Zald (1969), which contends that board functioning changes with different phases of development (life-cycle changes).

Miller-Millesen (2003) includes age in her theoretical-based model on board roles and responsibilities but does not propose hypotheses based on the variable. However, Ostrower and Stone (2010) do examine the age of the organization in more detail in their contingency-based framework on board roles and responsibilities. They argue age needs to be considered in context with other internal characteristics in order to understand its

influence on board roles and responsibilities. They use the Urban Institute's survey data to analyze the organization age variable in their framework. Ostrower and Stone find that age is positively associated with certain strategizing activities but unrelated to other board roles and responsibilities. Based on this research and the literature presented in Chapter 2, the hypothesis below is proposed.

This dissertation's framework also incorporated school age and utilized the question wording for the age variable from the Urban Institute survey in the charter school governance survey. The charter school governance survey asked (Appendix B, Q26) how long has the charter school been in operation. Table 3.6 explains how this independent variable was operationalized in the study. The variable of age was used to examine Hypothesis 8 below.

Hypothesis 8: The older the charter school, the greater the activity level of the charter school board in performing strategizing roles and responsibilities.

School Size

In a review of the literature, Ostrower and Stone (2006, 2010) explain that organizational size is an important variable when it comes to influences on board behaviors. Ostrower and Stone (2010) argue size needs to be considered in context with other internal characteristics in order to understand its influence on board roles and responsibilities. They use the Urban Institute's survey data to analyze the organization size variables in their framework. Ostrower and Stone find that organizational size was positively associated with boards performing certain monitoring and strategizing roles and responsibilities and negatively associated with boards performing certain boundary-spanning roles and

responsibilities. Based on this research and the literature presented in Chapter 2, the hypothesis below is proposed.

This dissertation's framework also incorporated school size and utilized the survey items from the Urban Institute survey, which operationalizes size based on one factor, the operating expenses of the organization. For the charter school governance survey size was operationalized through two factors to incorporate not only annual expenses but also students served by the school. First, the respondents were asked how many students attend the charter school (Appendix B, Q29). Second, the respondents were asked what the operating expenses were for the organization during the previous year (Appendix B, Q43). Table 3.6 explains how these two independent variables were operationalized in the study. The variable of size was used to examine Hypotheses 9a and 9b below.

Hypothesis 9a: The larger the size of the charter school (based on annual expenses), the greater the activity level of the charter school board in performing monitoring and strategizing board roles and responsibilities and the lower the activity level in performing boundary-spanning roles and responsibilities.

Hypothesis 9b: The larger the size of the charter school (number of students), the greater the activity level of the charter school board in performing monitoring and strategizing board roles and responsibilities and the lower the activity level in performing boundary-spanning roles and responsibilities.

Stability

Board functions change with different phases of the organization (Zald, 1969). Miller-Millesen (2003) explains through agency theory that the principal-agent relationship changes when the organization's stability is called into question. She argues that a typical principal-agent relationship between an ED and a board, where the board engages in monitoring activities, is likely to occur when the organization is stable. She also uses

resource dependency theory to explain how boards during unstable periods for an organization will be more involved in boundary-spanning functions. Based on Miller-Millesen's research and the literature presented in Chapter 2, the hypotheses below are proposed.

This dissertation expanded on the Urban Institute's survey to examine stability because it only asked if the organization was going through a period of change. This study tried to capture a better understanding of stability by asking (Appendix B, Q41) if the organization is planning major changes in the following areas: large scale programmatic changes (i.e. incorporation of additional grade level; new academic or extracurricular programs); internal staff structure; shift in mission; and hiring a new executive director/principal. Table 3.6 explains how the stability variable is operationalized in this dissertation. The factor of stability is examined through Hypotheses 10a and 10b below.

Hypothesis 10a: Charter school boards raise their activity level with regard to performing monitoring roles and responsibilities when the organization is stable.

Hypothesis 10b: Charter school boards raise their activity level with regard to performing boundary-spanning roles and responsibilities when the organization is unstable.

Professionalization

Miller-Millesen (2003) built off the theoretical and empirical research of previous scholars to explain that the more professionalized an organization is the more likely the nonprofit board will not be involved in monitoring organizational activities. Miller-Millesen also explains that when an organization is professionalized and board members are not focusing their attention on monitoring activities, they will focus their attention on boundary-

spanning activities. Based on Miller-Millesen's research and the literature presented in Chapter 2, the hypotheses below are proposed.

This dissertation used the same question from the Urban Institute's survey to examine professionalization in this framework by asking (Appendix B, Q36) if the executive director/principal is a paid staff member. However, since professionalization usually accounts for the credentials of the executive, the charter school governance survey captured professionalization by also asking respondents (Appendix B, Q38, 39, and 40) if the executive director/principal has a school administrator's license, a professional educator's license or an advance degree in leadership, administration, or management. Table 3.6 explains how the professionalization variable was operationalized in this dissertation. The factor of professionalization was examined through Hypotheses 11a and 11b below.

Hypotheses 11a: Charter school boards lower their activity level with regard to monitoring roles and responsibilities when the executive staff is professionalized.

Hypotheses 11b: Charter school boards raise their activity level with regard to boundary-spanning roles and responsibilities when the executive staff is professionalized.

Charter School Management

The management system variable in this dissertation is not examined in Ostrower and Stone's (2010) framework. The reason for the divergence from their framework was because the types of management systems available for charter schools are unique from many nonprofits. Charter schools boards have an option to have their charter schools managed by an Educational Management Organization (EMO) or Charter Management Organization (CMO). However, since EMOs and CMOs are professionalized management organizations

then this variable should follow similar assumptions and hypotheses as the previous professionalization variable.

This dissertation captured the management system variable by asking the respondent (Appendix B, Q42) whether an EMO/CMO manages the charter school. Table 3.6 explains how the variable was operationalized in this study. The variable was used to examine Hypotheses 12a and 12b below.

Hypotheses 12a: Charter school boards lower their activity level with regard to monitoring roles and responsibilities when the school is managed by an EMO or CMO.

Hypotheses 12b: Charter school boards raise their activity level with regard to boundary-spanning roles and responsibilities when the school is managed by an EMO or CMO.

3.4.3 Control Variables

Two sets of variables were controlled for in this study:

1. Examining the number and length of board meetings. These variables were based on survey items that account for how many board meetings occur in a year (Appendix B, Q2) and how long board meetings last (Appendix B, Q4).
2. Based on charter school literature, school characteristics were also controlled.

Variables in this set included the type of school (elementary, middle, high school) (Appendix B Q34); location of school (rural, suburban, urban) (Appendix B, Q30); if the school is a virtual charter (Appendix B, Q33); the number of paid staff (Appendix B, Q27); and the percent of low-income students served by the school (Appendix B, Q35).

3.5 Data Analysis

Data analysis procedures were implemented to test the validity and reliability of the data and to analyze the framework presented in the dissertation. First, the data were analyzed for nonresponse bias, missing values, and bivariate correlations, all of which have the potential to influence the statistical analysis of the framework. Second, the framework was analyzed using factor analysis and multiple linear regressions. Each of these statistical concepts are presented below and the results are shown in later chapters.

3.5.1 Nonresponse Bias, Missing Values, and Bivariate Correlations

The data were analyzed for nonresponse bias to ensure the answers from the respondents do not differ in any meaningful ways from the non-respondents of the survey. In order to check against possible response bias the variables of state charter school law autonomy level, school type, student enrollment, and school age were examined. The results for nonresponse bias are presented in Chapter 4.

The data were also examined for missing values to ensure no patterns of missing values existed that would jeopardize the validity and reliability of the research. Ideally, any missing data should be randomly distributed and not concentrated on a single variable. This study used the Missing Value Analysis (MVA) technique in SPSS to examine the data and the results are presented in Chapter 4.

Finally, the data were analyzed to ensure multicollinearity did not exist among the independent variables. Correlations among the independent variables could overstate the effects the variables have on the dependent variables. Using SPSS, bivariate correlations

were run to ensure multicollinearity did not exist among the independent variables and the results are presented in Chapter 5.

3.5.2 Factor Analysis

The dependent variables were analyzed with an exploratory factor analysis (EFA) of the 12 board roles and responsibilities to see if they loaded on the constructs of monitoring, strategizing, boundary-spanning, and conforming categories. For this study, factor loadings greater than 0.7 on the proposed construct and less than 0.3 on other constructs were desired. As will be presented in Chapter 4, the 12 board roles and responsibilities did not factor as expected, with the monitoring and strategizing factoring as one construct and the boundary-spanning and conforming constructs factoring as expected. Thus, the board roles and responsibilities loaded on three categories and additive items scales were utilized to create the three dependent variables of monitoring and strategizing, boundary-spanning, and conforming. The effects of the independent variables within the framework were then analyzed on the 3 dependent variables.

3.5.3 Multiple Linear Regressions

Multiple linear regressions were used with the data to examine the influence the independent variables had on the dependent variables. Linear regression requires the dependent variables to be continuous, while the independent variables can be measured on a continuous or ordinal scale (Garson, 2014). Multiple linear regressions predict the amount by which the dependent variables change for each one-unit increase in an independent variable, while controlling for other variables in the framework. Beta weights were then used to compare the influence of each independent variable predicting each dependent variable,

along with considering the statistical significance of each variable (Garson, 2014). Multiple linear regressions were used in this dissertation by examining the effects the independent variables had on each of the three dependent variable constructs individually. These results are presented in Chapter 5.

3.5.4 Testing Assumptions of Multiple Linear Regression

There are multiple assumptions about the data and models that must be met for the results of linear regression analyses to be valid. The assumptions of proper specification of the models, outliers, error terms, and normal distribution of error terms are discussed below and addressed in other sections of the dissertation are the assumptions of sample size (Section 3.2.2); measurement error in the models (Section 3.6 and Section 4.3); missing values (Section 4.4); normality (Section 4.6); and absence of multicollinearity (Section 5.3).

The proper specification of the regression model is examined two ways. First, regression analysis assumes a linear relationship between the dependent and independent variables. Preliminary tests using curve estimation procedures in SPSS indicated a linear relationship between the dependent and independent variables.

Second, regression analysis assumes that the study did not include causally irrelevant but correlated independent variables or exclude important variables from the model. If the study fails to meet either of these assumptions then the standard errors associated with the parameter estimates have the potential to be inflated (Garson, 2014). In order to avoid violating these assumptions, the models were built based on previous charter school and nonprofit governance research in order to attempt to include only the most important variables. However, the low R-squares of the models, discussed later in the dissertation,

indicated that there are likely variables omitted from the analysis, which would inflate the standard errors of the regression analysis.

OLS regression assumes that there are not extreme outliers that may produce unreliable results. In this study that was diagnosed based on the Cook's D values for residuals. A Cook's D value greater than 1 ($D > 1$) for each of the regression analyses indicates a possible outlier problem (Garson, 2014). Table 3.4 shows a summary of the Cook's D values for each regression model and shows that the mean values are not close to zero, which indicates there are likely no outliers skewing the results.

Table 3.4: Summary of Cook's D Statistics for Regression Models

Regression Model	Mean Cook's Distance	Standard Deviation	Minimum	Maximum
Monitoring and Strategizing	.003	.005	.000	.037
Boundary-Spanning	.003	.004	.000	.035
Conforming	.003	.004	.000	.031

Another OLS regression assumption is that error terms are independent of each other. The Durbin-Watson statistic for the residuals tests for autocorrelations should have a value between 1.5 and 2.5 to show independence of observations (Garson, 2014). Table 3.5 shows the values of the Durbin-Watson statistic for each of the regression models and they all fall in the accepted range indicating that the assumption of independence of error terms is met.

Table 3.5: Summary of Durbin-Watson Statistics

Regression Model	Durbin-Watson
Monitoring and Strategizing	1.928
Boundary-Spanning	1.981
Conforming	2.000

Finally, OLS regression models were examined to ensure that the error terms have a normal distribution. This was checked by examining the P-P Plot of residuals for each model. The P-P Plots of the residuals for each model showed well-fitted lines and no major departures from normality.

3.6 Limitations of the Research Design

Challenges inherent to survey research include reducing survey error and ensuring validity in the study. While it is impossible to eliminate all survey error and threats to a study's validity, there were several means employed in this study to ensure accuracy in the data. The four types of validity that were greatest concern to this study: content, construct, internal, and external.

3.6.1 Content Validity

Content validity refers to the degree a measurement truly covers what it was intended to measure (Babbie, 1990). Content validity is often combated through subject matter experts and pretesting the survey instrument. For this study, the survey instrument was developed using items from the Urban Institute's National Survey of Nonprofit Governance, which Ostrower and Stone (2010) uses for a framework similar to the one employed in this dissertation. The Urban Institute's study is validated by scholars in the nonprofit field and by other researchers that have used the data for analysis. However, this dissertation also pretested the survey instrument used in this study in order to show that the measurements in the survey were truly measuring what they were intended to do.

3.6.2 Construct Validity

Construct validity is the extent that a measure is related to the underlying construct (Groves et al., 2009). A good construct usually has theoretical basis, which is explained through operational definitions involving measurable indicators (Garson, 2013c). As reviewed in Chapter 2, the constructs examined in this study are based on the theoretical assumptions from previous scholars (e.g., Miller-Millesen, 2003; Cornforth, 2004).

Convergent and divergent validity are also ways to assess construct validity. Convergent validity establishes construct validity when two or more measurement procedures (e.g., survey items) are used to collect data about a construct. In this dissertation convergent validity was examined through monitoring for internal consistency through statistical practices such as factor analysis and the use of Cronbach's alpha. A Cronbach's alpha should be .60 or higher for adequate exploratory research, .70 or higher for adequate confirmatory research, and .80 or higher for confirmatory research (Garson, 2013a).

Divergent validity establishes construct validity by showing that constructs are different from each other. Divergent validity was examined using factor analysis to ensure crossloadings between constructs were low ($<.4$) (Garson, 2013a). This research employed the use of these statistical techniques to reduce the threat of convergent validity.

3.6.3 Internal Validity

Internal validity examines if a casual relationship exists. A lack of internal validity results in variables, other than the independent variables, being responsible for observed effects on the dependent variables (Garson, 2013c). For this study, internal validity was assessed through reviewing literature and past theoretical and empirical research that

demonstrated a cause and effect relationship with charter school's environmental factors, board attributes, and organizational characteristics and board roles and responsibilities.

3.6.4 External Validity

External validity is the bias that may occur in generalizing conclusions from a sample to a population, to other subject populations, to other settings, or to other time periods (Garson, 2013c). External validity was addressed in this model by taking a stratified sample of the target population to ensure that smaller sampling errors were produced with samples from a homogeneous population compared to a heterogeneous population. Instead of selecting the sample from the target population as a whole, this study drew a sample from each of the homogenous subsets of the population, based on state charter school laws. Also, this study oversampled three times the adequate sample size to ensure the responses for the survey can be generalized for the stratum and for the entire population.

Validity issues can arise due to nonresponse, which is when a significant number of people in the survey sample do not respond to the questionnaire and have different traits from those who responded. This study attempted to avoid nonresponse bias by providing the potential respondents a complete understanding of how the survey was administered. This was done first by the respondent receiving a straightforward letter stating the purpose of the survey, which emphasized the educational and beneficial nature of the study. Also, the letter was personalized by letting participants know it was for a dissertation. Second, the survey design provided the potential respondent a clear and concise avenue to participate in the survey, which included reminders to the participant to take the survey during the time period that it was implemented. Also, the consent form for the survey emphasized the confidential

nature of the survey and provided several avenues for the participant to guarantee the credibility of the survey. Finally, as mentioned above, the population was oversampled to ensure an adequate number of responses were received so generalizations can be made about the population from the sample.

Validity issues can also arise due to response bias. Response bias occurs when the answers provided by respondents are not a reflection of the true answer. The bias is the result in the difference between the expected value and the true value being estimated (Grove et al., 2009). Some ways in which response bias can occur include the respondent answering in a way that is not factual in order to generate a certain result or can occur due to respondent answering in a nonfactual way because they believe this is the answer the surveyor would like to hear. This research project attempted to avoid response bias by checking respondents' answers with already available data to ensure the least amount of bias was introduced into the study. For example, respondents' answers to charter school revenue and expenditure survey items were evaluated against the charter schools 990 IRS tax form in order to ensure the respondents were accurately reflecting the correct amounts for their schools. Additionally, respondents' answers for other charter school data (i.e. school age, school size) were also checked for accuracy by utilizing the Center for Education Reform's database, as well as the State's Department of Public Instructions/Education databases, on charter schools.

Table 3.6: Descriptions and Coding for Dependent and Independent Variables

Variable	Description	Attributes	Type	Level of Measurement	Source	Hyps.
Board Roles and Responsibilities <i>(How actively involved is the board?)</i>	Selecting and Evaluating the Executive Director/ Principal	Sliding Scale – Not Active (0) to Very Active (10)	D.V.	Interval	Survey (Appendix B) Q15A	
	Overseeing the organization’s programs and services	Sliding Scale – Not Active (0) to Very Active (10)	D.V.	Interval	Survey (Appendix B) Q15B	
	Providing fiscal and policy oversight	Sliding Scale – Not Active (0) to Very Active (10)	D.V.	Interval	Survey (Appendix B) Q15C	
	Defining the organization’s mission and purpose	Sliding Scale – Not Active (0) to Very Active (10)	D.V.	Interval	Survey (Appendix B) Q15D	
	Planning for the future of the organization through strategic planning	Sliding Scale – Not Active (0) to Very Active (10)	D.V.	Interval	Survey (Appendix B) Q15E	
	Setting the organization’s policy	Sliding Scale – Not Active (0) to Very Active (10)	D.V.	Interval	Survey (Appendix B) Q15F	
	Advancing the organization’s public image	Sliding Scale – Not Active (0) to Very Active (10)	D.V.	Interval	Survey (Appendix B) Q15G	
	Developing community relationships	Sliding Scale – Not Active (0) to Very Active (10)	D.V.	Interval	Survey (Appendix B) Q15H	
	Enlisting financial resources	Sliding Scale – Not Active (0) to Very Active (10)	D.V.	Interval	Survey (Appendix B) Q15I	
	Assuring legal compliance for the organization	Sliding Scale – Not Active (0) to Very Active (10)	D.V.	Interval	Survey (Appendix B) Q15J	
	Implementing mandates for the organization	Sliding Scale – Not Active (0) to Very Active (10)	D.V.	Interval	Survey (Appendix B) Q15K	
Meeting professional standards for the organization	Sliding Scale – Not Active (0) to Very Active (10)	D.V.	Interval	Survey (Appendix B) Q15L		

Table 3.6: Continued

Variable	Description	Attributes	Type	Level of Measurement	Source	Hyps.
Resources and Funding	Student Fees and charges	0 – 0% 1 – 1 to 9% 2 – 10 to 24% 3 – 25 to 49% 4 – 50 to 74% 5 – 75 to 100%	I.V.	Ordinal (Scale)	Survey (Appendix B) Q44A	
	Federal, State, and Local allocated dollars to the school	0 – 0% 1 – 1 to 9% 2 – 10 to 24% 3 – 25 to 49% 4 – 50 to 74% 5 – 75 to 100%	I.V.	Ordinal (Scale)	Survey (Appendix B) 44A	H _{1a}
	Government grants, contracts, and funding	0 – 0% 1 – 1 to 9% 2 – 10 to 24% 3 – 25 to 49% 4 – 50 to 74% 5 – 75 to 100%	I.V.	Ordinal (Scale)	Survey (Appendix B) Q44C	H _{1a}
	Foundation grants or contracts	0 – 0% 1 – 1 to 9% 2 – 10 to 24% 3 – 25 to 49% 4 – 50 to 74% 5 – 75 to 100%	I.V.	Ordinal (Scale)	Survey (Appendix B) Q44D	H _{1b}
	Donations from individuals	0 – 0% 1 – 1 to 9% 2 – 10 to 24% 3 – 25 to 49% 4 – 50 to 74% 5 – 75 to 100%	I.V.	Ordinal (Scale)	Survey (Appendix B) Q44E	H _{1b}
	Endowment Income	0 – 0% 1 – 1 to 9% 2 – 10 to 24% 3 – 25 to 49% 4 – 50 to 74% 5 – 75 to 100%	I.V.	Ordinal (Scale)	Survey (Appendix B) Q44F	
Institutional and Regulatory Environment	The level of autonomy granted by the state charter school law	0 – Low 1 – Medium 2 – High	I.V.	Ordinal	Survey (Appendix B) Q31	H ₂
Board Size	Number of voting members	0 – ()	I.V.	Interval	Survey (Appendix B) Q1	H _{3a-b}
Executive Director / Principal as Voting Member	ED/ Principal is a voting board member	0 = No 1 = Yes	I.V.	Nominal/ Dummy	Survey (Appendix B) Q5	H _{4a-c}

Table 3.6: Continued

Variable	Description	Attributes	Type	Level of Measurement	Source	Hyps.
Demographic Characteristics	Number of males and females on the board	0 – () <i>(Data are also transformed into a percent)</i>	I.V.	Interval	Survey (Appendix B) Q22	H _{5a-b}
	Number of Hispanics, Whites, African Americans/ Blacks, and Asians on the board.	0 – () <i>(Data are also transformed into a percent)</i>	I.V.	Interval	Survey (Appendix B) Q21	H ₆
Corporate Board Members	Number of school board members that sit on corporate boards	0 – () <i>(Data are also transformed into a percent)</i>	I.V.	Interval	Survey (Appendix B) Q24	H ₇
Recruitment Criteria <i>(How important are the criteria for selecting new members?)</i>	Ability to donate	Sliding Scale – Not Important (0) to Very Important (10)	I.V.	Interval	Survey (Appendix B) Q20A	
	Ability to fundraise	Sliding Scale – Not Important (0) to Very Important (10)	I.V.	Interval	Survey (Appendix B) Q20B	
	Business or financial skills	Sliding Scale – Not Important (0) to Very Important (10)	I.V.	Interval	Survey (Appendix B) Q20C	
	Knowledge of the organization’s mission area	Sliding Scale – Not Important (0) to Very Important (10)	I.V.	Interval	Survey (Appendix B) Q20D	
	Previous volunteer work for the organization	Sliding Scale – Not Important (0) to Very Important (10)	I.V.	Interval	Survey (Appendix B) Q20E	
	Willingness to give time	Sliding Scale – Not Important (0%) to Very Important (100%)	I.V.	Interval	Survey (Appendix B) Q20F	
	Membership in group served by the organization	Sliding Scale – Not Important (0) to Very Important (10)	I.V.	Interval	Survey (Appendix B) Q20G	

Table 3.6: Continued

Variable	Description	Attributes	Type	Level of Measurement	Source	Hyps.
Recruitment Criteria <i>(How important are the criteria for selecting new members?)</i>	Reputation in the community	Sliding Scale – Not Important (0) to Very Important (10)	I.V.	Interval	Survey (Appendix B) Q20H	
	Friend or acquaintance of one or more current board members	Sliding Scale – Not Important (0) to Very Important (10)	I.V.	Interval	Survey (Appendix B) Q20I	
	Racial or ethnic diversity	Sliding Scale – Not Important (0) to Very Important (10)	I.V.	Interval	Survey (Appendix B) Q20J	
	Gender	Sliding Scale – Not Important (0) to Very Important (10)	I.V.	Interval	Survey (Appendix B) Q20K	
School Age	Number of years school, as a charter, has been in operation	0 – ()	I.V.	Interval	Survey (Appendix B) Q26	H ₈
School Size	Operating Expenses of previous fiscal year	\$0.00 - \$ ()	I.V.	Interval	Survey (Appendix B) Q43	H _{9a}
	Number of students	0 - ()	I.V.	Interval	Survey (Appendix B) Q29	H _{9b}
Stability <i>(Is the organization planning major changes in the following areas?)</i>	Expansion of programs (i.e. incorporation of additional grades)	0 = No 1 = Yes	I.V.	Nominal/ Dummy	Survey (Appendix B) Q41A	H _{10a} H _{10b}
	Internal staff structure	0 = No 1 = Yes	I.V.	Nominal/ Dummy	Survey (Appendix B) Q41B	H _{10a} H _{10b}
	Shift in mission	0 = No 1 = Yes	I.V.	Nominal/ Dummy	Survey (Appendix B) Q41C	H _{10a} H _{10b}
	Hiring new Executive Director/ Principal	0 = No 1 = Yes	I.V.	Nominal/ Dummy	Survey (Appendix B) Q41D	H _{10a} H _{10b}

Table 3.6: Continued

Variable	Description	Attributes	Type	Level of Measurement	Source	Hyps.
Professionalization	Is the Executive Director/Principal a paid professional staff member?	0 = No 1 = Yes	I.V.	Nominal/ Dummy	Survey (Appendix B) Q36	H _{11a} H _{11b}
	Does the Executive Director/Principal have a school administrator's license?	0 = No 1 = Yes	I.V.	Nominal/ Dummy	Survey (Appendix B) Q38	H _{11a} H _{11b}
	Does the Executive Director/Principal have a professional educator's license?	0 = No 1 = Yes	I.V.	Nominal/ Dummy	Survey (Appendix B) Q39	H _{11a} H _{11b}
	Does the Executive Director/Principal have an advance degree in leadership, administration, or management?	0 = No 1 = Yes	I.V.	Nominal/ Dummy	Survey (Appendix B) Q40	H _{11a} H _{11b}
Management System	Educational Management Organization (EMO)/Charter Management Organization (CMO) manages the charter school	0 = No 1 = Yes	I.V.	Nominal/ Dummy	Survey (Appendix B) Q42	H _{12a} H _{12b}

3.7 Conclusion of Chapter 3

Chapter 3 provided a discussion of the research design for the dissertation, including the population, sampling frame, and sample for the study. Also, Chapter 3 explained the instrument design, the survey administration process, and procedures for data collection. Chapter 3 also discusses the operationalization of the variables and again presents the major hypotheses for the dissertation. Finally, Chapter 3 discussed any limitations of the research design and explained the methodology by the research questions outlined earlier are explored in Chapters 4, 5, and 6.

3.8 Preview of Chapter 4

Chapter 4 provides an analysis of the survey response rate and compares the survey respondents to the non-respondents and the population. Also, Chapter 4 analyzes missing values in the data set. Additionally, Chapter 4 presents an overview of the results for the dependent variables in the study, charter school board roles and responsibilities. Finally, Chapter 4 presents the results of the factor analysis examining the theoretical categorizations of charter school board roles and responsibilities.

CHAPTER 4: ANALYSIS OF THEORY-BASED TYPOLOGY

4.1 Introduction

The previous three chapters provided the background for this research that seeks to better understand how environmental factors, board attributes, and internal organizational characteristics influence how charter school boards operate. This chapter lays the groundwork for the findings from the regression methods analyzing the factors that affect charter school boards to perform some roles and responsibilities more frequently than others. The remainder of this chapter is divided into seven sections:

1. Analysis of survey response rate;
2. Comparison of survey respondents versus non-respondents;
3. Analysis of missing values;
4. Examination of charter school board roles and responsibilities;
5. Factor analysis of charter school board roles and responsibilities;
6. Summary of Chapter 4; and
7. Preview of Chapter 5.

4.2 Survey Response Rate

As mentioned in Chapter 3, the target population of this study was 6,175 United States' charter schools that were in operation in the 2013-2014 school year as of March 2014. The study used a stratified sampling method and administered the national charter school governance survey to 2,730 charter schools. Utilizing the Center for Education Reform Database, the individual state's Department of Public Instruction websites, and the individual charter school website, email addresses for the executive directors (EDs) and principals of all

2,730 charter schools were collected. The survey was emailed to the EDs/principals of the selected charter schools on April 23, 2014 and the survey responses were collected from April 23, 2014 to May 23, 2014. Some 374 email surveys were returned or were sent to unsuccessful email addresses reducing the sample size to 2,356. In all, 448 out of the 2,356 surveys emails returned usable surveys for the study, resulting in a survey response rate of 19.02%. The survey response rate is comparable to other national charter schools surveys administered by the National Alliance on Public Charter Schools and the Center for Education Reform (Center for Educational Reform, 2014; National Alliance for Public Charter Schools, 2013b). The response rate of the High Stratum was 18.86%, the Medium Stratum was 19.05%, and the Low Stratum was 20.66%. The details of the survey response rates are described in Table 4.1.

Table 4.1: Survey Response Rates

Stratified Sample (Level of Autonomy)	Emailed Charter School Governance Surveys			
	Number of Emailed Surveys	Number of Emails Returned	Total Number of Responses	Survey Response Rate
High	1734	239	282	18.86%
Medium	855	115	141	19.05%
Low	141	20	25	20.66%
Totals	2730	374	448	19.02%

4.3 Comparison of Respondents and Non-Respondents

While the goal of any survey is for all those asked to participate in the survey to respond, the reality is that most surveys will have non-respondents, which is the case with this study. Therefore, researchers need to examine nonresponse bias to ensure that a statistically significant difference does not exist for respondents of the survey compared to non-respondents. It is necessary that nonresponse bias be limited for any study to ensure the validity of the survey and the respondent's answers. For the examination of nonresponse bias data for respondents, non-respondents, and the population not surveyed were available across four variables: state charter school law level of autonomy; type of school based on grade levels; student enrollment size; and school age.

4.3.1 State Charter School Law's Level of Autonomy

The variable of state charter school law's level autonomy was examined for nonresponse bias to determine if there was a significant difference in autonomy level distribution (High, Medium, and Low) between respondents and non-respondents in the sample, as well as respondents and the remainder of the population (including non-respondents). As shown in Table 4.2 and 4.3, the Chi-Square test of all groups (High, Medium, and Low) indicates a non-significant result ($p=.900$), comparing respondents to non-respondents in the sample. The non-significant finding means there is no statistically significant difference in the autonomy level distribution between the respondents and non-respondents in the sample.

Table 4.2: Cross Tabulation: Charter School Law Autonomy Level for Respondents and Non-respondents of the Sample

		Charter School Law Autonomy Level			Total
		Low	Medium	High	
Nonresponse	Observed	116	714	1452	2282
	Expected	117.9	714.7	1449.4	2282
	% Observed	5.1%	31.3%	63.6%	100%
Response	Observed	25	141	282	448
	Expected	23.1	140.3	284.6	448
	% Observed	5.6%	31.5%	62.9%	100%
Total	Observed	141	855	1734	2730
	Expected	141	855	1734	2730
	% Observed	5.2%	31.3%	63.5%	100%

Table 4.3: Chi-Square Test: Charter School Law Autonomy Level for Respondents and Non-respondents of the Sample

Chi-Square Tests			
	Value	df	Asymp. Sig (2-sided)
Pearson Chi-Square	.211	2	.900
Likelihood Ratio	.207	2	.902
N of Valid Cases	2730		

As shown in Table 4.4 and 4.5, the Chi-Square test of all groups (High, Medium, and Low) indicates a non-significant result ($p=.916$), comparing respondents to the remainder of the population, which included non-respondents in the sample. The non-significant finding

means there is no statistically significant difference in the autonomy level distribution between the respondents and the population.

Table 4.4: Cross Tabulation: Charter School Law Autonomy Level for Respondents and the Population

		Charter School Law Autonomy Level			Total
		Low	Medium	High	
Population	Observed	293	1780	3614	5687
	Expected	294.8	1780.7	3611.5	5687
	% Observed	5.2%	31.3%	63.5%	100%
Sample Response	Observed	25	141	282	448
	Expected	23.2	140.3	284.5	448
	% Observed	5.6%	31.5%	62.9%	100%
Total	Observed	318	1921	3896	6135
	Expected	381	1921	3896	6135
	% Observed	5.2%	31.3%	63.5%	100%

Table 4.5: Chi-Square Test: Charter School Law Autonomy Level for Respondents and the Population

Chi-Square Tests			
	Value	df	Asymp. Sig (2-sided)
Pearson Chi-Square	.175	2	.916
Likelihood Ratio	.171	2	.918
N of Valid Cases	6135		

4.3.2 Type of School Based on Grade Levels

The variable of type of school based on grade levels was examined for nonresponse bias to determine if there was a significant difference in grade levels (Elementary, Middle, High, Elementary/Middle, Middle/High, and Elementary/Middle/High) between respondents and non-respondents, as well as respondents and the remainder of the population. As shown in Table 4.6 and 4.7, the Chi-Square test of all groups (Elementary, Middle, High, Elementary/Middle, Middle/High, and Elementary/Middle/High) indicates a significant result ($p=.000$), comparing respondents to non-respondents in the sample. The significant finding means there is a statistically significant difference in the type of school based on grade level distribution between the respondents and non-respondents in the sample. Table 4.6 shows that Elementary and Middle Schools are underrepresented in responses and the combination schools of Elementary/Middle/High are overrepresented in the sample, which limits the study's results in their generalizability to non-respondents of the survey.

Table 4.6: Cross Tabulation: Type of School Based on Grade Level for Respondents and Non-respondents of the Sample

		Type of Charter School Based on Grade Level							Total
		Elem	Mid	High	Elem/ Mid	Mid/ High	Elem/ High	Elem/ Mid/ High	
Nonresponse	Observed	464	139	456	699	208	1	298	2265
	Expected	445.6	126.3	447.3	704.0	214.9	1.7	325.2	2265
	% Observed	20.5%	6.1%	20.1%	30.9%	9.2%	0.0%	13.2%	100%
Response	Observed	70	12	79	143	49	1	91	444
	Expected	87.4	24.7	87.7	138.0	42.1	.3	63.8	444
	% Observed	15.5%	2.7%	17.8%	32.2%	11.0%	0.2%	20.5%	100%
Total	Observed	533	151	535	842	257	2	389	2709
	Expected	533	151	535	842	257	2	389	2709
	% Observed	19.7%	5.6%	19.7%	31.1%	9.5%	.1%	14.4%	100%

Table 4.7: Chi-Square Test: Type of School Based on Grade Level for Respondents and Non-respondents of the Sample

Chi-Square Tests			
	Value	df	Asymp. Sig (2-sided)
Pearson Chi-Square	30.629	6	.000
Likelihood Ratio	30.656	6	.000
N of Valid Cases	2709		

As shown in Table 4.8 and 4.9, the Chi-Square test of all groups (Elementary, Middle, High, Elementary/Middle, Middle/High, and Elementary/Middle/High) indicates a significant result ($p=.000$), comparing respondents to the population. The significant finding

means there is a statistically significant difference in the type of school based on grade level distribution between the respondents and non-respondents in the sample. Similar to Table 4.6, Table 4.8 shows that Elementary and Middle Schools are underrepresented in response and the combination schools of Elementary/Middle/High are overrepresented in the sample, which emphasizes the limitations to the study's results in their generalizability to the population.

Table 4.8: Cross Tabulation: Type of School Based on Grade Level for Respondents and the Population

		Type of Charter School							Total
		Elem	Mid	High	Elem/ Mid	Mid/ High	Elem/ High	Elem/ Mid/ High	
Population	Observed	1066	381	1156	1758	495	5	740	5601
	Expected	1051.6	364.1	1144.3	1761.4	504.0	5.6	770.0	5601
	% Observed	19.0%	6.8%	20.6%	31.4%	8.8%	0.1%	13.2%	100%
Sample Response	Observed	69	12	79	143	49	1	91	444
	Expected	83.4	28.9	90.7	139.6	40.0	.4	61.0	444
	% Observed	15.5%	2.7%	17.8%	32.2%	11.0%	0.2%	20.5%	100%
Total	Observed	1135	393	1235	1901	544	6	831	6045
	Expected	1135	393	1235	1901	544	6	831	6045
	% Observed	18.8%	6.5%	20.4%	31.4%	9.0%	.1%	13.7%	100%

Table 4.9: Chi-Square Test: Type of School Based on Grade Level for Respondents and the Population

Chi-Square Tests			
	Value	df	Asymp. Sig (2-sided)
Pearson Chi-Square	33.877	6	.000
Likelihood Ratio	34.642	6	.000
N of Valid Cases	6045		

4.3.3 Student Enrollment

The variable of student enrollment is based on the number of students enrolled in the school and as a continuous variable, testing for differences between respondents to non-respondents or respondents to the population was conducted using T-tests for equality of means. The T-test for equality of means examines the assumption that there are no differences in mean scores of respondents and non-respondents, as well respondents and the population, at a statistically significant level ($p < .05$). In regard to this study, a preferred T-test would show that the average numbers of students enrolled in charter schools for respondents is comparatively close to the average numbers of students enrolled in charter schools for non-respondents and the population. As shown in Table 4.10, the T-test for the student enrollment variable is statistically significant indicating there is a difference between respondents and non-respondents regarding average number of students enrolled in charter schools. Also, Table 4.11 shows the T-test for the student enrollment variable is statistically significant indicating there is a difference between respondents and the population regarding average number of students enrolled in charter schools. Table 4.10 and 4.11 shows that

schools with large enrollments are overrepresented in the responses, which limits the study's results in their generalizability to non-respondents of the survey and the overall population.

Table 4.10: T-test for Equality of Means: Student Enrollment for Respondents and Non-Respondents

Variable	Respondents			Non-respondents			t-test for Equality of Means		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.	t	df	Sig.
Student Enrollment	448	516.71	678.21	2070	326.04	365.03	5.772	504.38	.000

Table 4.11: T-test for Equality of Means: Student Enrollment for Respondents and Population

Variable	Sample Respondents			Population			t-test for Equality of Means		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.	t	df	Sig.
Student Enrollment	448	516.71	678.21	5102	345.12	475.32	5.243	486.31	.000

4.3.4 School Age

The variable of school age is based on the number of years the charter school has been in operation and as a continuous variable, testing for differences between respondents to non-respondents or respondents to the population was conducted using a T-test for equality of means. The T-test for equality of means examines the assumption that there are no differences in mean scores of respondents and non-respondents, as well respondents and the population, at a statistically significant level ($p < .05$). In regard to this study, a preferred T-test would show that the average numbers of years schools have been in operation for respondents is comparatively close to the average number of years schools have been in

operation for non-respondents and the population. As shown in Table 4.12, the T-test for the school age variable is statistically significant indicating there is a difference between respondents and non-respondents regarding average number of years the schools have been in operation. However, Table 4.13 shows the T-test for the school age variable is not statically significant, which indicates there is no difference between the respondents and the population regarding the average number of years schools have been in operation. The results for the school age variable show that while the generalizability of this study’s finding to the non-respondents is limited, the research findings could be comparable to what one might find within population. Regardless of a significant and a non-significant finding for school age, the respondents’ average school age is slightly large than the non-respondents and the population, which could potentially influence the results of further statistical analyses and the generalizability of the findings.

Table 4.12: T-test for Equality of Means: School Age for Respondents and Non-Respondents

Variable	Respondents			Non-respondents			t-test for Equality of Means		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.	t	df	Sig.
School Age	448	10.08	5.119	2256	9.09	4.997	3.752	627.71	.000

Table 4.13: T-test for Equality of Means: School Age for Respondents and the Population

Variable	Sample Respondents			Population			t-test for Equality of Means		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.	t	df	Sig.
School Age	448	10.08	5.119	5588	9.46	24.685	1.503	2869.38	.133

The above analysis in this section examined whether there was a statistically significant difference between respondents and non-respondents, as well as respondents and the population, using the variables state charter school law level of autonomy, type of school based on grade levels, student enrollment size, and school age. While the survey respondent group is representative of schools based on state law and somewhat representative of schools based on school age, the respondent group lacks some generalizability due to the other variables. The respondents of the survey represent schools that are older and large in size, which are often proxies for capacity to answer surveys. Also, the respondents are from schools that have combinations in school types (i.e. K-12 grade levels), instead of being from one school type (i.e. Elementary). Due to these factors, the analysis of the results must be careful in projecting any findings onto all charter schools. Due to nonresponse bias, this study should be seen as exploratory, not confirmatory, with regard to charter school board roles and responsibilities nationally. Put another way, generalization is not to a random sample of all U.S. charter schools but to a national sample, which is biased toward schools that have larger student enrollments and that are older. These and other limitations of the study are discussed further in Chapter 6.

4.4 Missing Values Analysis

As often is the case with a survey, respondents left some questions in the charter school governance survey unanswered due to several possible reasons, such as survey fatigue or unknown information. Without the proper analysis of missing data, the results of the study may be misrepresented. This study examines missing data using Missing Value Analysis (MVA), which reveals if patterns of missing values exist for the variables with missing data. Patterns of missing data could lead to bias in the results. Ideally, the data should be Missing

Completely at Random (MCAR), resulting in no bias in the data. In order to test for MCAR, Little's MCAR test was first ran on variables that had more than 5 percent missing values because missing values larger than 5% of a total variable are not ignorable within the dataset (Garson, 2015b). Second, Little's MCAR test was run on all variables with missing data.

Little's MCAR test was run on three independent variable that had more than 5 percent missing values: charter school operational expenses (17.6% missing values), recruitment criteria: racial or ethnic diversity (5.1% missing values), and recruitment criteria: gender (6.9% missing values). These variables were not statistically significant ($p > .05$), passing Little's MCAR test, which means the data are missing completely at random. Next, Little's MCAR test was run on all variables with missing values, which returned a not statistically significant result as well. Typically, if Little's MCAR test was passed case deletion would be appropriate but due to the small sample size case deletion was deemed inappropriate. Thus, the statistical analysis of missing data imputations was run for all variables with missing data. Five separate imputations for the date were generated and the medium overall model-fit score will be was selected among the five iterations for the regression analysis.

4.5 Descriptive Statistics for Dependent Variables: Charter School Board Roles and Responsibilities

The first research question asked within the dissertation is, "What are the common roles and responsibilities practiced by charter school boards?" This question is first partly answers by examining the descriptive statistics of the dependent variables that asks the survey respondents to identify, on a 10-point scale (0-not active to 10-very active), how actively

involved the charter school's board is in carrying out certain roles and responsibilities. Based on the literature, respondents were asked to analyze 12 roles and responsibilities of their charter school boards. The 12 roles and responsibilities examined were:

1. Selecting and evaluating the ED/principal;
2. Overseeing the organization's programs/services
3. Providing fiscal and policy oversight
4. Defining the organization's mission and purpose;
5. Planning for the future of the organization through strategy and planning;
6. Setting the organization's policy;
7. Advancing the organization's public image;
8. Developing community relationships;
9. Enlisting financial resources (i.e. fundraising);
10. Assuring legal compliance for the organization;
11. Implementing mandates for the organization; and
12. Meeting professional standards for the organization.

Table 4.14 presents the descriptive statistics for each board role and responsibility analyzed in this study. Based on the average activity level of roles and responsibilities for charter school boards, the table shows that there is limited variability in what roles and responsibilities they are performing more frequently than others. However, while there is a not a great level of variability across all the roles and responsibilities, the table depicts that there are certain board roles and responsibilities being performed more than others.

Specifically, board roles and responsibilities associated in the previous chapters (See Figure

3.2 for board roles and responsibilities theoretical typology groupings) with the categories of monitoring, strategizing, and conforming are more prevalent compared to boundary-spanning roles and responsibilities. Thus, to partly answer the first research question, charter school boards are more likely to perform roles and responsibilities previously categorized as monitoring, strategizing, and certain conforming roles and are least likely to perform roles and responsibilities associated with the boundary-spanning category. Specifically, the boundary-spanning roles and responsibilities that are least likely to be performed by charter school boards are developing community relationships and enlisting in financial resources (i.e. fundraising, personal donations, etc.). The common board roles and responsibilities of charter school are examined further in the next section and later in Chapter 6.

Table 4.14: Descriptive Statistics for Dependent Variables: Charter School Board Roles and Responsibilities

(Survey Question: How actively involved is your charter school’s board in carrying out the following functions: 0-Not Active – 10-Very Active)

Board Roles and Responsibilities	N	Responses	Missing Values	Mean	Median	Standard Deviation
A) Selecting and Evaluating the Executive Director/Principal	448	448	0	7.2893	8.705	3.24679
B) Overseeing the organization’s mission and purpose	448	448	0	7.4261	8	2.19394
C) Providing financial and policy oversight	448	448	0	7.9178	8.605	2.20812
D) Defining the organization’s mission and purpose	448	448	0	6.9334	7.1	2.56249
E) Planning for the future of the organization through strategic planning	448	448	0	6.9565	7.235	2.56397
F) Setting the organization’s policy	448	448	0	7.3307	8.005	2.4721
G) Advancing the organization’s public image	448	448	0	6.26	6.645	2.51899
H) Developing community relationships	448	448	0	5.9337	6.07	2.50137
I) Enlisting financial resources (i.e. fundraising, personal donations, etc.)	448	448	0	4.6673	5.01	2.91906
J) Assuring legal compliance for the organization	448	448	0	7.0571	7.265	2.5687
K) Implementing mandates for the organization	448	448	0	5.4699	5.55	2.79161
L) Meeting professional standards for the organization	448	448	0	6.4392	6.805	2.61134

4.6 Theory-Based Typology for Charter School Board Roles and Responsibilities

The 12 board roles and responsibilities, described in the previous section, were also examined through an exploratory factor analysis (EFA), specifically principal components analysis (PCA), in order further examine the first research question in the study by seeing if the individual dependent variables load on specified theoretical constructs explained in

previous chapters. As previously stated, Miller-Millesen (2003) notes that there are three dominant theories – agency theory, resource-dependency theory, and institutional theory – that best explain various normative roles and responsibilities for nonprofit boards. This research uses the theoretical framework examined by Miller-Millesen but includes the addition of stewardship theory (Davis et al., 1997; Muth and Donaldson, 1998) to better place board roles and responsibilities in a theoretical context. As previously shown in Table 3.3, the 12 board roles and responsibilities theoretically are believed to load on the constructs of monitoring, strategizing, boundary-spanning, and conforming categories. This study uses a PCA with a varimax rotation to see if the 12 board roles and responsibilities load as specified across these four constructs.

A PCA expects factor loadings greater than 0.7 on the proposed construct and less than 0.3 on other constructs are desired (Garson, 2013a). However, 0.7 standard is often considered high and often researchers (Hair et al., 1998) call loadings above 0.6 “high” and below 0.4 “low.” Table 4.15 shows the factor loadings to be relatively high. However, the 12 board roles and responsibilities did not factor as expected. As shown in Table 4.15, the monitoring and strategizing roles factored as one construct with the roles and responsibilities assigned to the boundary spanning and conforming construct factoring as expected. However, since the board role and responsibility of *planning for the future of the organization* was suppose to measure Factor 1 (Monitoring and Strategizing) but crossloaded with Factor 2 (Boundary-Spanning) it was dropped from the analysis. Table 14.6 shows the revised factor analysis for charter school board roles and responsibilities not including the *planning for the future of the organization* variable. Table 4.16 still shows the monitoring

and strategizing roles factored as one construct with the roles and responsibilities assigned to the boundary spanning and conforming construct factoring as expected. The items within each dimension were checked for internal consistency based on Cronbach's alpha to ensure reliability. As shown at the bottom of Figure 4.16, reliability was greater than that typically required to consider a scale good for confirmatory research ($\alpha > .80$) for all three constructs.

Table 4.15: Factor Analysis for Charter School Board Roles and Responsibilities

Questionnaire Items	Factor 1	Factor 2	Factor 3
<i>Monitoring (Agency Theory)</i>			
Selecting and Evaluating the ED/Principal	.631	.102	.131
Overseeing the organization's mission and purpose	.793	.256	.148
Providing fiscal and policy oversight	.727	.012	.391
<i>Strategizing (Stewardship Theory)</i>			
Defining the organization's mission and purpose	.776	.367	.114
Planning for the future of the organization	.701	.416	.202
Setting the organization's policy	.700	.142	.306
<i>Boundary Spanning (Resource Dependency Theory)</i>			
Advancing the organization's public image	.334	.805	.183
Developing community Relationships	.227	.836	.261
Enlisting financial resources (i.e. fundraising, etc.)	.122	.787	.175
<i>Conforming (Institutional Theory)</i>			
Assuring legal compliance for the organization	.302	.109	.809
Implementing mandates for the organization	.117	.362	.748
Meeting professional standards for the organization	.316	.243	.751
<i>Cronbach's alpha value</i>	.864	.842	.803
<i>Eigenvalue</i>	5.937	1.324	1.082
<i>Percentage of variance explained</i>	49.471	11.029	9.015
<i>Cumulative variance explained</i>	49.471	60.500	69.515
<i>N - 448</i>			

Table 4.16: Revised Factor Analysis for Charter School Board Roles and Responsibilities

Questionnaire Items	Factor 1	Factor 2	Factor 3
<i>Monitoring (Agency Theory)</i>			
Selecting and Evaluating the ED/Principal	.661	.125	.104
Overseeing the organization's mission and purpose	.799	.273	.150
Providing fiscal and policy oversight	.733	.026	.389
<i>Strategizing (Stewardship Theory)</i>			
Defining the organization's mission and purpose	.765	.379	.127
Setting the organization's policy	.678	.146	.331
<i>Boundary Spanning (Resource Dependency Theory)</i>			
Advancing the organization's public image	.320	.810	.190
Developing community Relationships	.227	.845	.256
Enlisting financial resources (i.e. fundraising, etc.)	.106	.788	.179
<i>Conforming (Institutional Theory)</i>			
Assuring legal compliance for the organization	.302	.112	.805
Implementing mandates for the organization	.102	.358	.755
Meeting professional standards for the organization	.304	.243	.755
<i>Cronbach's alpha value</i>	.830	.842	.803
<i>Eigenvalue</i>	5.333	1.314	1.047
<i>Percentage of variance explained</i>	48.480	11.949	9.520
<i>Cumulative variance explained</i>	48.480	60.429	69.949
<i>N - 448</i>			

While the roles and responsibilities assigned to the categories of monitoring (agency theory) and strategizing (stewardship theory) did not load on the prescribed categories based on theoretical assumptions, the fact they load on one construct does follow a continuous discussion within the literature (e.g., Van Puyvelde, 2012) on the relationship between agency and stewardship theory in describing board behaviors in the nonprofit sector. For the purpose of this study, the variables associated with their respective factors are summed to create the three new dependent variables of monitoring and strategizing, boundary-spanning, and conforming, as show in Table 4.17. The effects of the independent variables, described in previous chapters, were analyzed on the 3 new dependent variables, in Chapter 5, to

understand what factors influenced the board behaviors of monitoring and strategizing, boundary-spanning, and conforming in charter schools.

Table 4.17: New Theory-Based Typology of Charter School Board Roles and Responsibilities

Monitoring & Strategizing	Boundary-Spanning	Conforming
<ul style="list-style-type: none"> • Selecting and evaluating the ED/principal • Overseeing the organization's programs/ services • Providing fiscal and policy oversight • Defining the organization's mission and purpose • Setting the organization's policy 	<ul style="list-style-type: none"> • Advancing the organization's public image • Developing community relationships • Enlisting financial resources 	<ul style="list-style-type: none"> • Assuring legal compliance for the organization • Implementing mandates for the organization • Meeting professional standards for the organization

Finally, the three dependent variables created through summation scores, based on the PCA, were analyzed for normality. When testing for normality a stringent criterion for skewness requires it to be between within the +1 and -1 range. Table 14.18 shows that the data had low skewness and kurtosis and are not greater than +/-1. Since skewness and kurtosis is low and that OLS regression is robust against non-severe departures from normality, the models were analyzed using OLS regression in Chapter 5.

Table 4.18: Distributions of Dependent Variables

Monitoring & Strategizing		Boundary-Spanning		Conforming	
Skewness (Std. Error)	Kurtosis (Std. Error)	Skewness (Std. Error)	Kurtosis (Std. Error)	Skewness (Std. Error)	Kurtosis (Std. Error)
-.786 (.115)	.343 (.230)	-.353 (.115)	-.283 (.230)	-.434 (.115)	-.183 (.230)

4.7 Conclusion of Chapter 4

Chapter 4 provided an analysis of the survey response rate and comparing survey respondents to non-respondents and the population. Also, Chapter 4 analyzed missing values in the data set. Finally, Chapter 4 discussed the overall results of charter school board roles and responsibilities and reviewed the factor analysis examining the theoretical categorizations of charter school board roles and responsibilities.

4.8 Preview of Chapter 5

Chapter 5 provides an overview of all independent variables in the dissertation. Then, Chapter 5 assesses bivariate correlations for multicollinearity in the study. Also, Chapter 5 provides the analysis and explains the results of the charter school board framework using multiple linear regressions. The chapter explains what factors influence charter school boards in performing their roles and responsibilities. Finally, Chapter 5 tests the hypotheses proposed in Chapter 2 and explains the findings.

CHAPTER 5: ANALYSIS OF CONTINGENCY BASED FRAMEWORK

5.1 Introduction

The previous chapter provided the overall analysis of charter school board roles and responsibilities, the focus of this study. This chapter will capitalize on the groundwork provided in the previous chapter and use it to examine what environmental factors, board attributes, and internal organizational characteristics influence what roles and responsibilities charter school boards perform. This chapter provides the findings from the regression methods analyzing the factors that affect charter school boards to perform some roles and responsibilities more frequently than others. The remainder of this chapter is divided into six sections:

1. Examination of the independent variables;
2. Assessing bivariate correlations for multicollinearity;
3. Analysis of framework using multiple linear regressions;
4. Testing of hypotheses;
5. Summary of Chapter 5; and
6. Preview of Chapter 6.

5.2 Descriptive Statistics of Independent Variables

This section lays the groundwork for the regression models by providing initial analysis of all the independent variables within the models. The descriptive statistics are provided for each independent variable and when necessary, additional explanation is provided for variables that required any transformation or were left out of the regression

models. Following this section, additional analysis is provided to examine multicollinearity between the independent variables.

5.2.1 Resources and Funding

Tables 5.1 through 5.6 show the responses of what percent of the charter school’s funding came from student fees and charges; federal, state, and local allocated dollars; government grants and contracts; foundation grants and contracts, donations, and endowment income. As expected, the overwhelming amount of dollars for charter schools come from federal, state, and local entities and the least amount comes from the schools endowment income. Overall, for all types of funding there is low variability across responses within each category, with most responses clustered within one or two response levels.

Table 5.1: Student Fees and Charges

		Frequency	Percent	Valid Percent
Responses	0%	280	62.5	65.6
	1 – 9%	132	29.5	30.9
	10 – 24%	4	0.9	0.9
	25 – 49%	3	0.7	0.7
	50 – 74%	2	0.4	0.5
	75 – 100%	6	1.3	1.4
Missing		21	4.7	
Total		448	100	100

Table 5.2: Federal, State, and Local Allocated Dollars to the School

		Frequency	Percent	Valid Percent
Responses	0%	5	1.1	1.2
	1 – 9%	7	1.6	1.6
	10 – 24%	4	0.9	0.9
	25 – 49%	12	2.7	2.8
	50 – 74%	43	9.6	10.1
	75 – 100%	356	79.5	83.4
Missing		21	4.7	
Total		448	100	100

Table 5.3: Government Grants and/or Contracts

		Frequency	Percent	Valid Percent
Responses	0%	153	34.2	35.8
	1 – 9%	166	37.1	38.9
	10 – 24%	76	17	17.8
	25 – 49%	19	4.2	4.4
	50 – 74%	10	2.2	2.3
	75 – 100%	3	0.7	0.7
Missing		21	4.7	
Total		448	100	100

Table 5.4: Foundation Grants and/or Contracts

		Frequency	Percent	Valid Percent
Responses	0%	250	55.8	58.5
	1 – 9%	142	31.7	33.3
	10 – 24%	23	5.1	5.4
	25 – 49%	8	1.8	1.9
	50 – 74%	3	0.7	0.7
	75 – 100%	1	0.2	0.2
Missing		21	4.7	
Total		448	100	100

Table 5.5: Donations

		Frequency	Percent	Valid Percent
Responses	0%	166	37.1	38.9
	1 – 9%	230	51.3	53.9
	10 – 24%	28	6.3	6.6
	25 – 49%	3	0.7	0.7
	50 – 74%	0	0	0
	75 – 100%	0	0	0
Missing		21	4.7	
Total		448	100	100

Table 5.6: Endowment Income

		Frequency	Percent	Valid Percent
Responses	0%	408	91.1	95.6
	1 – 9%	17	3.8	4.0
	10 – 24%	2	0.4	0.5
	25 – 49%	0	0	0
	50 – 74%	0	0	0
	75 – 100%	0	0	0
Missing		21	4.7	
Total		448	100	100

Due to limited dispersion across categories within each type of funding, as depicted in Tables 5.1 through 5.6, the variables are examined as dichotomous variables (0=No Fund, 1=Funds) within the regression analysis. Tables 5.7 through 5.12 show the allocation of responses based on the types of funding classifications as dichotomous variables. However, the funding types of federal, state, and allocated dollars and endowment income show that the dispersion of responses lack variability with over 90% of the responses following into one category. Thus, these variables will not be included in the overall regression analysis due to lack variability within the responses.

Table 5.7: Student Fees and Charges: Dichotomous Variable

		Frequency	Percent	Valid Percent
Funding	No	280	62.5	65.6
	Yes	147	32.8	34.4
Missing		21	4.7	
Total		448	100	100

Table 5.8: Federal, State, and Local Allocated Dollars to the School: Dichotomous Variable

		Frequency	Percent	Valid Percent
Funding	No	5	1.1	1.2
	Yes	422	94.2	98.8
Missing		21	4.7	
Total		448	100	100

Table 5.9: Government Grants and/or Contracts: Dichotomous Variable

		Frequency	Percent	Valid Percent
Funding	No	153	34.2	35.8
	Yes	274	61.1	64.2
Missing		21	4.7	
Total		448	100	100

Table 5.10: Foundation Grants and/or Contracts: Dichotomous Variable

		Frequency	Percent	Valid Percent
Funding	No	250	55.8	58.5
	Yes	177	39.5	41.5
Missing		21	4.7	
Total		448	100	100

Table 5.11: Donations: Dichotomous Variable

		Frequency	Percent	Valid Percent
Funding	No	166	37.1	38.9
	Yes	261	58.2	61.1
Missing		21	4.7	
Total		448	100	100

Table 5.12: Endowment Income: Dichotomous Variable

		Frequency	Percent	Valid Percent
Funding	No	408	91.1	95.6
	Yes	19	4.2	4.4
Missing		21	4.7	
Total		448	100	100

5.2.2 Institutional and Regulatory Environment

The Center of Education Reform’s (2013b) state-by-state report card grading each state’s charter school legislation was used to classify the school autonomy variable. The state laws were classified based on high, medium, and low levels of school autonomy. Table 5.13 shows the number and percent of responses provided for each school autonomy category. As previously shown in Table 4.4, there is no statistically significant difference in the autonomy level distribution between the respondents and the population.

Table 5.13: School Autonomy

		Frequency	Percent	Valid Percent
Responses	Low	25	5.6	5.6
	Medium	141	31.5	31.5
	High	282	62.9	62.9
Missing		0		
Total		448	100	100

5.2.3 Board Size

This study’s survey asked respondents how many voting board members currently serve on the board. Table 5.14 shows seven members as the average number serving on a charter school board. Within the survey responses, no charter school had fewer than 3 and more than 21 members serving on a charter school board.

Table 5.14: Board Size

N	Responses	Missing	Percent Missing	Mean	Median	Standard Deviation	Minimum	Maximum
448	447	1	0.2	7.17	7	2.726	3	21

5.2.4 Executive Director/Principal as Voting Member of Board

This dissertation’s survey asked respondents if the executive director (ED) and principal of the charter school was a voting member of the board. Table 5.15 shows that 87.5% of all charter schools in the survey has an ED/principal that is a voting member of the school’s board.

Table 5.15: Executive Director/Principal/ as Voting Member of the Board

		Frequency	Percent	Valid Percent
Responses	Yes	392	87.5	87.7
	No	55	12.3	12.3
Missing		1	0.2	
Total		448	100	100

5.2.5 Board Demographic Characteristics

The study’s survey asked two board demographic questions. First, how many board members are Hispanic/Latino, White, African American/Black, Asian or Other and second, how many board members are male or female. Table 5.16 shows the descriptive statistics for the overall percent of minority members on charter school boards. On average, 27.46% of members on a charter school board are minorities.

Table 5.16: Percent of Minority Board Members

Members	N	Responses	Missing	Percent Missing	Mean	Median	Standard Deviation
Percent of Minority Members	448	440	8	1.8	27.46	19.09	30.196

Table 5.17 shows the descriptive statistics for the overall percent of female members on charter school boards. On average, 50.99% of members on a charter school board are females.

Table 5.17: Percent of Female Board Members

Members	N	Responses	Missing	Percent Missing	Mean	Median	Standard Deviation
Percent of Female Members	448	447	1	0.2	50.99	50.00	21.560

5.2.6 Corporate Board Members

This dissertation’s survey asked respondents approximately how many board members sit on corporate boards. Table 5.18 shows the descriptive statistics of respondents’ answers for number of members that also sit on corporate boards. For the regression analysis, the numbers depicted in Table 5.19 were computed to an overall percentage of charter school board members that also sit on corporate boards. Table 5.19 shows the descriptive statistics for the overall percent of female members on charter school boards. On average, 12.84% of members on a charter school board also sit on corporate boards.

Table 5.18: Corporate Board Members

Members	N	Responses	Missing	Percent Missing	Mean	Median	Standard Deviation
Corporate Board Members	448	428	20	4.5	0.89	0	1.377

Table 5.19: Percent of Corporate Board Members

Members	N	Responses	Missing	Percent Missing	Mean	Median	Standard Deviation
Percent of Corporate Board Members	448	428	20	4.5	12.84	0.00	20.50

5.2.7 Board Recruitment Criteria

The study's survey asked respondents to identify on a 10-point scale (0-Not at all important to 10-Extremely Important) how important a list of 11 recruitment criteria were in the selection of new board members. Table 5.20 shows the descriptive statistics for each recruitment criterion. The recruitment criteria were analyzed for factor grouping but did not produce significant results and since previous literature (Ostrower and Stone, 2010) examines the criteria individually, this study did the same. The board recruitment criteria results showed that the willingness to give time and knowledge of the organization's mission were important to charter schools' recruitment strategies, while the ability to donate or fundraise mattered the least to recruiting board members. The recruitment criteria variables ability to donate, ability to fundraise, gender, and race/ethnicity are examined further in the bivariate correlations section.

Table 5.20: Board Recruitment Criteria

Board Recruitment Criteria	N	Responses	Missing	Percent Missing	Mean	Median	Standard Deviation
A) Ability to donate	448	430	18	4.0	1.79	0.05	2.45737
B) Ability to fundraise	448	431	17	3.8	2.36	0.88	2.84048
C) Business or financial skills	448	431	17	3.8	5.46	6.00	2.91184
D) Knowledge of the organization's mission area	448	438	10	2.2	6.90	7.23	2.66694
E) Previous volunteer work for the organization	448	427	21	4.7	3.49	3.60	3.03879
F) Willingness to give time	448	441	7	1.7	7.38	8.00	2.35993
G) Membership in group served by the organization	448	430	18	4.0	3.69	4.07	3.25409
H) Reputation in the community	448	435	13	2.9	6.31	7.01	2.80538
I) Friend or acquaintance of one or more current board members	448	429	19	4.2	3.34	3.00	3.03614
J) Racial or ethnic diversity	448	425	23	5.1	3.58	4.09	3.15941
K) Gender	448	417	31	7.0	2.63	1.67	2.83715

5.2.8 Charter School Age

This dissertation's survey asked respondents how long the charter school had been in operation. Table 5.21 shows 10 years as the average age of the charter school. Within the survey responses, no charter school had been open less than 1 year and more than 24 years. The missing value for the charter school age variable was replaced with data from the Center for Education Reform (2013a).

Table 5.21: Charter School Age

N	Responses	Missing	Percent Missing	Mean Years	Median Years	Standard Deviation	Minimum	Maximum
448	447	1	0.2	10.06	10	5.097	1	24

5.2.9 Charter School Size

The study's survey used two factors in operationalizing the size of the school. First, respondents were asked how many students attended the charter school and second, they were asked what the operation expenses were for the organization for the previous year. Table 5.22 and 5.23 show the descriptive statistics for these variables. The missing values for the student enrollment variable were replaced with data from the Center for Education Reform (2013). The tables show that the average charter school student enrollment was 519 and the average charter school total operating expenses were approximately 4 million dollars. These two variables are examined further in the bivariate correlations section.

Table 5.22: Student Enrollment

N	Responses	Missing	Percent Missing	Mean	Median	Standard Deviation
448	446	2	0.5	518.64	332	679.294

Table 5.23 Operating Expenses in Dollars

N	Responses	Missing	Percent Missing	Mean	Median	Standard Deviation
448	447	79	17.6	4,053,762.29	2,500,000	5,045,736.78

5.2.10 Stability

The study examined organizational stability by asking respondents if the organization was planning major changes in the following areas: large scale programmatic changes; internal staff structure; shift in mission; and hiring a new executive director/principal. Tables 5.24 through 5.27 show the frequencies for respondents' answers on the four organizational stability variables. The variable organizational stability in terms of shift in mission shows that the dispersion of responses lack variability with over 90% of the response saying their charter school was not going through a shift in mission. Thus, this variable was not included in the overall analysis of the stability group or the regression analysis due to the lack of variability within the response. The remainder stability variables were examined to see if they could be integrated into one overall factor. Cronbach's alpha was obtained to assess the internal reliability of the three items of organizational stability. Table 5.28 shows the Cronbach's alpha of the three items of stability is .394, which is not an acceptable level to aggregate the three items into a valid scale. Thus, the three variables of large scale programmatic changes, internal staff structure, and hiring a new executive director/principal were examined individually in the regression analysis.

Table 5.24: Organizational Stability: Large Scale Expansion of Programs

		Frequency	Percent	Valid Percent
Responses	Yes	262	58.5	59.4
	No	179	40.0	40.6
Missing		7	1.6	
Total		448	100	100

Table 5.25: Organizational Stability: Internal Staff Structure

		Frequency	Percent	Valid Percent
Responses	Yes	133	29.7	30.2
	No	308	68.8	69.8
Missing		7	1.6	
Total		448	100	100

Table 5.26: Organizational Stability Shift in Mission

		Frequency	Percent	Valid Percent
Responses	Yes	35	7.8	7.9
	No	406	90.6	92.1
Missing		7	1.6	
Total		448	100	100

Table 5.27: Organizational Stability Hiring New Executive Director/Principal

		Frequency	Percent	Valid Percent
Responses	Yes	61	13.6	13.8
	No	380	84.8	86.2
Missing		7	1.6	
Total		448	100	100

Table 5.28: Reliability Test of Organizational Stability

Cronbach's Alpha	N
.394	3

5.2.11 Professionalization

The study examined professionalization by asking respondents if the ED/principal was a paid staff member and by asking if the ED/principal had any of the following credentials: school administrator's license, professional education's license, or an advanced degree in leadership, administration or management. Tables 5.29 through 5.32 show the frequencies for respondents' answers on the four professionalization variables. While the

professionalization variable asking if the ED/principal was a paid staff member shows that the dispersion of responses lack variability with over 90% of the responses saying they were paid staff, this variable was included in the overall analysis in order to compare the variable to previous scholars' (Ostrower and Stone, 2010) models. While all four professionalization variables could not be integrated into one overall factor, three of the variables were integrated into one factor. The professionalization variables that were integrated into one overall factor were the three variables that evaluated if the ED/principal had professional licenses or advanced degrees.

Cronbach's alpha was obtained to assess the internal reliability of the three items. Cronbach's alpha should be above .60 to be labeled as "adequate for exploratory research," above .70 to be "adequate for confirmatory research," and above .80 to be "good for confirmatory research" (Garson, 2013a, 11-12). As shown in Table 5.33, the Cronbach's alpha of the three items measuring if the ED/principal had professional licenses or advanced degrees was .627, which is slightly higher than .60 and acceptable for exploratory research. Thus, the three variables asking if the ED/principal had certain credentials were summed into one professional licenses/degrees factor for the regression analysis. Thus, the regression analysis analyzed professionalization through two variables, first, if the ED/principal is a paid staff member and second, through the created factor of professional licenses/degrees.

Table 5.29: Executive Director/Principal/ is a Paid Staff Member

		Frequency	Percent	Valid Percent
Responses	Yes	438	96.9	98.0
	No	9	2.0	2.0
Missing		5	1.1	
Total		448	100	100

Table 5.30: Executive Director/Principal has a School Administrator’s License

		Frequency	Percent	Valid Percent
Responses	Yes	312	69.6	70.6
	No	130	29.0	29.4
Missing		6	1.3	
Total		448	100	100

Table 5.31: Executive Director/Principal has a Professional Educator’s License

		Frequency	Percent	Valid Percent
Responses	Yes	390	87.1	88.2
	No	52	11.6	11.8
Missing		6	1.3	
Total		448	100	100

Table 5.32: Executive Director/Principal has an Advance Degree in Leadership, Administration, or Management

		Frequency	Percent	Valid Percent
Responses	Yes	348	77.7	78.7
	No	94	21.0	21.3
Missing		6	1.3	
Total		448	100	100

Table 5.33: Reliability Test of Professional Licenses/Degrees

Cronbach’s Alpha	N
.627	3

5.2.12 Charter School Management

This dissertation’s survey asked respondents if an Education Management Organization (EMO) or Charter Management Organization (CMO) managed the charter school. Table 5.34 shows that 19.2% of all charter schools in the survey has an EMO or CMO managing the charter school.

Table 5.34: Charter School Management

		Frequency	Percent	Valid Percent
Responses	Yes	86	19.2	19.5
	No	355	79.2	80.5
Missing		7	1.6	
Total		448	100	100

5.2.13 Control Variables

The study included two sets of control variables, based on nonprofit governance and charter school literature. From the nonprofit governance literature the control variables included in the study examined the number and length of board meetings. The descriptive statistics for these two control variables can be found in Appendix E. Also found in Appendix E are the descriptive statistics for the control variables based on the charter school literature. These variables include the type of school (if the school is a combination school), location of the charter school, if the school is a virtual charter, the number of paid staff, and the percent of low-income students served in the school. The section above examined the descriptive statistics of all the independent variables within the model. Several variables above required additional explanation due to the necessity to transform or remove the variable before regression models were run. The next section examines multicollinearity among the independent variables, following which, the results for the regression models are discussed.

5.3 Bivariate Correlations

This section assesses several significant relationships between independent variables and addresses concerns of multicollinearity. While scholars (Tabachnick and Fidell, 2013; Garson, 2014) slightly differ with regard to the level of bivariate correlations that signals a

potential multicollinearity problem, for the purpose of this study correlations above .70 were further examined. A few sets of variables were correlated to a high degree with statistical significance. The correlated variables were:

- Recruitment Criteria: Ability to Fundraise was highly correlated to Recruitment Criteria: Ability to Donate (Pearson correlation = .835, $p = .000$)
- Recruitment Criteria: Gender was highly correlated to Recruitment Criteria: Race/Ethnicity (Pearson correlation = .706, $p = .000$)
- Number of Paid Staff was highly correlated to Number of Students (Pearson correlation = .851, $p = .000$)
- Number of Paid Staff was highly correlated to Charter School Operational Expenses (Pearson correlation = .840, $p = .000$)
- Number of Students was highly correlated to Charter School Operational Expenses (Pearson correlation = .885, $p = .000$)

Since all of these correlations were above .70, collinearity diagnostics were conducted on these independent variables. The literature (Tabachnick and Fidell, 2013; Garson, 2014) indicates that tolerance and variance inflation factor (VIF) assess the possibility of multicollinearity among variables. A tolerance statistic below .25 is a cause for concern that multicollinearity exists, while a VIF statistic greater than 4.0 indicates possible multicollinearity (Garson, 2014). Table 5.35 illustrates the collinearity statistics associated with the highly correlated independent variables for each regression model.

Table 5.35: Collinearity Statistics for Highly Correlated Independent Variables

Variables	Monitoring and Strategizing		Boundary-Spanning		Conforming	
	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
Recruitment Criteria: Gender	.420	2.380	.420	2.380	.420	2.380
Recruitment Criteria: Race/Ethnicity	.418	2.394	.418	2.394	.418	2.394
Recruitment Criteria: Ability to Donate	.250	4.005	.250	4.005	.250	4.005
Recruitment Criteria: Ability to Fundraise	.222	4.502	.222	4.502	.222	4.502
Number of Student	.115	8.675	.115	8.675	.115	8.675
Number of Paid Staff	.178	5.610	.178	5.610	.178	5.610
Charter School's Operational Expenses	.137	7.292	.137	7.292	.137	7.292

Based on the tolerance and VIF statistics for the highly correlated variables of recruitment criteria: gender and recruitment criteria race/ethnicity, the decision was made not to drop or alter the variables because the tolerance and VIF statistics were within the acceptable range and did not indicate multicollinearity. The tolerance statistic for the highly correlated variables of recruitment criteria: ability to donate and recruitment criteria ability to fundraise was within the acceptable range but the VIF was above the acceptable statistic and indicates the possibility for multicollinearity. Since there is the possibility for multicollinearity and the two variables measure a similar concept on the same scale, the variables were combined to create an additive scale called recruitment criteria: ability to acquire resources and replaced the other two variables in the framework.

The variables number of students, number of paid staff, and charter school's operational expenses were all highly correlated with each other and the tolerance and VIF statistics for all three variables indicated multicollinearity. In the dissertation, the variables number of students and charter school's operational expenses were measures of school size, which explains the multicollinearity issue. While the variable number of paid staff in the

dissertation was a control variable, in most public organizations personnel costs are a large part of the budget and therefore would be expected to be correlated to charter school's operational expenses. Also, the number of paid staff in a school is predominantly teachers, which means the variable number of paid staff would be highly correlated with number of students. Therefore, number of paid staff was also a measure of school size, which indicated that the framework had three measures of school size that were all highly correlated, as specified by the tolerance and VIF statistics.

In order to avoid the multicollinearity issue, the three continuous variables of number of students; number of paid staff; and charter school's operational expenses were transformed by taking the logarithm of each so all three were on the same scale. The three variables were examined to see if they could be integrated into one overall school size variable. Cronbach's alpha was obtained to assess the internal reliability of the three items. The Cronbach's alpha of the three variables for school size was .950, which implies a strong scale. Thus, the three transformed variables were summed to create an additive scale called school size, which replaced the variables number of student; number of paid staff; and charter school's operational expenses in the framework.

5.4 Framework Analysis: Multiple Linear Regressions

In the following sections, the results of the multiple linear regressions for the framework depicted in Figure 5.1, is discussed. Each section addresses how the independent variables associated with external conditions, board attributes, and internal organizational characteristics influence a charter school's board activity level for monitoring and strategizing, boundary-spanning, and conforming roles and responsibilities. Multiple linear

regressions were used in this dissertation in order to examine the effects the independent variables had on each of the three dependent variable constructs individually.

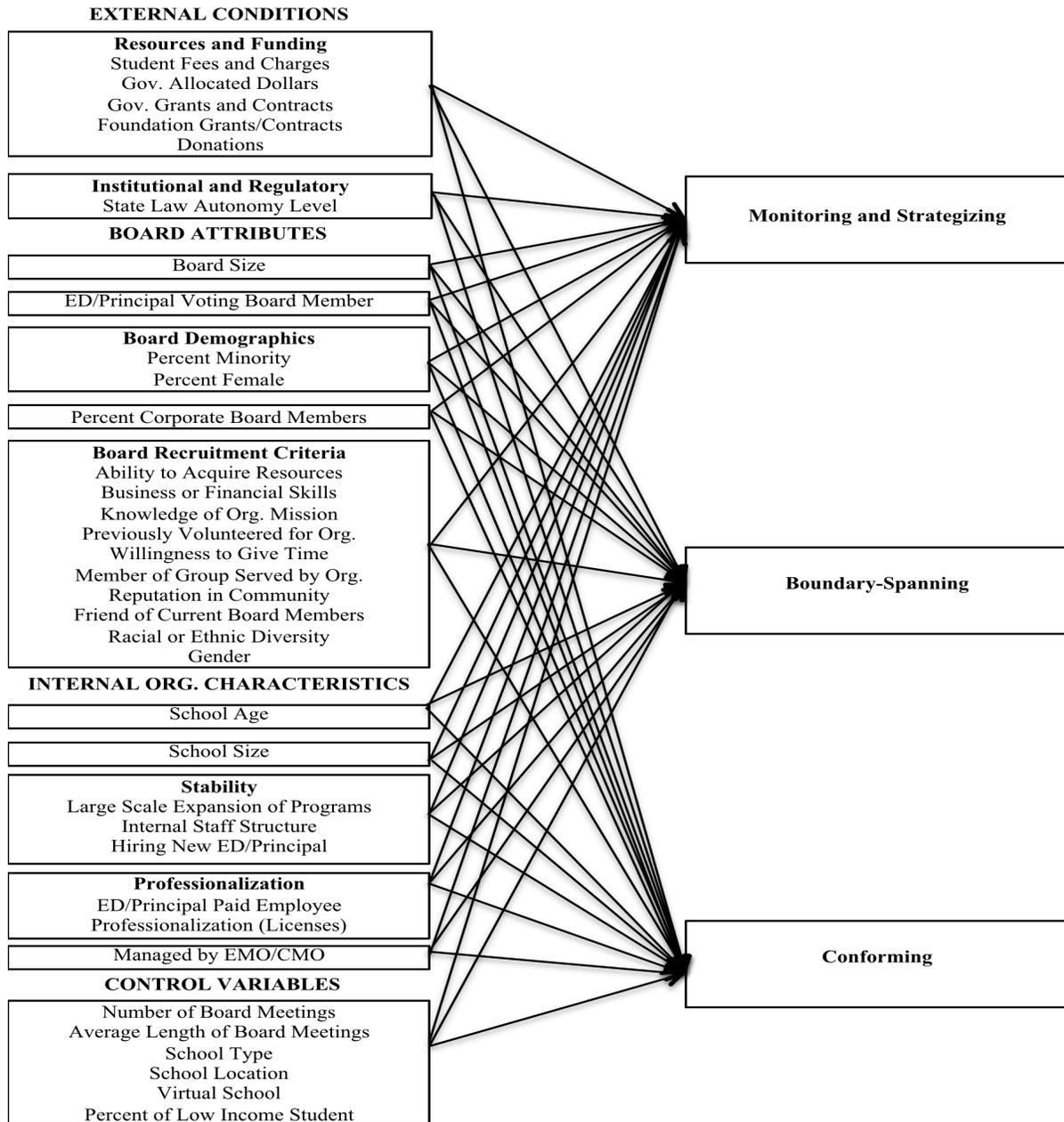


Figure 5.1: Revised Contingency Based Framework: A Conceptual Model Examining Factors Influencing Charter School Board Roles and Responsibilities

5.4.1 OLS Analysis of Monitoring and Strategizing Roles and Responsibilities

The dependent variable for the board activity level for monitoring and strategizing roles and responsibilities (the factor 1 construct) was predicted by other variables in the framework described earlier. These variables are listed and the results shown in Table 5.36 below in the column for “original model.” Results are also shown for two revisions of the model in which certain variables discussed below were omitted. The models were found to be significant ($p = .000$), which shows the variables included explain the concept attempted to be measured. A total of 12 variables were significant in the original and revised models in examining the activating level of boards performing monitoring and strategizing roles and responsibilities. The significant variables were:

- Number of board members;
- ED/principal as voting member;
- School is managed by an EMO/CMO;
- School age;
- Average length of board meeting;
- Virtual school;
- Type of school (if school is a combination school); and
- Board recruitment criteria of business and financial skills, knowledge of organization’s mission, willingness to give time, member of group served by organization, and friend of current board member.

While the main point of this study was to examine an overall framework, as Table 5.36 also shows, further regression analyses were conducted to explore the potential for

effects if the model was trimmed. The model was first trimmed by excluding the least significant variable of percent of female board members ($p = .989$). Compared to the original model, the revised model had the same overall fit as the previous one ($R\text{-squared} = .428$) and no variables became significant or dropped to a non-significant level.

A second revised regression was run excluding percent of female board members and the least significant variable in the previously revised model, which was student fees and charges ($p = .993$). Compared to the previous two models, the second revised regression did not affect the overall fit as well ($R\text{-square} = .428$) and no variables became significant or dropped to a non-significant level. While not shown in Table 5.36, the model was trimmed until all remaining variables in the model were significant. However, the trimming of the model made no substantive difference in the findings. Also, since Ostrower and Stone (2010) examine the full model (with non-significant variables included), this study did the same in order to compare with the previous research. The significant variables of the original model are examined further in this section and then all variables are discussed further in Section 5.5.

Table 5.36: OLS Analysis of Board Activity of Monitoring and Strategizing Roles and Responsibilities with All Predictors

Categories of Variables		Independent Variables	Original Model	1 st Revised Model	2 nd Revised Model
External Conds.	Resources and Funding	Student Fees and Charges	-.007 (.000)	-.007 (.000)	Excluded
		Gov. Grants/Contracts	.580 (.028)	.581 (.028)	.581 (.028)
		Foundation Grants/Contracts	.485 (.024)	.485 (.024)	.485 (.024)
	Institutional and Regulatory (State Law)	Donations	-.715 (-.036)	-.714 (-.035)	-.715 (-.036)
		Low Autonomy	1.76 (.042)	1.76 (.042)	1.76 (.042)
		Medium Autonomy	-1.02 (-.049)	-1.02 (-.049)	-1.02 (-.049)
	High Autonomy	Omitted	Omitted	Omitted	
Board Attributes	Board Size	Number of Board Members	.373 (.103)**	.373 (.103)**	.373 (.103)**
	ED/Principal Voting Member	ED/Principal Voting Member	-3.54 (-.117)**	-3.54 (-.117)**	-3.54 (-.117)**
	Board Demographics	Percent Minority	-.006 (-.019)	-.006 (-.019)	-.006 (-.019)
		Percent Female	.000 (.001)	Excluded	Excluded
	Corporate Board Members	Percent Corporate Members	.003 (.006)	.003 (.006)	.003 (.006)
	Recruitment Criteria	Ability to Acquire Resources	.020 (.010)	.020 (.010)	.020 (.010)
		Business or Financial Skills	.580 (.170)***	.579 (.170)***	.579 (.170)***
		Knowledge of Org. Mission	1.17 (.319)***	1.17 (.319)***	1.17 (.319)***
		Previously Volunteered for Org.	-.238 (-.074)	-.238 (-.074)	-.238 (-.074)
		Willingness to Give Time	.735 (.176)***	.735 (.176)***	.735 (.176)***
		Member of Group Served by Org.	.240 (.080)*	.240 (.080)*	.240 (.080)*
		Reputation in Community	.068 (.019)	.068 (.019)	.068 (.019)
		Friend of Current Board Member	-.533 (-.164)***	-.53 (-.164)***	-.53 (-.164)***
	Racial or Ethnic Diversity	-.058 (-.018)	-.058 (-.018)	-.058 (-.018)	
Gender	.242 (.070)	.242 (.070)	.242 (.070)		
Internal Org. Charcs.	Age	School Age	.115 (.060)	.115 (.060)	.115 (.060)
	School Size	School Size	-.210 (-.027)	-.211 (-.027)	-.211 (-.027)
	Stability	Large scale expansion of programs	-.137 (-.007)	-.138 (-.007)	-.137 (-.007)
		Internal Staff Structure	-.095 (-.004)	-.095 (-.004)	-.095 (-.004)
		Hiring new ED/Principal	-.879 (-.031)	-.879 (-.031)	-.878 (-.031)
	Professionalization	ED/Principal is a Paid Employee	1.852 (.027)	1.855 (.027)	1.854 (.027)
		ED/Principal has Professional Licenses/Degrees	.531 (.049)	.531 (.049)	.531 (.049)
Management	School is Managed by EMO/CMO	-2.33 (-.094)**	-2.33 (-.094)**	-2.33 (-.094)**	
Control Variables	Control Variables	Number of Board Meetings	.052 (.021)	.052 (.021)	.052 (.021)
		Average Length of Board Meetings	.721 (.076)*	.722 (.076)*	.722 (.076)*
		School Type	1.774 (.086)**	1.774 (.086)**	1.774 (.086)**
		Rural School Location	-.338 (-.015)	-.337 (-.015)	-.337 (-.015)
		Suburban School Location	1.30 (.063)	1.30 (.063)	1.30 (.063)
		Urban School Location	Omitted	Omitted	Omitted
		Virtual School	-2.20 (-.079)**	-2.20 (-.079)**	-2.20 (-.079)**
		Percent of Low Income Students	-.020 (-.062)	-.020 (-.062)	-.020 (-.062)
R-square			.428	.428	.428
Adjusted R-Square			.376	.378	.379

*p < .1. ** < .05. ***p < .01

Beta Weights are in parentheses

External Conditions

This section discusses the variables related to external conditions for charter schools. In all, there were six variables related to external conditions for charter schools that were expected to influence a board's activity level in performing monitoring and strategizing roles and responsibilities. If a school received funding from student fees and charges ($p=.993$), government grants or contracts ($p=.511$), foundations grants and contracts ($p=.589$), or donations ($p=.452$) were not found to be a significant predictor of how active charter school boards are in performing monitoring and strategizing roles and responsibilities. Also, the study found that charter school boards from states that provided low ($p=.295$) and medium ($p=.246$) levels of autonomy compared to charter school boards from a states that provide high levels of autonomy were not significant predictors of how active a charter school board is in performing monitoring and strategizing roles and responsibilities. These results are expanded on and compared to previous literature in Section 5.5.

Board Attributes

This section examines the variables related to attributes for charter school boards. In all, there were 15 variables related to board's attributes for charter schools that were expected to influence a board's activity level for performing monitoring and strategizing roles and responsibilities. This study found several significant effects related to board attributes.

This study found that as the number of charter school board members increases, the activity level raises with regard to boards performing monitoring and strategizing roles and responsibilities ($b=.373$, $p=.023$). However, the dissertation found that if the ED/principal is

a voting member of the board ($b=-3.539$, $p=.005$) then charter school boards activity level lowers with regard to performing monitoring and strategizing roles and responsibilities.

In terms of board recruitment criteria, Table 5.36 shows that charter schools that emphasize recruiting board members based on their business or financial skills ($b=.580$, $p=.001$), knowledge of the organization's mission ($b=1.170$, $p=.000$), willingness to give time ($b=.752$, $p=.000$), or membership in a group served by the organization ($b=.240$, $p=.085$) raises the activity level of boards performing monitoring and strategizing roles and responsibilities. However, charter school boards that emphasize recruiting members based on a friendship to a current board member ($b=-.533$, $p=.000$) lowers the activity level of boards performing monitoring and strategizing roles and responsibilities. In terms of the relative effect the significant variables in the board attribute category had on monitoring and strategizing roles and responsibilities, recruiting board members based on knowledge of the organization's mission ($\beta=.319$) had the largest effect in the board attribute category, as well as the overall model. The variables of number of board members ($\beta=-.103$), ED/principal as a voting board member ($\beta=-.117$), as well as the board recruitment criteria of having business or financial skills ($\beta=.170$), willingness to give time ($\beta=.176$), and friend of current board members ($\beta=-.164$) had a moderate effect on the overall model. While the board recruitment variable of member of group served by the organization ($\beta=.080$) had only a small effect on the overall model.

In terms of non-significant variables in the board attributes category, this study showed that the percent of minorities ($p=.697$) and females ($p=.989$) on charter school boards were not significant predictors of how active charter school boards are in performing

monitoring and strategizing roles and responsibilities. Also, the dissertation shows that an emphasis recruiting board members based on ability to acquire resources ($p=.848$), previously volunteering for the organization ($p=.149$), reputation in the community ($p=.685$), racial or ethnic diversity ($p=.753$), or gender ($p=.230$) were not significant predictors of how active charter school boards are in performing monitoring and strategizing roles and responsibilities. These results are expanded on and compared to previous literature in Section 5.5.

Internal Organizational Characteristics

This section examines the variables related to internal organizational characteristics for charter schools. In all, there were eight variables related to internal organizational characteristics for charter schools that were expected to influence a board's activity level for performing monitoring and strategizing roles and responsibilities. This study found one significant effect related to internal organizational characteristics. The dissertation found that if the school is managed by an EMO/CMO then the charter school board's activity level is lowered with regard to performing monitoring and strategizing roles and responsibilities ($b=-2.333$, $p=.026$), but the variable only had a small effect ($\beta=-.094$) on the overall model compared to the other significant predictor variables.

In terms of non-significant variables in the internal organizational characteristics category, this study showed that the charter school age ($p=.148$) and size ($p=.573$) were not significant predictors of how active charter school boards are in performing monitoring and strategizing roles and responsibilities. Also, the dissertation shows that charter schools going through changes of expanding programs ($p=.573$), restructuring staff ($p=.869$) and hiring a

new ED/principal ($p=.916$) were not significant predictors of how active charter school boards are in performing monitoring and strategizing roles and responsibilities. Finally, measures of a charter school's professionalization of having a paid ED/principal ($p=.444$) or an ED/principal with professional licenses or degrees ($p=.500$) were not significant predictors of how active charter school boards are in performing monitoring and strategizing roles and responsibilities. These results are expanded on and compared to previous literature in Section 5.5.

Control Variables

This section examines the seven control variables included in the framework. This study found three significant control variables. This dissertation found that the longer the charter school board's meetings are the more active the charter school board is in performing monitoring and strategizing roles and responsibilities ($b=.721$ $p=.065$). However, the dissertation found that if the charter school is a virtual school then charter school boards activity level lowers with regard to performing monitoring and strategizing roles and responsibilities ($b=-2.197$, $p=.047$). Finally, the study found that if the school was a combination school (e.g., elementary/middle/high school) ($b=1.774$, $p=.042$), the board's activity level increased with regard to performing monitoring and strategizing roles and responsibilities.

5.4.2 OLS Analysis of Boundary-Spanning Roles and Responsibilities

The dependent variable for the board activity level for boundary-spanning roles and responsibilities (the factor 2 construct) was predicted by other variables in the framework described earlier. These variables are listed and the results shown in Table 5.37 below in the

column for “original model.” Results are also shown for two revisions of the model in which certain variables discussed below were omitted. The models were found to be significant ($p = .000$), which shows the variables included explain the concept attempted to be measured. A total of 12 variables were significant in the original and revised models in examining the activating level of boards performing boundary-spanning roles and responsibilities. The significant variables were:

- Number of board members;
- Percent corporate board members;
- ED/Principal has professional licenses/degrees;
- Rural School Location;
- Stability measure of internal staff structure and hiring a new ED/principal; and
- Board recruitment criteria of ability to acquire resources, knowledge of organization’s mission, willingness to give time, member of group served organization, reputation in the community, and friend of current board member.

While the main point of this study was to examine an overall framework, as Table 5.37 also shows, further regression analyses were conducted to explore the potential for effects if the model was trimmed. The model was first trimmed by excluding the least significant variable, which was the stability measure of large scale expansion of programs ($p = .981$). Compared to the original model, the revised model had the same overall fit as the previous one ($R\text{-squared} = .399$) and no variables became significant or dropped to a non-significant level.

A second revised regression was run excluding large scale expansion of programs and the least significant variable in the previously revised model, which was virtual charter school ($p = .890$). Compared to the previous two models, the second revised regression did not affect the overall fit as well ($R\text{-square} = .399$) and no variables became significant or dropped to a non-significant level. While not shown in Table 5.37, the model was trimmed until all remaining variables in the model were significant. However, the trimming of the model made no substantive difference in the findings. Also, since Ostrower and Stone (2010) examine the full model (with non-significant variables included), this study did the same in order to compare with the previous research. The significant variables of the original model are examined further in this section and then all variables are discussed further in Section 5.5.

Table 5.37: Analysis of Board Activity of Boundary-Spanning Roles and Responsibilities with All Predictors

Categories of Variables		Independent Variables	Original Model	1 st Revised Model	2 nd Revised Model
External Conds.	Resources and Funding	Student Fees and Charges	-.114 (-.008)	-.116 (-.008)	-.117 (-.008)
		Gov. Grants/Contracts	.106 (.007)	.107 (.007)	.101 (.007)
		Foundation Grants/Contracts	.476 (.034)	.475 (.034)	.474 (.034)
	Institutional and Regulatory (State Law)	Donations	-.115 (-.008)	-.114 (-.008)	-.120 (-.008)
		Low Autonomy	1.407 (.047)	1.409 (.047)	1.406 (.047)
		Medium Autonomy	.217 (.015)	.217 (.015)	.218 (.015)
	High Autonomy	Omitted	Omitted	Omitted	
Board Attributes	Board Size	Number of Board Members	.389 (.153)***	.389 (.152)***	.388 (.152)***
	ED/Principal Voting Member	ED/Principal Voting Member	1.019 (.048)	1.019 (.048)	1.018 (.048)
	Board Demographics	Percent Minority	-.004 (-.016)	-.004 (-.016)	-.004 (-.016)
		Percent Female	.011 (.034)	.011 (.034)	.011 (.034)
	Corporate Board Members	Percent Corporate Members	.047 (.136)***	.047 (.136)***	.047 (.136)***
	Recruitment Criteria	Ability to Acquire Resources	.235 (.172)**	.235 (.172)**	.235 (.172)**
		Business or Financial Skills	.075 (.031)	.075 (.031)	.074 (.031)
		Knowledge of Org. Mission	.246 (.095)*	.246 (.095)*	.246 (.095)*
		Previously Volunteered for Org.	.193 (.084)	.193 (.084)	.193 (.084)
		Willingness to Give Time	.553 (.188)***	.553 (.188)***	.554 (.188)***
		Member of Group Served by Org.	.390 (.184)***	.390 (.184)***	.391 (.185)***
		Reputation in Community	.284 (.115)**	.284 (.115)**	.285 (.115)**
		Friend of Current Board Member	-.312 (-.136)**	-.312 (-.136)**	-.312 (-.136)**
Racial or Ethnic Diversity	-.136 (-.062)	-.136 (-.062)	-.136 (-.061)		
Gender	.030 (.012)	.030 (.012)	.029 (.012)		
Internal Org. Charcs.	Age	School Age	.027 (.020)	.027 (.020)	.027 (.020)
	School Size	School Size	.247 (.045)	.247 (.045)	.244 (.044)
	Stability	Large scale expansion of programs	.014 (.001)	Excluded	Excluded
		Internal Staff Structure	-1.118 (-.075)*	-1.114 (-.074)*	-1.120 (-.075)*
		Hiring new ED/Principal	-1.435 (-.071)*	-1.436 (-.071)*	-1.437 (-.071)*
	Professionalization	ED/Principal is a Paid Employee	2.354 (.049)	2.356 (.049)	2.352 (.048)
		ED/Principal has Professional Licenses/Degrees	.584 (.077)*	.584 (.077)*	.586 (.077)*
Management	School is Managed by EMO/CMO	1.061 (.061)	1.060 (.061)	1.062 (.061)	
Control Variables	Control Variables	Number of Board Meetings	.052 (.029)	.052 (.029)	.052 (.029)
		Average Length of Board Meetings	-.202 (-.030)	-.202 (-.030)	-.200 (-.030)
		School Type	-.091 (-.006)	-.091 (-.006)	-.092 (-.006)
		Rural School Location	1.556 (.099)*	1.555 (.099)*	1.556 (.099)*
		Suburban School Location	.664 (.046)	.664 (.046)	.668 (.046)
		Urban School Location	Omitted	Omitted	Omitted
		Virtual School	.111 (.006)	.110 (.006)	Excluded
		Percent of Low Income Students	.003 (.014)	.003 (.014)	.003 (.015)
R-square			.399	.399	.399
Adjusted R-Square			.345	.347	.348

*p < .1. ** < .05. ***p < .01

Beta Weights are in parentheses

External Conditions

This section discusses the variables related to external conditions for charter schools. In all, there were six variables related to external conditions for charter schools that were expected to influence a board's activity level in performing boundary-spanning roles and responsibilities. If a school received funding from student fees and charges ($p=.851$), government grants or contracts ($p=.865$), foundations grants and contracts ($p=.462$), or donations ($p=.867$) were not found to be a significant predictor of how active charter school boards are in performing boundary-spanning roles and responsibilities. Also, the study found that charter school boards from states that provided low ($p=.249$) and medium ($p=.734$) levels of autonomy compared to charter school boards from a states that provide high levels of autonomy were not significant predictors of how active a charter school board is in performing boundary-spanning roles and responsibilities. These results are expanded on and compared to previous literature in Section 5.5.

Board Attributes

This section examines the variables related to attributes for charter school boards. In all, there were 15 variables related to board's attributes for charter schools that were expected to influence a board's activity level for performing boundary-spanning roles and responsibilities. This study found several significant effects related to board attributes.

This study found that as the number of board members increase in a charter school, the active level raises of the charter school board performing boundary-spanning roles and responsibilities ($b=.389$, $p=.001$). Also, the dissertation found that the higher the percentage of charter school board members that also sit on corporate boards, the activity level raises of

the charter school board performing boundary-spanning roles and responsibilities ($b=.047$, $p=.001$).

In terms of board recruitment criteria, Table 5.37 shows that charter schools that emphasize recruiting board members based on their ability to acquire resources, ($b=.235$, $p=.002$), knowledge of the organization's mission ($b=.246$, $p=.065$), willingness to give time ($b=.553$, $p=.000$), membership in a group served by the organization ($b=.390$, $p=.000$), or reputation in the community raises the activity level of boards performing boundary-spanning roles and responsibilities. However, charter school boards that emphasize recruiting members based on a friendship to a current board member ($b=-.312$, $p=.002$) lowers the activity level of boards performing boundary-spanning roles and responsibilities. In terms of the relative effect the significant variables in the board attribute category had on boundary-spanning roles and responsibilities, recruiting board members based on willingness to give time ($\beta=.188$) and member of group served by the organization ($\beta=.184$) had the largest effects in the board attribute category, as well as the overall model. The variables of number of board members ($\beta=.153$), percent of corporate board members ($\beta=.136$), as well as the board recruitment criteria of ability to acquire resources ($\beta=.172$), reputation in the community ($\beta=.115$), and friend of current board members ($\beta=-.136$) had a moderate effect on the overall model. While the board recruitment variable of knowledge of the organization's mission ($\beta=.095$) had a small effect on the overall model.

In terms of non-significant variables in the board attributes category, this dissertation found that having an ED/principal as a voting board member ($p=.266$) was not a significant predictor of how active charter school boards are in performing boundary-spanning roles and

responsibilities. Also, this study showed that the percent of minorities ($p=.744$) and females ($p=.422$) on charter school boards were not significant predictors of how active charter school boards are in performing boundary-spanning roles and responsibilities.

Finally, recruiting board members based on business or financial skills ($p=.531$), previously volunteering for the organization ($p=.106$), racial or ethnic diversity ($p=.312$), or gender ($p=.839$) were also not significant predictors of how active charter school boards are in performing boundary-spanning roles and responsibilities. These results are expanded on and compared to previous literature in Section 5.5.

Internal Organizational Characteristics

This section examines the variables related to internal organizational characteristics for charter schools. In all, there were eight variables related to internal organizational characteristics for charter schools that were expected to influence a board's activity level for performing boundary-spanning roles and responsibilities. This study found three significant effects related to internal organizational characteristics. The dissertation found that in terms of stability, if the charter school is going through internal staff restructuring ($b=-1.118$, $p=.086$) or hiring a new ED/principal ($b=-1.435$, $p=.085$) the activity level of the board lowers with regard to performing boundary-spanning roles and responsibilities. However, internal staff restructuring ($\beta=-.075$) and hiring a new ED/principal ($\beta=-.071$) variables had a small effect on the overall model compared to the other significant predictor variables. Also, the study found that having ED/principals with professional licenses and degrees ($b=.584$, $p=.063$) results in increasing the activity level of the board performing boundary-spanning roles and responsibilities. However, it also had a small effect ($\beta=.077$) on the overall model.

In terms of non-significant variables in the internal organizational characteristics category, this study showed that the charter school age ($p=.634$) and size ($p=.359$) were not significant predictors of how active charter school boards are in performing boundary-spanning roles and responsibilities. Also, the dissertation shows that schools going through an expansion of programs ($p=.981$) was not a significant predictor of how active charter school boards are in performing boundary-spanning roles and responsibilities. Finally, having a paid ED/principal ($p=.237$) or having a school that is managed by an EMO/CMO ($p=.158$) were not significant predictors of how active charter school boards are in performing boundary-spanning roles and responsibilities. These results are expanded on and compared to previous literature in Section 5.5.

Control Variables

This section examines the seven control variables included in the framework. This study found one significant control variable. This dissertation found that a charter school in a rural location ($b=1.556$, $p=.058$) compared to a school in an urban location raises the activity level of the board performing boundary-spanning roles and responsibilities. However, it had a small effect ($\beta=.099$) on the overall model.

5.4.3 OLS Analysis of Conforming Roles and Responsibilities

The dependent variable for the board activity level for conforming roles and responsibilities (the factor 3 construct) was predicted by other variables in the framework described earlier. These variables are listed and the results shown in Table 5.38 below in the column for “original model.” Results are also shown for two revisions of the model in which certain variables discussed below were omitted. The models were found to be significant ($p =$

.000), which shows the variables included explain the concept attempted to be measured. A total of 8 variables were significant in the original and revised models in examining the activating level of boards performing conforming roles and responsibilities. The significant variables were:

- Government grants and contract;
- School age;
- ED/principal is a paid employee; and
- Board recruitment criteria of business or financial skills, knowledge of organization's mission, member of group served organization, reputation in the community, and friend of current board member.

While the main point of this study was to examine an overall framework, as Table 5.38 also shows, further regression analyses were conducted to explore the potential for effects if the model was trimmed. The model was first trimmed by excluding the least significant variable of virtual charter school ($p = .996$). Compared to the original model, the revised model had the same overall fit as the previous one ($R\text{-squared} = .347$) and no variables became significant or dropped to a non-significant level.

A second revised regression was run excluding virtual charter school and the least significant variable in the previously revised model, which was the recruitment variable previous volunteer work for the organization ($p = .979$). Compared to the previous two models, the second revised regression did not affect the overall fit as well ($R\text{-square} = .347$) and no variables became significant or dropped to a non-significant level. While not shown in Table 5.38, the model was trimmed until all remaining variables in the model were

significant. However, the trimming of the model made no substantive difference in the findings. Also, since Ostrower and Stone (2010) examine the full model (with non-significant variables included), this study did the same in order to compare with the previous research. The significant variables of the original model are examined further in this section and then all variables are discussed further in Section 5.5.

Table 5.38: Analysis of Board Activity of Conforming Roles and Responsibilities with All Predictors

Categories of Variables		Independent Variables	Original Model	1 st Revised Model	2 nd Revised Model
External Conds.	Resources and Funding	Student Fees and Charges	.515 (.036)	.516 (.036)	.516 (.036)
		Gov. Grants/Contracts	1.140 (.080)*	1.141 (.081)*	1.142 (.081)*
		Foundation Grants/Contracts	-1.040 (-.076)	-1.040 (-.076)	-1.041 (-.076)
		Donations	-.850 (-.061)	-.850 (-.061)	-.850 (-.061)
	Institutional and Regulatory (State Law)	Low Autonomy	1.876 (.065)	1.876 (.065)	1.877 (.065)
		Medium Autonomy	.854 (.059)	.854 (.059)	.854 (.059)
		High Autonomy	Omitted	Omitted	Omitted
Board Attributes	Board Size	Number of Board Members	-.072 (-.029)	-.072 (-.029)	-.072 (-.029)
	ED/Principal Voting Member	ED/Principal Voting Member	-.167 (-.008)	-.167 (-.008)	-.168 (-.008)
	Board Demographics	Percent Minority	.015 (.066)	.015 (.066)	.015 (.066)
		Percent Female	.008 (.026)	.008 (.026)	.008 (.026)
	Corporate Board Members	Percent Corporate Members	.008 (.022)	.008 (.022)	.007 (.022)
	Recruitment Criteria	Ability to Acquire Resources	.027 (.020)	.027 (.020)	.027 (.020)
		Business or Financial Skills	.404 (.171)***	.404 (.171)***	.403 (.171)***
		Knowledge of Org. Mission	.613 (.242)***	.613 (.242)***	.613 (.242)***
		Previously Volunteered for Org.	.003 (.001)	.003 (.001)	Excluded
		Willingness to Give Time	.195 (.067)	.195 (.067)	.196 (.068)
		Member of Group Served by Org.	.181 (.087)*	.181 (.087)*	.182 (.087)*
		Reputation in Community	.446 (.183)***	.446 (.183)***	.446 (.183)***
		Friend of Current Board Member	-.260 (-.116)**	-.260 (-.116)**	-.260 (-.116)**
		Racial or Ethnic Diversity	-.107 (-.049)	-.107 (-.049)	-.107 (-.049)
Gender	.207 (.086)	.207 (.086)	.207 (.086)		
Internal Org. Charcs.	Age	School Age	.148 (.111)**	.148 (.111)**	.148 (.111)**
	School Size	School Size	.075 (.014)	.075 (.014)	.075 (.014)
	Stability	Large scale expansion of programs	.342 (.025)	.342 (.025)	.341 (.025)
		Internal Staff Structure	-.733 (-.050)	-.733 (-.050)	-.733 (-.050)
		Hiring new ED/Principal	.355 (.018)	.355 (.018)	.356 (.018)
	Professionalization	ED/Principal is a Paid Employee	4.891 (.103)**	4.891 (.103)**	4.892 (.103)**
		ED/Principal has Professional Licenses/Degrees	-.199 (-.027)	-.199 (-.027)	-.200 (-.027)
Management	School is Managed by EMO/CMO	-1.154 (-.067)	-1.154 (-.067)	-1.155 (-.067)	
Control Variables	Control Variables	Number of Board Meetings	.035 (.020)	.035 (.020)	.035 (.020)
		Average Length of Board Meetings	-.077 (-.012)	-.077 (-.012)	-.076 (-.012)
		School Type	-.412 (-.029)	-.411 (-.029)	-.412 (-.029)
		Rural School Location	-.492 (-.032)	-.492 (-.032)	-.490 (-.032)
		Suburban School Location	.664 (.046)	.664 (.046)	.666 (.046)
		Urban School Location	Omitted	Omitted	Omitted
		Virtual School	-.005 (.000)	Excluded	Excluded
		Percent of Low Income Students	.013 (.055)	.013 (.055)	.013 (.055)
R-square			.347	.347	.347
Adjusted R-Square			.288	.290	.291

*p < .1. ** < .05. ***p < .01

Beta Weights are in parentheses

External Conditions

This section discusses the variables related to external conditions for charter schools. In all, there were six variables related to external conditions for charter schools that were expected to influence a board's activity level in performing conforming roles and responsibilities. The study found that a charter school receiving funding from government grants or contracts ($b=1.140$, $.081$) raises the board's activity level in performing conforming roles and responsibilities. However, it had a small effect ($\beta=.080$) on the overall model.

If a school received funding from student fees and charges ($p=.406$), foundations grants and contracts ($p=.118$), or donations ($p=.27$) were not found to be a significant predictor of how active charter school boards are in performing conforming roles and responsibilities. Also, the study found that charter school boards from states that provided low ($p=.131$) and medium ($p=.189$) levels of autonomy compared to charter school boards from a states that provide high levels of autonomy were not significant predictors of how active a charter school board is in performing conforming roles and responsibilities. These results are expanded on and compared to previous literature in Section 5.5.

Board Attributes

This section examines the variables related to attributes for charter school boards. In all, there were 15 variables related to board's attributes for charter schools that were expected to influence a board's activity level for performing conforming roles and responsibilities.

This study found several significant effects related to board attributes.

This study found that charter schools that emphasize recruiting board members based on their business or financial skills ($b=.404$, $p=.001$), knowledge of the organization's

mission ($b=.613$, $p=.000$), membership in a group served by the organization ($b=.181$, $p=.007$), or reputation in the community ($b=.446$, $p=.000$) raises the activity level of boards performing conforming roles and responsibilities. However, charter school boards that emphasize recruiting members based on a friendship to a current board member ($b=-.260$, $p=.013$) lowers the activity level of boards performing conforming roles and responsibilities. In terms of the relative effect the significant variables in the board attribute category had on conforming roles and responsibilities, recruiting board members based on knowledge of the organization's mission ($\beta=.242$) had the largest effect in the board attribute category, as well as the overall model. The board recruitment criteria of having business or financial skills ($\beta=.171$), reputation in the community ($\beta=.181$), and friend of current board members ($\beta=-.116$) had a moderate effect on the overall model. While the board recruitment variable of member of group served by the organization ($\beta=.087$) had only a small effect on the overall model.

In terms of non-significant variables in the board attributes category, this study showed the number of board members ($p=.553$) and having an ED/principal as a voting board member ($p=.858$) were not significant predictors of how active charter schools boards are in performing conforming roles and responsibilities. Also, the percent of minorities ($p=.196$) and females ($p=.557$) on charter school boards were not significant predictors of how active charter school boards are in performing conforming roles and responsibilities. Also, the dissertation shows that an emphasis on recruiting board members based on ability to acquire resources ($p=.729$), previously volunteering for the organization ($p=.979$), willingness to give time ($p=.187$), racial or ethnic diversity ($p=.431$), or gender ($p=.165$) were not significant

predictors of how active charter school boards are in performing conforming roles and responsibilities. These results are expanded on and compared to previous literature in Section 5.5.

Internal Organizational Characteristics

This section examines the variables related to internal organizational characteristics for charter schools. In all, there were eight variables related to internal organizational characteristics for charter schools that were expected to influence a board's activity level for performing conforming roles and responsibilities. This study found two significant effects related to internal organizational characteristics. The dissertation found that the older the charter school, the more active the board is in performing conforming roles and responsibilities ($b=.148$, $p=.012$), and the variable only had a moderate effect ($\beta=.111$) on the overall model compared to the other significant predictor variables. Also, the study found that a charter school having an ED/principal as a paid employee ($b=4.891$, $p=.015$) results in increasing the activity level of the board performing conforming roles and responsibilities. However, it also had a moderate effect ($\beta=.103$) on the overall model.

In terms of non-significant variables in the internal organizational characteristics category, this study showed that the charter school size ($p=.787$) was not a significant predictor of how active charter school boards are in performing conforming roles and responsibilities. Also, the dissertation shows that charter schools going through changes of expanding programs ($p=.578$), restructuring staff ($p=.269$) and hiring a new ED/principal ($p=.676$) were not significant predictors of how active charter school boards are in performing conforming roles and responsibilities. Finally, an ED/principal with professional

licenses or degrees ($p=.536$) and a charter school managed by an EMO or CMO ($p=.135$) were not significant predictors of how active charter school boards are in performing conforming roles and responsibilities. These results are expanded on and compared to previous literature in Section 5.5.

Control Variables

This section examines the seven control variables included in the framework. This study found that none of the control variables were significant in the overall model.

5.5 Hypothesis Testing and Discussion

Prior research found a variation in the activity level of nonprofit boards performing roles and responsibilities associated with monitoring, strategizing, boundary-spanning, and conforming behaviors. This dissertation investigated if previous research (e.g., Miller-Millesen, 2003, Ostrower and Stone, 2010) examining all nonprofit boards is applicable to charter school boards by examining factors that influence their roles and responsibilities. This study suggested several hypotheses based on the theoretical assumptions and previous research of other scholars. In the following sections, this dissertation examines what hypotheses are supported, (or not supported), by the research findings of this study.

5.5.1 Hypothesis 1: Resources and Funding

Resource dependency theorists (Pfeffer, 1972, 1973; Pfeffer and Salancik, 1978) predict that in complex environments, when organizations are dependent on the environment for resources, boards would be more likely to focus on external roles (e.g., boundary-spanning and conforming). However, when organizations are less dependent on external resources they would be more likely to focus on internal roles (e.g., monitoring and

strategizing). Miller-Millesen (2003) built on Pfeffer and Salancik's theoretical assumptions by arguing that nonprofit boards would be more likely to focus on boundary-spanning roles than on internal roles (e.g., monitoring and strategizing) when a portion of income raised from external sources are high. Ostrower and Stone (2010) tested Miller-Millesen's hypothesis but instead of examining external funding as one concept, they examined it as government funding and private funding (e.g., donations). They found that reliance on government-funding sources was significantly related to levels of board engagement in certain boundary-spanning activities but mostly unrelated to internally oriented roles. Based on Miller-Millesen's hypothesis and parts of Ostrower and Stone's findings, this study tested to see if government funding had the same effect on charter schools as it did in previous nonprofit research by hypothesizing:

Hypothesis 1a: Charter school boards raise their activity level with regard to performing boundary-spanning and conforming roles and responsibilities and lower their activity level with regard to performing monitoring and strategizing roles and responsibilities when the school receives government funding.

This study found no support that charter schools receiving government funding (government grants and contracts) raised their activity in performing boundary-spanning roles and responsibilities (See Table 5.37). However, this dissertation did find that reliance on government funding was significantly related to raising the board's activity level with regard to performing conforming roles and responsibilities (See Table 5.38). In terms of monitoring and strategizing roles and responsibilities, this study deviated from Miller-Millesen's hypothesis but found similar results to Ostrower and Stone that government funding was unrelated to internally oriented roles and responsibilities (See Table 5.36). Thus,

Hypothesis 1a is slightly supported in that charter schools that receive government funding do raise their activity level with regard to performing conforming roles and responsibilities; however, there was no relationship found between government funding and any other board roles and responsibilities.

Ostrower and Stone (2010) also tested Miller-Millesen's hypothesis by examining external funding as private funding. They found that reliance on private funding sources were significantly related to levels of board engagement in certain boundary-spanning activities (e.g., fundraising) but generally unrelated to internally oriented roles. Based on Miller-Millesen's hypothesis and parts of Ostrower and Stone's findings, this study tested to see if private funding had the same effect on charter schools as it did in previous nonprofit research by hypothesizing:

Hypothesis 1b: Charter school boards raise their activity level with regard to performing boundary-spanning and conforming roles and responsibilities and lower their activity level with regard to performing monitoring and strategizing roles and responsibilities when the school receives private funding.

This study found no support that charter schools receiving private funding (foundation grants and contracts or donations) raised their activity in performing boundary-spanning or conforming roles and responsibilities (See Table 5.37 and 5.38). In terms of monitoring and strategizing roles and responsibilities, this study deviated from Miller-Millesen's hypothesis but found results similar to Ostrower and Stone that private funding was unrelated to internally oriented roles and responsibilities (See Table 5.36). Thus, Hypothesis 1b is not supported in that charter schools that receive private funding do raise their activity level in performing boundary-spanning and conforming roles and

responsibilities and lower their activity level in performing monitoring and strategizing roles and responsibilities.

The findings suggest that charter schools' resources and funding environment influence board roles and responsibilities differ from research based on all nonprofits. An explanation for this difference is due to the fact that charter schools receive a majority of their revenue from government allocated dollars (as was shown previously in Table 5.2 and 5.8) and do not have to rely on additional government or private funding. Since the reliance on additional external sources is minimal for charter schools then the effect these sources have on a board's roles and responsibilities is generally unrelated.

5.5.2 Hypothesis 2: Institutional and Regulatory Environment

The institution and regulatory variable in this dissertation deviates from how it is examined in Ostrower and Stone's (2010) framework. In this dissertation, the environment variable was based on the public policy environment of charter schools, and not the general environment of all nonprofits. Specifically, this environment variable examined the state charter school law based on the amount of autonomy from bureaucratic controls that is afforded to the school. Wohlstetter et al (1995) argue that higher levels of autonomy result in freedom to exercise more choice in organizational policymaking. This would result in charter school boards in states that provide more autonomy to be more actively involved in monitoring and strategizing roles and responsibilities. Also, Miller-Millesen (2003) explains that nonprofit boards are more likely to perform conforming roles and responsibilities when they have to respond to external mandates that emanate from the legal environment.

However, charter schools in states with higher levels of autonomy would not have to respond

as much to external mandates from the legal environment, which would result in charter school boards being less likely to perform conforming roles and responsibilities. Based on this research the hypothesis below was tested:

Hypothesis 2: Charter school boards raise their activity level with regard to performing monitoring and strategizing roles and responsibilities and lower their activity level with regard to performing conforming roles and responsibilities when state legislation provides higher levels of autonomy from bureaucratic constraints.

This study found no support that charter schools that have more autonomy from state regulations raised their activity in performing monitoring and strategizing roles and responsibilities (See Table 5.36). Also, this study found no support that charter schools that have more autonomy from state regulations lowered their activity level in performing conforming roles and responsibilities (See Table 5.38). While not examined in the above hypothesis, this study found that charter schools autonomy level was unrelated to boundary-spanning roles and responsibilities (See Table 5.37). Thus, Hypothesis 2 is not supported.

While this was an unexpected result, the findings might allude to the fact that the variable measuring autonomy is not an accurate depiction of how the institutional environment influences a charter school board. The larger institutional environment and isomorphic pressures (DiMaggio and Powell, 1983) causing charter schools to model themselves after traditional schools might have a greater influence on the board roles and responsibilities than the actual autonomy provided by state laws.

5.5.3 Hypothesis 3: Board Size

Miller-Millsen (2003) uses resource dependency theory to argue that if a nonprofit board was trying to reduce their environmental uncertainty then having a larger board would

result in more links to external resources. She argues that board size would have positive association with certain roles and responsibilities associated with boundary-spanning. This argument is supported by previous research (Abzug et al., 1993; Bowen, 1994; Ostrower, 2002) that explains that organizations use large boards as fundraising tools. Ostrower and Stone (2010) examine board size in their framework and find a positive association between board size and certain board roles responsibilities related to boundary-spanning. Based on this research the hypotheses below were tested:

Hypothesis 3a: Charter school board size will not have any relationship to the activity level of the charter school board in performing monitoring, strategizing, or conforming roles and responsibilities.

Hypothesis 3b: The larger the size of the charter school board, the greater the activity level of the charter school board in performing boundary-spanning roles and responsibilities.

This dissertation found partial support for Hypothesis 3a. The study showed that the larger the size of the charter school board, the greater the activity in performing monitoring and strategizing roles and responsibilities (See Table 5.36). The relationship was further tested and confirmed (See Appendix F, Table F-1) by squaring the variable to truly ensure that an increase in board size had a significant positive association with monitoring and strategizing roles and responsibilities.

However, no relationship was found between board size and conforming roles and responsibilities (See Table 5.38). While this was an unexpected result, the findings might allude to the fact that a larger board would balance the power relationships between the board and staff, which would likely have the board assuming more monitoring and strategizing roles and responsibilities (Miller-Millesen, 2003). Nevertheless, the findings show that

charter school boards are different from previously researched nonprofits in that board size does impact the activity level of boards performing monitoring and strategizing roles and responsibilities. This provides evidence that maybe specific charter school board research is needed beyond the research that exists on all nonprofit boards, a concept that is examined further in Chapter 6.

This dissertation found support for Hypothesis 3b. The study showed that the larger the size of the charter school board, the greater the activity level in performing boundary-spanning roles and responsibilities (See Table 5.37). The relationship was further tested and confirmed (See Appendix F, Table F-2) by squaring the variable to truly ensure that an increase in board size had a significant positive association with boundary-spanning roles and responsibilities. While Hypothesis 3a was only partially supported, the support for Hypothesis 3b confirmed pervious research findings that the more board members in an organization the more avenues the organization has and the more likely the organization is to reduce environmental uncertainty through boundary-spanning activities.

5.5.4 Hypothesis 4: Executive Director/Principal as Voting Member of the Board

Ostrower and Stone (2010) find that an ED serving as voting member on a nonprofit board is negatively associated with all board roles and responsibilities related to monitoring and strategizing because it undermines the governance of the board. Also, they find that an ED serving as a voting board member on a nonprofit board is negatively associated with certain roles and responsibilities related to boundary-spanning (e.g., community relations). Based on this research, the hypotheses below were tested:

Hypothesis 4a: Charter school boards lower their activity level with regard to performing monitoring roles and responsibilities when the ED/principal is a voting member of the board.

Hypothesis 4b: Charter school boards lower their activity level with regard to performing strategizing roles and responsibilities when the ED/principal is a voting member of the board.

Hypothesis 4c: Charter school boards lower their activity level with regard to performing boundary-spanning roles and responsibilities when the ED/principal is a voting member of the board.

This dissertation found support for Hypotheses 4a and 4b. The study showed that having an ED/principal as a voting member does lower the activity level of the board in performing monitoring and strategizing roles and responsibilities (See Table 5.36). As expected, this is probably due to the ED/principal undermining the governance responsibilities of the board. The study did not find support for Hypothesis 4c. The results showed no relationship between having an ED/principal as voting member and performing boundary-spanning roles and responsibilities. While Hypothesis 4c is not supported, this is somewhat consistent with Ostrower and Stone's (2010) research because they only find a relationship with one boundary-spanning role and responsibility (community relations) but find no relationship with other boundary-spanning roles and responsibilities (e.g., raising funds). Finally, while no hypothesis was proposed on the relationship between conforming roles and responsibilities and having an ED/principal as a voting member, the results did not show a relationship between the two items.

5.5.5 Hypothesis 5: Percentage of Female Board Members

Previous reviews of the literature (Middleton, 1987; Ostrower, 2007; Ostrower and Stone, 2006) suggest that men outnumber women on nonprofit boards. The National Center

for Nonprofit Boards (2000) finds that women constitute 43 percent of board members in the nonprofit sector. However, differences in gender ratios are found across different fields of activity. In this study, on average women represent 50.99% of all board members in charter schools (See Table 5.16). The percentage of women serving on charter school boards from this study compared to previous research is expected as gender variation among nonprofits often relate to the organization's size and field of activity (Middleton, 1987; NCNB, 2000).

In terms of how the percentage of females on a nonprofit board matter to the board's roles and responsibilities, research is mixed. Some scholars (Bradshaw et al., 1996; Siciliano, 1996) find that having gender diversity is negatively associated with obtaining resources (boundary-spanning). However, Ostrower and Stone (2010) specifically test how the percentage of females on a nonprofit board influenced board roles and responsibilities. They find that the higher percentage of female board members was positively associated with roles and responsibilities related to boundary-spanning and strategizing. Based on Ostrower and Stone's research, the hypotheses below were tested:

Hypothesis 5a: The higher the percentage of female board members on a charter school board, the greater the activity level of a charter school board in performing strategizing board roles and responsibilities.

Hypothesis 5b: The higher the percentage of female board members on a charter school board, the greater the activity level of a charter school board in performing boundary-spanning board roles and responsibilities.

This study found no support that the higher percentage of female board members increased the board's activity in performing monitoring and strategizing roles and responsibilities (See Table 5.36). Also, the results showed no support that the higher percentage of female board members increased the board's activity in performing boundary

roles and responsibilities (See Table 5.37). While not examined in the above hypotheses, this study found no relations between percentage of female board members and conforming roles and responsibilities (See Table 5.38). Thus, Hypotheses 5a and 5b are not supported and no relationship is shown between percentage of female board members and a charter school's board roles and responsibilities. While Ostrower and Stone (2010) study represents nonprofit boards in the entire sector, this study is examining a small sub-sector of nonprofit boards that might have led to percentages of female influencing board roles and responsibilities differently.

5.5.6 Hypothesis 6: Percentage of Racial and Ethnic Minority Board Members

Less information exists on the racial and ethnic composition of boards compared to the literature on gender. Previous reviews of the literature (Middleton, 1987; Ostrower, 2007; Ostrower and Stone, 2006) suggest that nonprofit boards are overwhelmingly white. The National Center for Nonprofit Boards (2000) finds that Caucasians constitute 86 percent of board members in the nonprofit sector. However, differences in gender ratios are found across different fields of activity. In this study, on average minorities represent 27.46% of all board members in charter schools (See Table 5.17). Research is limited on how racial and ethnic diversity influences board roles and responsibilities. However, Ostrower and Stone (2010) find that a higher percentage of board members from ethnic and minority groups were not associated with any board roles and responsibilities. Based on this research the following hypothesis was tested:

Hypothesis 6: The higher the percentage of racial and ethnic minorities on a charter school board will not have any relationship to activity level of the charter school board in performing any board roles and responsibilities.

Hypothesis 6 was supported. This study found no relationship between the higher percentage of racial and ethnic minorities and any board roles and responsibilities (See Table 5.36, 5.37, and 5.38). Since research is limited in this area, Ostrower and Stone's research and now this study assists in building support for future research that racial and ethnic diversity might not influence how a board performs certain roles and responsibilities.

5.5.7 Hypothesis 7: Percentage of Corporate Board Members

Ostrower and Stone (2010) find that the higher the percentage of corporate board members that sit on a nonprofit board the more active the nonprofit board is in performing certain monitoring roles and responsibilities. However, they did not find that the percentage of corporate board members that sit on a nonprofit board variable is associated to any other board roles and responsibilities. Based on this understanding the following hypotheses below were tested:

Hypothesis 7: The higher the percentage of corporate board members that sit on a charter school board, the greater the activity level of a charter school board in performing monitoring roles and responsibilities.

This study found no support for Hypothesis 7 that the higher percentage of corporate board members increased the charter schools board's activity level in performing monitoring and strategizing roles and responsibilities (See Table 5.36). While this was unexpected, it does not deviate too much from the literature because Ostrower and Stone only find a relationship between a few monitoring roles and responsibilities. This study tested the relationship between all roles and responsibilities associated with monitoring and strategizing, which could have resulted in the non-significant finding.

However, the results do find that the higher percentage of corporate board members raised the charter school board's activity level with regard to performing boundary roles and responsibilities (See Table 5.37). While Ostrower and Stone did not have this finding in their study, this research suggests that corporate board members' external connections would increase boundary-spanning activities for the charter school. Finally, while not examined in the above hypotheses, this study found no relations between percentage of corporate board members and conforming roles and responsibilities (See Table 5.38).

5.5.8 Board Recruitment Criteria

Ostrower and Stone (2010) argue that one set of board attributes that are in need of more thorough analysis is recruitment criteria used to select board members and the relationship they have with board roles and responsibilities. This dissertation examined the board recruitment criteria variables through a more exploratory lens and did not propose hypotheses regarding how each criterion influenced charter school board roles and responsibilities. The discussion below, when possible, compares board recruitment criteria findings in this study with Ostrower and Stone's results using similar variables with the hope to build on governance literature around these concepts for future studies.

Board Recruitment Criteria and Monitoring and Strategizing Roles and Responsibilities

This study and Ostrower and Stone found similar results in that charter schools that emphasize recruiting board members based on finance and business skills, knowledge of the organization's mission, willingness to give time, or membership in a group served by the organization raise the activity level of boards with regard to performing certain monitoring and stargazing roles and responsibilities. Also, the studies mimic each other's findings in that

charter school boards that emphasize recruiting members based on a friendship to a current board member lowers the activity level of boards with regard to performing boundary-spanning roles and responsibilities. Both studies also found no relationship between racial and ethnic and gender diversity and monitoring and strategizing roles and responsibilities.

The studies differ in their results in that Ostrower and Stone find that charter schools that emphasize recruiting board members based on reputation in the community are more active in performing monitoring roles and responsibilities. Also, they find that the board recruitment criterion of ability to acquire resources (fundraising ability) lowers the activity level of boards with regard to performing certain monitoring and strategizing roles and responsibilities. These results emphasize the importance board recruitment criteria are to how boards perform their monitoring and strategizing roles and responsibilities, which is examined further in Chapter 6.

Board Recruitment Criteria and Boundary-Spanning Roles and Responsibilities

This dissertation and Ostrower and Stone found mixed results regarding board recruitment criteria and boundary-spanning roles and responsibilities. Both studies found that in charter schools that emphasize recruiting board members based ability to acquire resources, knowledge of organization's mission, willingness to give time, or reputation in the community raise the activity level of boards with regard to performing certain boundary-spanning roles and responsibilities. Also, the studies have similar findings in that charter school boards that emphasize recruiting members based on a friendship to a current board member lowers the activity level of boards with regard to performing boundary-spanning roles and responsibilities.

The studies differ in their results in that Ostrower and Stone find that charter schools that emphasize recruiting board members based on financial and business skills, previously volunteering for the organization, ethnic diversity, and gender diversity are more active in performing certain boundary-spanning roles and responsibilities. However, this study found no relationship between the previously described variables and boundary-spanning roles and responsibilities. Also, they find that having membership in a group served by the organization lowers the boards' active level in performing some boundary-spanning roles and responsibilities (raising funds), while this study found a positive relationship between the two variables. These results emphasize how important board recruitment criteria are to how boards perform their boundary-spanning roles and responsibilities and shows. Also, the findings show that the external resources and community available to charter schools compared to all nonprofit organizations might explain the difference in how the two groups of boards perform boundary-spanning roles and responsibilities. These findings are examined further in Chapter 6.

Board Recruitment Criteria and Conforming Roles and Responsibilities

Ostrower and Stone did not directly examine conforming roles and responsibilities. However, this study found in charter schools that emphasize recruiting board members based on their business or financial skills, knowledge of the organization's mission, membership in a group served by the organization, or reputation in the community raise the activity level of boards with regard to performing conforming roles and responsibilities. Also, this study found that charter school boards that emphasize recruiting members based on a friendship to a current board member lowers the activity level of boards with regard to performing

conforming roles and responsibilities. These results, as well as the previously described relationships between board recruitment criteria and board roles and responsibilities, emphasize the importance board recruitment criteria have to how boards perform their roles and responsibilities. These findings allude to the assumption that the work that goes into acquiring board members with certain characteristics relates to what roles and responsibilities the board intends to perform for the organization, an idea examined further in Chapter 6.

5.5.9 Hypothesis 8: School Age

Older studies (Zald, 1987; Karmer, 1987) find that organizational age is explained as an important variable when it comes to predicting board power. One of the more notable studies from this group is from Zald (1969), which contends that board functioning changes with different phases of development (life-cycle changes). Ostrower and Stone (2010) examine the age of the organization in more detail in their contingency-based framework and find that age is positively associated with certain strategizing activities but unrelated to other board roles and responsibilities. Based on their research the following hypothesis was tested:

Hypothesis 8: The older the charter school, the greater the activity level of the charter school board in performing strategizing roles and responsibilities.

This study found no support for Hypothesis 8. There was no relationship between the age of the charter school and monitoring and strategizing roles and responsibilities (See Table 5.36). While unexpected, this finding does not deviate from Ostrower and Stone's research too much because they only found a relationship between the age of the nonprofit and one variable related to strategizing roles and responsibility. Based on this study's results and Ostrower and Stone's findings the age of an organization most likely does not have a

relationship with a board's activity level in performing monitoring and strategizing roles and responsibilities.

This dissertation also found no relationship between the age of the organization and boundary-spanning roles and responsibilities (See Table 5.37). While not examined in the Ostrower and Stone research, this study found that the older the charter school the greater the activity level of the charter school board in performing conforming roles and responsibilities (See Table 5.38). A possible explanation for these results is that as a charter school becomes more established and increases in age the more regulations and professional standards the charter school board has to uphold.

5.5.10 Hypothesis 9: School Size

This dissertation tested the hypotheses:

Hypothesis 9a: The larger the size of the charter school (based on annual expenses), the greater the activity level of the charter school board in performing monitoring and strategizing board roles and responsibilities and the lower the activity level in performing boundary-spanning roles and responsibilities.

Hypothesis 9b: The larger the size of the charter school (number of students), the greater the activity level of the charter school board in performing monitoring and strategizing board roles and responsibilities and the lower the activity level in performing boundary-spanning roles and responsibilities.

However, as previously explained, the variables of annual expenses and number of students, as well as the control variable of number of paid staff, had a multicollinearity problem. These variables were collapsed into one school-size variable. Hypotheses 9a and 9b examine the effect that annual expenses and number of students have on board roles and responsibilities in the same way, so these two hypotheses were collapsed into Hypothesis 9 to test the one school size variable in the models.

Hypothesis 9: The larger the size of the charter school, the greater the activity level of the charter school board in performing monitoring and strategizing board roles and responsibilities and the lower the activity level in performing boundary-spanning roles and responsibilities.

The above hypothesis is based on Ostrower and Stone's (2010) research where they find that organizational size was positively associated with boards performing certain monitoring and strategizing roles and responsibilities and negatively associated with certain boundary-spanning roles and responsibilities. They argue that this might lead to the conclusion that larger nonprofits are more likely to rely on professional staff to fulfill externally oriented roles. However, this study found no support for Hypothesis 9. This dissertation also found no relationship between the size of the charter school and monitoring and strategizing (See Table 5.36), boundary-spanning (See Table 5.37), and conforming (See Table 5.38) roles and responsibilities. While an unexpected result, the findings allude to the possible need to research charter school boards separately from all nonprofit boards in order to fully understand what roles and responsibilities they perform, a concept discussed further in Chapter 6.

5.5.11 Hypothesis 10: Stability

Agency theory explains that the principal-agent relationship changes when the organization's stability is called into question. Miller-Millesen (2003) explains that in a stable nonprofit a principal-agent relationship between an ED and a board is one which the board engages in monitoring activities. Ostrower and Stone (2010) test Miller-Millesen's assumptions and find that indicators of change in a nonprofit were unrelated to board roles and responsibilities. While Ostrower and Stone's empirical analysis does not support Miller-

Millesen's theoretical assumption, this dissertation retested Miller-Millesen's theoretical understanding in order to provide additional research about how an organization's stability influences board roles and responsibilities. The following hypothesis was tested:

Hypothesis 10a: Charter school boards raise their activity level with regard to performing monitoring roles and responsibilities when the organization is stable.

Also, Miller-Millesen examines organizational stability through resource-dependency theory. She argues that when the environment is stable and the organization does not experience change, the need for external information would be quite low. Based on this understanding, she explains that nonprofit boards are more likely to engage in boundary-spanning activities when the external environment is complex or when the organization is going through a crisis. Ostrower and Stone examine Miller-Millesen's assumptions and find mixed support. They find that organizations going through change were more likely to engage in community relationships but find no relationship to engagement in fundraising. Based on the mixed support from Ostrower and Stone's research, this dissertation retested Miller-Millesen's theoretical assumption through the following hypothesis:

Hypothesis 10b: Charter school boards raise their activity level with regard to performing boundary-spanning roles and responsibilities when the organization is unstable.

This study found no support for Hypotheses 10a and 10b. In regard to Hypothesis 10a, the results showed no relationship between a charter school's stability and performing monitoring and strategizing roles and responsibilities (See Table 5.36). These findings do follow the same results Ostrower and Stone find in their empirical analysis of Miller-Millesen's theoretical assumption. Based on this dissertation and Ostrower and Stone's

findings, evidence support that the stability of the organization does not influence how a board performs their monitoring and strategizing roles and responsibilities.

In regard to Hypothesis 10b, the study found the opposite relationship compared to Miller-Millesen's theoretical assumption. The findings showed that when a charter school is going through organizational changes of staff restructuring or hiring a new ED/principal, the board activity level lowers with regard to performing boundary-spanning roles and responsibilities (See Table 5.37). Ostrower and Stone find mixed results between organizational stability and boundary-spanning roles and responsibilities. Due to the fact that Ostrower and Stone find mixed results and that this dissertation found the opposite relationship compared to Miller-Millesen's theoretical assumption, the need for further research is necessary that possibly specifies the relationships between different types of transitions, not just overall stability, and board roles and responsibilities. Also, while not examined through Miller-Millesen's or Ostrower and Stone's research, this study found no relationship between organizational stability and conforming roles and responsibilities (See Table 5.38).

5.5.12 Hypothesis 11: Professionalization

Early literature (Mintzberg, 1983; Kramer, 198; Johnson et al., 1993) argues that the more professionalized an organization is the more power the ED has to oversee the organization compared to the board. These scholars show that professionalization served as the ED's ability to manage the organization. Miller-Millesen (2003) builds off the theoretical and empirical research of previous scholars and hypothesizes that the more professionalized the organization, the less likely the board will be involved in monitoring (and strategic) roles

and responsibilities. She also explains that if a board is not focusing on monitoring activities then it can center their attention on boundary-spanning activities. Thus, she hypothesizes that when an organization is professionalized, the more likely the board will be involved in boundary-spanning roles and responsibilities. Based on Miller-Millesen's research, this dissertation tested the following hypotheses:

Hypotheses 11a: Charter school boards lower their activity level with regard to monitoring roles and responsibilities when the executive staff is professionalized.

Hypotheses 11b: Charter school boards raise their activity level with regard to boundary-spanning roles and responsibilities when the executive staff is professionalized.

This study did not find support for Hypotheses 11a. This dissertation found no relationship between professionalization and monitoring and strategizing roles and responsibilities (See Table 5.36). While an unexpected result for this dissertation, Ostrower and Stone (2010) also find mixed results in their research. They find that professionalization (ED being a paid employee) was positively related to some monitoring roles (e.g., financial oversight, evaluating the ED) and negatively related to other monitoring roles (e.g., monitoring programs). A possible explanation about the differences in this dissertation's results (and Ostrower and Stone's findings) compared to Miller-Millesen's theoretical understanding is that the type of professionalization of the executive staff matters in how it influences monitoring and strategizing roles and responsibilities.

This study did find support for Hypothesis 11b. The findings showed that when the executive staff was professionalized (ED/principal is has professional licenses/degree), the board increased their activity in performing boundary-spanning roles and responsibilities

(See Table 5.37). While this study found support for the hypothesis, previous research from Ostrower and Stone found that professionalization (ED being a paid employee) was negatively associated with certain boundary-spanning roles and responsibilities. Again, an explanation about the differences in this dissertation's findings (and Miller-Millesen's theoretical understanding) compared to Ostrower and Stone's research is that the type of professionalization of the executive staff matters in how it influences boundary-spanning roles and responsibilities. This study tested two types of professionalization, an ED/principal as a paid staff member and having professional licenses and degrees, while Ostrower and Stone only examine the ED has a paid staff member. Finally, while not examined by Miller-Millesen or Ostrower and Stone, this study found professionalization (having an ED/principal as a paid employee) increased the board's activity level in performing conforming roles and responsibilities (See Table 5.38).

5.5.13 Hypothesis 12: Charter School Management

The type of management system of the organization is a unique factor to this research due to the fact that some charter schools are managed by EMOs or CMOs. Since EMOs and CMOs are established and professionalized organizations, this dissertation assumed that charter schools managed by these entities would have boards with similar characteristics as charter schools with a professionalized executive staff. Thus, the management hypotheses proposed for this dissertation followed the same understanding as the hypotheses proposed in the professionalization section. This study tested the following management hypotheses:

Hypotheses 12a: Charter school boards lower their activity level with regard to monitoring roles and responsibilities when the school is managed by an EMO or CMO.

Hypotheses 12b: Charter school boards raise their activity level with regard to boundary-spanning roles and responsibilities when the school is managed by an EMO or CMO.

This study found support for Hypothesis 12a but did not find support for Hypothesis 12b. The findings showed that when a charter school is managed by an EMO/EMO the board increased its activity in performing monitoring and strategizing roles and responsibilities (See Table 5.36). However, the study found no relationship between a charter schools being managed by an EMO or CMO and boundary-spanning or conforming roles and responsibilities (See Table 5.37 and 5.38). While the type of management system was examined as a separate variable, the hypotheses test assessed the type of management of the charter school through the lens of professionalization in the organization. The findings provide partial support for some of the previously described professionalization assumptions provided by Miller-Millesen (2003). Thus, the findings again support the argument that it is really the type of professionalization in an organization, not overall professionalization that matters in how it influences board roles and responsibilities.

5.5.14 Control Variables

While no hypotheses were proposed for any control variables, this section briefly addresses any significant control variables in the models and their contribution to the research. Findings discussed above with regard to hypotheses assumed other variables in the model, including the control variables, were statistically controlled. That is, previously discussed finding were conditional on the significant control variables discussed in this section.

This study found that a charter schools with combinations of school types (e.g., high/middle) compared to a school comprised of a specific school type (e.g., high) had a board that was more active in monitoring and strategizing roles and responsibilities. This leads to the possible conclusion that whereas a charter school that attempts to be more generalist in type of education provided (combination school) needs the assistance of its board more in strategizing for the school and monitoring the organization; specialist schools that focus on fewer grades have the capacity and capability within the organization (e.g., ED/principal) to provide more monitoring and strategizing oversight.

This dissertation also found that virtual charter schools had boards that were less active in performing monitoring and strategizing roles and responsibilities. A possible explanation for this finding is that since the charter school was not a “brick and mortar” organization then the board’s actual ability to provide oversight and strategize for the organization was diminished. Another possible explanation for this result is that charter schools that are virtual often tend to be managed by EMOs and CMOs, which had also similar findings regarding monitoring and strategizing board roles and responsibilities.

Finally, in regard to monitoring and strategizing roles and responsibilities a positive relationship was found with the average length of the charter school board meetings. It is possible to explain this finding through the intuitive understanding that the longer the board meeting is associated the more time being spent on oversight and strategizing for the organization. The only other relationship found with a control variable was between a charter school in a rural location and boundary-spanning roles and responsibilities. This dissertation found that a charter school in a rural location compared to a school in an urban location

raises the activity level of the board with regard to performing boundary-spanning roles and responsibilities. A possible reason behind this finding is that a charter school in a rural location needs to look outside the organization for additional resources more than schools in cities or suburbs.

Table 5.39: Summary of Findings for Hypotheses

Category of Variables		Hypothesis	Supported
External Conditions	Resources and Funding	Hypothesis 1a: Charter school boards raise their activity level with regard to performing boundary-spanning and conforming roles and responsibilities and lower their activity level with regard to performing monitoring and strategizing roles and responsibilities when the school receives government funding.	Partial Support
		Hypothesis 1b: Charter school boards raise their activity level with regard to performing boundary-spanning and conforming roles and responsibilities and lower their activity level with regard to performing monitoring and strategizing roles and responsibilities when the school receives private funding.	Not Supported
	Institutional and Regulatory (State Law)	Hypothesis 2: Charter school boards raise their activity level with regard to performing monitoring and strategizing roles and responsibilities and lower their activity level with regard to performing conforming roles and responsibilities when state legislation provides higher levels of autonomy from bureaucratic constraints.	Not Supported
Board Attributes	Board Size	Hypothesis 3a: Charter school board size will not have any relationship to the activity level of the charter school board in performing monitoring, strategizing, or conforming roles and responsibilities.	Partial Support
		Hypothesis 3b: The larger the size of the charter school board, the greater the activity level of the charter school board in performing boundary-spanning roles and responsibilities.	Supported
	ED/Principal Voting Member	Hypothesis 4a: Charter school boards lower their activity level with regard to performing monitoring roles and responsibilities when the ED/principal is a voting member of the board.	Supported
		Hypothesis 4b: Charter school boards lower their activity level with regard to performing strategizing roles and responsibilities when the ED/principal is a voting member of the board.	Supported
		Hypothesis 4c: Charter school boards lower their activity level with regard to performing boundary-spanning roles and responsibilities when the ED/principal is a voting member of the board.	Not Supported
	Board Demographics	Hypothesis 5a: The higher the percentage of female board members on a charter school board, the greater the activity level of a charter school board in performing strategizing board roles and responsibilities.	Not Supported
		Hypothesis 5b: The higher the percentage of female board members on a charter school board, the greater the activity level of a charter school board in performing boundary-spanning board roles and responsibilities.	Not Supported
		Hypothesis 6: The higher the percentage of racial and ethnic minorities on a charter school board will not have any relationship to activity level of the charter school board in performing any board roles and responsibilities.	Supported
	Corporate Board Members	Hypothesis 7: The higher the percentage of corporate board members that sit on a charter school board, the greater the activity level of a charter school board in performing monitoring roles and responsibilities.	Not Supported
	Recruitment	No Hypotheses	
Internal Org. Charcs.	Age	Hypothesis 8: The older the charter school, the greater the activity level of the charter school board in performing strategizing roles and responsibilities.	Not Supported
	School Size	Hypothesis 9a: The larger the size of the charter school the greater the activity level of the charter school board in performing monitoring and strategizing board roles and responsibilities and the lower the activity level in performing boundary-spanning roles and responsibilities.	Not Supported
	Stability	Hypothesis 10a: Charter school boards raise their activity level with regard to performing monitoring roles and responsibilities when the organization is stable.	Not Supported
		Hypothesis 10b: Charter school boards raise their activity level with regard to performing boundary-spanning roles and responsibilities when the organization is unstable.	Not Supported
	Professionalized	Hypotheses 11a: Charter school boards lower their activity level with regard to monitoring roles and responsibilities when the executive staff is professionalized.	Not Supported
		Hypotheses 11b: Charter school boards raise their activity level with regard to boundary-spanning roles and responsibilities when the executive staff is professionalized.	Supported
	Management	Hypotheses 12a: Charter school boards lower their activity level with regard to monitoring roles and responsibilities when the school is managed by an EMO/CMO.	Supported
		Hypotheses 12b: Charter school boards raise their activity level with regard to boundary-spanning roles and responsibilities when the school is managed by an EMO/CMO.	Not Supported

5.6 Summary of Chapter 5

Chapter 5 provided an overview of all independent variables in the dissertation. Also Chapter 5 assessed bivariate correlations for multicollinearity in the study. Finally, Chapter 5 provided and explained the results of the charter school board framework using multiple linear regressions and tested the hypotheses proposed in Chapter 2.

5.7 Preview of Chapter 6

Chapter 6 provides a summary of the overall findings. Chapter 6 discusses how the dissertation contributed the charter school governance and overall nonprofit governance literature. Also, limitations to the study are explained in Chapter 6. Finally, Chapter 6 provides directions for future research on charter school boards and boards for the entire nonprofit sector.

CHAPTER 6: CONCLUSION

6.1 Introduction

In the previous chapter, the descriptive statistics of the variables in the models and multicollinearity issues within the models were discussed. Also, the chapter examined how environmental factors, board attributes, and internal organizational characteristics influenced what roles and responsibilities charter school boards perform. This chapter provides an overall summary of this study's results, discusses limitations to this dissertation, and explains possible avenues for future research. The remainder of this chapter is divided into five sections:

1. Overview of research questions;
2. Summary of findings;
3. Contribution of the research;
4. Study limitations; and
5. Directions for future research.

6.2 Overview of Research Questions

An emerging consensus in the literature that exists on nonprofit governance is that there is no "one-size-fits-all" model of nonprofit boards. This study furthered that discussion by examining a specific subsector of nonprofits, charter schools, and comparing their board roles and responsibilities and factors that influence these roles and responsibilities with previous research on the overall nonprofit sector. In Chapter 1, two research questions were proposed to examine charter school board roles and responsibilities. These research questions are examined further in this section and Section 6.3.

6.2.1 Research Question 1

This dissertation moved beyond discussing prescribed nonprofit board roles and responsibilities and examined the actual governance of a specific nonprofit subsector. Also, by understanding the actual board roles and responsibilities of charter schools, this study discussed the differences between the governance of charter school boards and other types of nonprofit boards. This was done through comparing the findings of previous literature to the answer of the following research question:

1. What are common roles and responsibilities performed by charter school boards?

In this study, charter school executive directors (EDs) and principals were asked to identify, on a 10-point scale (0-not active to 10-very active), how actively involved their charter school board is in carrying out 12 board roles and responsibilities. The results showed limited variability in what roles and responsibilities charter school boards are performing more frequently than others (See Table 4.14). While there was a difference in the average activity levels (based on the 10-point scale) of charter school boards performing certain roles and responsibilities more than others, the average activity levels of each of the 12 board roles and responsibilities examined in the study were within 4 and 7 on the 10-point scale. These results showed that the average activity levels of charter schools performing each role and responsibility examined in the study were within the mid-range level of the 10-point scale.

However, while the average activity levels of charter school boards performing the 12 board roles and responsibilities were within the mid-range level on the 10-point scale, within that mid-range level there were certain board roles and responsibilities being performed more frequently than others. Specifically, board roles and responsibilities associated in the

previous chapters with the categories of monitoring, strategizing, and conforming were more prevalent compared to boundary-spanning roles and responsibilities. Thus, even though there was minor variability in how active charter school boards were in performing each of the 12 board roles and responsibilities, the results did indicate that charter school boards were more active in performing roles and responsibilities categorized by monitoring and strategizing and certain conforming roles (assuring legal compliance for the organization and meeting professional standards for the organization) compared to roles and responsibilities associated with boundary-spanning (advancing the organization's public image, developing community relationships, and enlisting financial resources). The reason why charter school boards perform boundary-spanning roles and responsibilities less frequently than other roles and responsibilities is because charter schools rely predominately on government allocated funding (See Table 5.2). Since charter schools have a stable form of funding, the board does not have to be as active in performing boundary-spanning roles and responsibilities.

While Ostrower and Stone (2010) do not examine all of 12 board roles and responsibilities incorporated in this study, in their examination of a national sample of nonprofits (having at least \$25,000 in annual receipts) they find "a great deal of heterogeneity in how actively boards handle even the most basic board roles" (907). For example, they explain that "about one third of boards are very actively engage in fundraising, one third are somewhat active, and one third are not very or not at all active" (907). This dissertation's results compared to Ostrower and Stone's study showed that charter school boards activity level in performing board roles and responsibilities differs from the entire nonprofit sector. The homogeneity in how actively charter school boards perform roles and

responsibilities can possibly be explained because the boards have similar institutional environments (due to isomorphic pressures) and organizational characteristics causing the boards to act in a similar manner. Also, another possible reason that Ostrower and Stone find a great deal of heterogeneity in how actively all nonprofit boards handle their roles and responsibilities is because their sample is made up of several different types of organizations that have different institutional environments and organizational characteristics acting on the boards.

This study showed that to better understand what roles and responsibilities nonprofit boards actually perform it is beneficial to examine a specific type of nonprofit or a subsector within the nonprofit field. The nonprofit sector is made up of many diverse subsectors and types of nonprofits that limit the ability of researchers to develop overarching conclusions about the field, in this case the governance of nonprofit boards. In order to move the field beyond discussing prescribed board roles and responsibilities for nonprofit boards, more analysis is needed to better understand what board roles and responsibilities are being performed by specific types of nonprofits or subsectors within the nonprofit field.

6.2.2 Research Question 2

Based on a better understanding of the actual roles and responsibilities performed by charter schools, answered in Research Question 1, this dissertation attempted to identify what factors influence charter school boards in performing some roles and responsibilities more actively than others. This was examined through the following research question:

2. What is the relative importance of external environmental conditions, board attributes, and internal organizational characteristics in accounting for differences among charter schools in performing board roles and responsibilities?

In Chapter 5, Tables 5.36, 5.37, and 5.38 showed that at least one variable within each of the categories of external environmental conditions, board attributes, and internal organization characteristics was associated with how actively charter school boards engage in certain roles and responsibilities. Overall, variables associated with board attributes had the strongest relationship to how actively charter school boards performed its roles and responsibilities. However, variables associated with external environmental conditions had almost no relationship to how active charter school boards performed its roles and responsibilities. Also, variables associated with internal organizational characteristics for charter schools had some relationship to board roles and responsibilities but these results differed considerably from previous research examining nonprofits. Overall, the results showed that the type of nonprofit or the subsector of nonprofit needs to be considered when examining the influence external environmental conditions and internal organization characteristics have on board roles and responsibilities. The dissertation presented findings that concluded that while charter schools are nonprofits in name (or tax-status), how factors, specifically organizational factors (environmental and internal), influenced their board roles and responsibilities are different compared to other nonprofits. The next section provides an in-depth discussion regarding how variables within each factor influenced charter school boards in performing certain roles and responsibilities.

6.3 Summary of Findings

The following subsections provide an in-depth discussion regarding how variables representing the categories of external environmental conditions, board attributes, and

internal organization characteristics influenced charter school boards in performing certain roles and responsibilities. The subsections discuss how and why findings from this study support and differ from previous research. Also, variables examined in this study, but not found in previous research, are explained.

6.3.1 External Environmental Conditions

Out of three hypotheses proposed for variables associated with external environmental conditions, only one hypothesis found minor support. Table 6.1 shows how variables associated with external environmental conditions influenced monitoring and strategizing, boundary spanning, and conforming board roles and responsibilities.

Table 6.1: External Environmental Factors Effect on Board Roles and Responsibilities

Categories of Variables		Independent Variables	Monitoring and Strategizing	Boundary Spanning	Conforming
External Environmental Conditions	Resources and Funding	Student Fees and Charges			
		Gov. Grants/Contracts			
		Foundation Grants/Contracts			+
	Institutional and Regulatory (State Law)	Donations			
		Low Autonomy			
		Medium Autonomy			
	High Autonomy				

+ Denotes positive relationship (significant finding)

- Denotes negative relationship (significant finding)

Findings Supporting Previous Research

In terms of resources and funding, this dissertation found that charter schools that received government grants and contracts were significantly related to a raise in activity level with regards to boards performing conforming roles and responsibilities. This finding supports Miller-Millesen’s (2003) assumption that when the organization receives external

funds (government funds) their boards are more active in performing external (e.g. conforming) roles and responsibilities.

Findings Differing from Previous Research

In terms of resources and funding, this study found no support that the type of funding a charter school receives influenced how active the board is in performing monitoring and strategizing and boundary-spanning roles and responsibilities. Also, this dissertation found no relationship between student fees and charges, foundation grants and contracts, and donations and conforming roles and responsibilities. These findings differ considerably from the literature that has examined how types of funding and resources relate to nonprofit board roles and responsibilities. Based on theoretical assumptions (Pfeffer and Salancik, 1978; Middleton, 1987) and qualitative research, Miller-Millesen (2003) suggested that nonprofit boards are more likely to focus on external (boundary-spanning and conforming) than internal (monitoring and strategizing) roles and responsibilities when boards receive external funding (See Table 5.39, Hypotheses 1a and 1b). However, this dissertation for the most part did not support Miller-Millesen's research on funding and resources.

This study's results did not support other research in the field suggesting a relationship between nonprofit funding and board governance. Brown and Guo's (2010) research found results similar to Miller-Millesen that nonprofits that operate in resource-constrained environments are more likely to have boards that perform more resource development. Ostrower and Stone (2010) found only partial support for Miller-Millesen's research that external funding (private and government) was related to certain boundary-

spanning roles and responsibilities but unrelated to internally (monitoring and strategizing) oriented roles and responsibilities. As previously stated, this study differs from previous research and found mostly no relationship between the types of funding a charter school received and board roles and responsibilities.

Charter schools rely mostly on government allocated dollars and do not have to rely as much on additional external funds or internal funds, which is a possible explanation of the differences between previous research and this study. Since charter schools have a stable form of funding, there is less of an effect on how funding and resources influence boards to perform its roles and responsibilities. However, these results suggest that research regarding nonprofit funding and research in relationship to board roles and responsibilities needs to be examined based on the type of nonprofit.

In terms of the institutional and regulatory environment, this dissertation examined the state's regulatory environment for charter schools and found no relationship to board roles and responsibilities. This study found that the public policy environment based on the level of autonomy from bureaucratic controls afforded to charter schools did not have any relationship to any board roles and responsibilities. However, previous research (Miller-Millesen, 2003; Ostrower and Stone, 2010; Brown and Guo, 2010) finds environmental conditions to have some effect on how other types of nonprofit boards perform certain roles and responsibilities. For example, Ostrower and Stone found that environmental conditions were primarily influenced by externally oriented roles (boundary-spanning).

A possible explanation for the differences between this study and previous research regarding the institutional and regulatory environment is that the variable examined in this

study is not comparable to the variables examined in previous studies (Miller-Millesen, 2003; Ostrower and Stone, 2010; Brown and Guo, 2010). The institutional and regulatory environment is contingent on the specific organization examined. Thus, one would expect boards to act differently based on the specific environment connected to that type of organization. However, the previous studies all emphasize the need for more research around this topic. Overall, variables within external environmental conditions category were mostly found to have no relationship to charter school board roles and responsibilities. Thus, this dissertation shows that while charter schools are nonprofits, the influence their external environmental conditions have on their boards performing certain roles and responsibilities differ compared to other types of nonprofits. Overall, the results showed that the type of nonprofit or the subsector of nonprofit needs to be considered when examining the influence external environmental conditions have on board roles and responsibilities.

6.3.2 Board Attributes

Board attributes have the strongest relationship to how actively charter school boards are in performing certain roles and responsibilities. Out of nine hypotheses proposed for variables in the board attributes category, five hypotheses were found to be partially or fully supported. This also does not take into account the relationships found between board recruitment criteria and board roles and responsibilities since no hypotheses were proposed for these variables. Table 6.2 shows how variables associated with board attributes influenced monitoring and strategizing, boundary-spanning, and conforming board roles and responsibilities.

Table 6.2: Board Attributes Effect on Board Roles and Responsibilities

Categories of Variables		Independent Variables	Monitoring and Strategizing	Boundary Spanning	Conforming	
Board Attributes	Board Size	Number of Board Members	+	+		
	ED/Principal Voting Member	ED/Principal Voting Member	-			
	Board Demographics	Percent Minority				
		Percent Female				
	Corporate Board Members	Percent Corporate Members		+		
	Recruitment Criteria	Ability to Acquire Resources			+	
		Business or Financial Skills		+		+
		Knowledge of Org. Mission		+	+	+
		Previously Volunteered for Org.				
		Willingness to Give Time		+	+	
		Member of Group Served by Org.		+	+	+
		Reputation in Community			+	+
		Friend of Current Board Member		-	-	-
Racial or Ethnic Diversity						
Gender						

+ Denotes positive relationship (significant finding)
 - Denotes negative relationship (significant finding)

Findings Supporting Previous Research

This dissertation found that the larger the charter school board, the greater the activity level in performing boundary-spanning roles and responsibilities. This dissertation’s findings align with previous research (Abzug et al., 1993; Bowen, 1994; Miller-Millesen, 2003; Ostrower and Stone, 2010) that finds that board size was related to certain boundary-spanning roles and responsibilities (i.e., acquiring resources). This finding was expected since the more members that serve on a board the more avenues there are for connections to resources outside of the organization.

This study found that having an ED/principal serve as a voting member on the charter school board was negatively associated with monitoring and strategizing roles and responsibilities, and unrelated to boundary-spanning roles and responsibilities. These findings are somewhat consistent with previous literature (Ostrower and Stone, 2010) and

suggest that having an ED/principal as a voting charter school board member undermines the governance responsibilities of the board (Ostrower, 2007), but does not influence how boards perform other roles and responsibilities.

In terms of board demographics, this dissertation found that the percentage of minorities on charter school boards was unrelated to monitoring and strategizing and boundary spanning board roles and responsibilities. Previous research is limited on how racial and ethnic diversity influences board roles and responsibilities, but this study's findings were consistent with Ostrower and Stone's (2010) research.

In terms of board recruitment criteria, this dissertation found strong relationships between charter school boards' recruitment criteria and board roles and responsibilities. This study found that charter schools that recruit board members based on finance and business skills, knowledge of the organization's mission, willingness to give time, membership in a group served by the organization, or reputation in the community raises the activity level of boards with regard to performing certain monitoring and strategizing roles and responsibilities. Also, the study found that recruiting members based on a friendship to a current board member lowers the activity level of boards with regard to performing monitoring and strategizing roles and responsibilities.

Additionally, this dissertation found that charter schools that emphasize recruiting board members based on their ability to acquire resources, knowledge of organization's mission, willingness to give time, membership in group served by the organization, or reputation in the community raises the activity level of boards with regard to performing certain boundary-spanning roles and responsibilities. Also, the study found that charter

school boards that emphasize recruiting members based on a friendship to a current board member lowers the activity level of boards in performing boundary-spanning roles and responsibilities.

Previous research (Miller, 2003; Ostrower and Stone, 2010) also stresses the importance of a nonprofit board's recruitment strategy in relationship to the board roles and responsibilities that are performed. This dissertation and Ostrower and Stone found somewhat similar results regarding how different types of board recruitment criteria influence board roles and responsibilities. This suggests that the work that goes into acquiring board members with certain traits relates directly to what roles and responsibilities the board will undertake, a concept discussed later on in this chapter.

Findings Differing from Previous Research

This dissertation found that the larger the charter school board, the greater the activity level in performing monitoring and strategizing roles and responsibilities. This deviates from previous research (Ostrower and Stone, 2010). Ostrower and Stone found no relationship between board size and monitoring and strategizing roles and responsibilities. A possible explanation for the difference between this study's finding and previous research is that the larger the charter school board, the more likely it is made up of members (e.g. parents) who are served by the school. Since a larger charter school board might have more parents as members, the board would be more likely to monitor the organization and develop strategies to ensure the school's success because it directly relates to their children's wellbeing.

In terms of board demographics, this dissertation found that the percent of females on charter school boards were unrelated to board roles and responsibilities. Research is mixed

on how gender diversity influences board roles and responsibilities. Some scholars (Bradshaw et al., 1996; Siciliano, 1996) find gender diversity is negatively associated with roles associated with obtaining resources, while others (Ostrower and Stone, 2010) find that the percentage of females on a nonprofit board are positively associated to boundary-spanning and strategizing roles and responsibilities. The results of this study found no relationship between percent of females and board roles and responsibilities, suggesting that gender influences on board behavior is contingent on additional factors, possibly organization type.

This dissertation found that the higher the percentage of corporate board members the greater the charter schools board's activity level in performing boundary-spanning roles and responsibilities. Also, this study found no relationship between this variable and monitoring and strategizing roles and responsibilities. The relationship between nonprofit board members on corporate boards and board roles and responsibilities has not been heavily researched; however, Ostrower and Stone (2010) find very different results. They find that having corporate board members on a nonprofit board raised the activity level in performing financial oversight (monitoring roles and responsibilities) but did not influence boundary-spanning roles and responsibilities. While this study and Ostrower and Stone's findings are not aligned, a possible explanation for this study's finding is that that having members of the charter school board who also sit on corporate boards raises the potential for external relationships for the board, which is shown in the relationship between this variable and boundary-spanning roles and responsibilities. Also, since Ostrower and Stone only find a relationship between corporate board members and one monitoring roles and responsibility

(i.e., financial oversight), the fact that this study found no relationship is not surprising since this study was examining the overall construct of monitoring and strategizing roles and responsibilities.

New Findings from This Study

This dissertation examined how board attributes influenced the dependent variable of conforming roles and responsibilities. Since very few studies have included this dependent variable in their research, this study examined the variable through an exploratory lens. This section explains how variables associated with board attributes influenced conforming roles and responsibilities when previous research has not examined the relationships.

This study found no relationship between board size and conforming roles and responsibilities. While no other studies examined this relationship, a possible explanation for this finding is that regardless of board size a charter school board has to perform conforming roles and responsibilities in order to operate as a school. Thus, the school having a small board compared to large board really does not have an effect on the board performing conforming roles and responsibilities.

This dissertation found no relationship between this variable and conforming roles and responsibilities. While no other studies examined this relationship, a possible explanation for this finding is that regardless of having the ED/principal serve as a voting member the board still needs to perform the same conforming roles and responsibilities in order to maintain legitimacy and credibility as an organization. Thus, having the ED/principal serve as a voting member does not effect the board in performing conforming roles and responsibilities.

In terms of board demographics, this dissertation found that the percentage of minorities and percentage of females on charter school boards was unrelated to conforming board roles and responsibilities. In terms of having charter school board members that also sit on corporate boards, this study found no relationship between this variable and conforming roles and responsibilities.

This dissertation found that charter schools that emphasize recruiting board members based on their business or financial skills, knowledge of the organization's mission, membership in a group served by the organization, or reputation in the community raises the activity level of boards with regard to performing conforming roles and responsibilities. Also, this study found that charter school boards that emphasize recruiting members based on a friendship to a current board member lowers the activity level of boards with regard to performing conforming roles and responsibilities. These findings demonstrate the importance board recruitment criteria have on a board performing conforming roles and responsibilities. This is consistent with how board recruitment criteria influenced other board roles and responsibilities in this study and previous research.

Overall, variables within board attributes category had a strong relationship to charter school board roles and responsibilities. These results are consistent with previous research (Miller-Millesen, 2003; Ostrower and Stone, 2010) that finds board attributes to have some of the largest effects on how nonprofit boards perform certain roles and responsibilities. This also explains why a review of the research (Ostrower and Stone, 2006) shows board composition to be of growing interest in nonprofit board literature because of how much it matters to the overall functioning of the board. Thus, this dissertation shows that one area

that charter school governance research and previous nonprofit governance research supports similar conclusions is the relationship between board attributes and board roles and responsibilities.

6.3.3 Internal Organizational Characteristics

Internal organizational characteristics have some relationship to how active charter school boards are in performing certain roles and responsibilities. However, out of eight hypotheses proposed for variables in the internal organization characteristics category, only two hypotheses were supported. The findings from this dissertation were somewhat inconsistent with previous research (Miller-Millesen, 2003; Ostrower and Stone, 2010) of similar variables. Table 6.3 shows how variables associated with internal organizational characteristics influenced monitoring and strategizing, boundary spanning, and conforming board roles and responsibilities.

Table 6.3: Internal Organizational Characteristics Effect on Board Roles and Responsibilities

Categories of Variables		Independent Variables	Monitoring and Strategizing	Boundary Spanning	Conforming	
Internal Organizational Characteristics	Age	School Age			+	
	School Size	School Size				
	Stability	Large scale expansion of programs		-		
		Internal Staff Structure		-		
		Hiring new ED/Principal				
	Professionalization	ED/Principal is a Paid Employee			+	+
		ED/Principal has Professional Licenses/Degrees				
	Management	School is Managed by EMO/CMO		-		

+ Denotes positive relationship (significant finding)

- Denotes negative relationship (significant finding)

Findings Supporting Previous Research

In terms of professionalization, this dissertation found that when charter schools have a professionalized ED/principal (having professional licenses/degrees), the charter school boards' activity level is higher with regard to performing boundary-spanning roles and responsibilities. The proposed professionalization hypothesis (see Table 5.39, Hypothesis 11b) in this dissertation was based on Miller-Millesen's (2003) previous research and theoretical understanding that nonprofits raise their activity level in performing boundary-spanning roles and responsibilities when the executive staff is professionalized. This dissertation found support that charter schools raise their activity level in performing boundary-spanning roles and responsibilities when the ED/principal is professionalized.

Findings Differing from Previous Research

This dissertation found no relationship between the age of a charter school and monitoring and strategizing and boundary-spanning board roles and responsibilities. However, this study did find that the older the charter school the greater the activity level of its board in performing conforming roles and responsibilities. These findings only partially support previous arguments by Miller (2003), who explains that all roles and responsibilities of a board change over time as an organization matures. These findings also support other researchers examining the life cycle of boards in both nonprofits (Mathiasen, 1999; Wood, 1993) and private organizations (Zahra and Pearce, 1989), who find that when the board transitions to different life cycles, there is a corresponding shift in governance roles and responsibilities.

A possible explanation for the difference in findings is that the actual relationship between organizational age and board roles and responsibilities is contingent on the type of organization being examined. Ostrower and Stone (2010) find very little relationship between organizational age and board roles and responsibilities when examining the entire sector. They find that as a nonprofit gets older the more active its board is in one role and responsibility, setting policy. Also, Dart et al. (1996) find mixed results between nonprofit board life cycles and board functions. Thus, this study's findings compared to previous research emphasize the need to better understand the relationship between these variables.

This dissertation found no relationship between the size of the charter school and monitoring and strategizing and boundary-spanning roles and responsibilities of the board. These findings do not match previous research of Ostrower and Stone (2010), who found that as nonprofits increase in size they are more likely to perform monitoring and strategizing roles and responsibilities and are less likely to perform boundary-spanning roles and responsibilities.

A possible explanation for the differences between this study's findings and previous research regarding monitoring and strategizing behavior is that increasing the student body for the school would not change how the board monitors and strategizes for the school. Whether there are 100 students in the school or 1,000 students, the overall goal for the organization of educating the students and the accompanied board roles and responsibilities for this goal does not change. While not examined in this study, if the school was to change from a K-6 school to a K-12 school then an increase in size due to additional grades being

taught could influence board roles and responsibilities; however, this study's results show that an increase in school size alone does not influence board roles and responsibilities.

An explanation for the differences between this study's findings and previous research regarding boundary-spanning board roles and responsibilities is that since charter school funds are based on the amount of students in the school, increasing the size of the school does change the need for boundary-spanning roles and responsibilities for the board. Unlike other organizations, increasing the size of a charter school does add additional strain on resources since charter schools are allocated government dollars based on the amount of students. Overall, the differences in findings suggest that while charter schools are nonprofits, the influence their size has on their boards performing certain roles and responsibilities differs compared to other types of nonprofits.

In terms of organizational stability, this dissertation found that when charter schools are going through organizational changes (e.g., restructuring staff and hiring new ED/principal) their board's activity level is lower with regard to performing boundary-spanning roles and responsibilities. Also this study found no relationship between organizational stability and monitoring and strategizing roles and responsibilities. The proposed organization stability hypotheses (see Table 5.39, Hypothesis 10a and 10b) in this dissertation were based on Miller-Millesen's (2003) previous research and theoretical understanding that nonprofits would raise their activity level in performing monitoring roles and responsibilities when the organization is stable; however, if the organizations are unstable, they raise their activity level in performing boundary-spanning roles and responsibilities. These hypotheses were not supported. While Ostrower and Stone (2010) find

no support for Miller-Millesen's hypotheses, their findings provide only partial support to this dissertation's results. A possible explanation between this dissertation finding the opposite relationship compared to Miller-Millesen's theoretical assumption is that the relationships between different types of transitions, not just overall stability, influence board roles and responsibilities differently. Miller-Millesen based her hypotheses on theory regarding how overall stability influenced boards while this dissertation examined the relationship between specific types of change within an organization and board roles and responsibilities.

In terms of professionalization, this study found no relationship between having a professionalized ED/principal and monitoring and strategizing roles and responsibilities. The proposed professionalization hypothesis (see Table 5.39, Hypothesis 11a) in this dissertation were based on Miller-Millesen's (2003) previous research and theoretical understanding that nonprofits lower their activity level in performing monitoring roles and responsibilities when the executive staff is professionalized. Ostrower and Stone (2010) find mixed support for Miller-Millesen's (2003) hypotheses in their research; however, their findings, compared to this dissertation also yield mixed results. The difference in findings from this dissertation compared to previous research suggests that while charter schools are nonprofits the influence that different types of professionalization have on boards performing certain roles and responsibilities somewhat differs compared to other types of nonprofits. A possible explanation of these differences in this dissertation and previous research is that the type of professionalization of the executive staff matters in how it influences board roles and responsibilities. This study examined different types of professionalization (e.g.

ED/principal has professional licenses) while previous studies have only based their argument on theory or a single type of professionalization (e.g. ED is a paid employee).

New Findings from This Study

This dissertation examined how internal organizational characteristics influenced the dependent variable of conforming roles and responsibilities. Other than Miller-Millesen (2003), very few studies have included this dependent variable in their research. This section explains how variables associated with internal organizational characteristics influenced conforming roles and responsibilities when previous research has not examined the relationships. Also, this section examines how the organization's management influenced board roles and responsibilities, a variable not included in previous governance frameworks.

This dissertation found no relationship between the size of the charter school and conforming roles and responsibilities. As discussed above, while the relationship found in this study does not match how size relates to board roles and responsibilities in other studies, charter schools are unique in that increasing the student body of the school does not change the overall goals and functions of the board.

In terms of organizational stability, while not examined through Miller-Millesen's (2003) or Ostrower and Stone's (2010) research, this study found no relationship between organizational stability and monitoring and strategizing and conforming roles and responsibilities. A possible explanation for this finding is that regardless of the changes occurring within the organization, the board still needs to perform the same conforming roles and responsibilities in order to maintain legitimacy and credibility as an organization.

In terms of professionalization, this study found that when charter schools have a professionalized ED/principal (ED is paid employee), the charter school board's activity level is lower with regard to performing conforming roles and responsibilities. A possible explanation for this result is that when the charter schools have a professionalized ED/principal, the board's conforming roles and responsibilities are being passed on to the professional ED/principal due to his or her professional qualifications.

This dissertation found that when a charter school is managed by an Education Management Organization (EMO) or a Charter School Management Organization (CMO), the charter school board's activity level is lower in regard to performing monitoring and strategizing roles and responsibilities. However, this study found no relationship between a charter school management by an EMO/CMO and boundary-spanning and conforming roles and responsibilities. This finding is somewhat expected since EMOs and CMOs are established and professionalized organizations; charter schools managed by these entities would have boards that are less involved in monitoring and strategizing board roles and responsibilities.

The variables within the internal organizational characteristics category had some relationship to charter school board roles and responsibilities. However, this dissertation's results compared to previous research (Miller-Millesen, 2003; Ostrower and Stone, 2010) differed considerably in regard to the influence that internal organizational characteristics had on board roles and responsibilities. Thus, this dissertation shows that while charter schools are nonprofits, the influence their internal organizational characteristics have on their boards performing certain roles and responsibilities differ compared to other types of

nonprofits. Overall, the results showed that the type of nonprofit or the subsector of nonprofit needs to be considered when examining the influence internal organizational characteristics have on board roles and responsibilities.

6.3.4 Overall Findings

This dissertation examined the research question: what is the relative importance of external environmental conditions, board attributes, and internal organizational characteristics in accounting for differences among charter schools in performing board roles and responsibilities? This study found that variables associated with board attributes had the strongest relationship to how actively charter school boards performed their roles and responsibilities. Also, variables associated with board attributes followed a similar understanding of previous research of how they influence board roles and responsibilities. However, variables associated with external environmental conditions had almost no relationship to how active charter school boards performed their roles and responsibilities, and these findings differed from previous research. Finally, variables within the category of internal organizational characteristics had some relationship to charter school board roles and responsibilities, but their results differed considerably from previous research regarding the influence that they had on board roles and responsibilities.

These results show that while it is possible to examine how board attributes influence all types of nonprofits in performing board roles and responsibilities, the specific conditions of a nonprofit based on their external environment and internal organization characteristics cannot be generalized across the entire nonprofit sector. This dissertation showed that variables associated with external environment conditions and internal organizational

characteristics for charter schools had some relationship to board roles and responsibilities but these results differed considerably from previous research examining nonprofits. Therefore, the type of nonprofit or the subsector of nonprofit needs to be considered when examining the influence external environmental conditions and internal organization characteristics have on board roles and responsibilities.

6.4 Contribution to the Literature

The findings from this dissertation contribute to academic literature on overall charter school governance research. Also, this study aids in building empirical research surrounding how nonprofits board roles and responsibilities are grouped based on theory and how certain factors influence nonprofit boards. Finally, this research provides some insight into how charter school boards can develop recruitment strategies based on the roles and responsibilities expect from their board.

6.4.1 Contribution to Charter School Governance Research

While previous charter school governance studies (Hill et al, 2002; Miron and Horn, 2003; Asher et al., 2003; Spark, 2009) have examined characteristics, composition, and board practices of some charter school boards, this study examined a national sample with a more in-depth look at the composition of charter school boards, along with what roles and responsibilities they perform, and what factors influences certain board practices over others. In terms of composition of the board, this study found that the average charter school board size was 7 members. However, charter schools in the United States have as few as 3 board member or as many as 21. Of the charter schools surveyed, 87.5% of the schools have the ED/principal as a voting member of the board.

The dissertation also examined the demographics of a charter school board. Of the schools surveyed, on average 27.46% of board members are minorities and 50.99% of members are female. Finally, on average 12.84% percent of charter school board members also sit on corporate boards. These findings provide a much larger overview of the composition of charter school board members in the United States compared to previous studies.

Previous charter school governance research (Hill et al, 2002; Miron and Horn, 2003; Asher et al., 2003; Spark, 2009) has only addressed what roles and responsibilities charter school boards perform, but this study takes a more in-depth look by examining how active they are in performing these roles. The results showed limited variability in what roles and responsibilities they are performing more frequently compared to others (See Table 4.14). While there is a difference in the average activity level (based on the 10-point scale) of charter school boards performing certain roles and responsibilities more frequently than others, the average activity level of each of the 12 board roles and responsibilities examined in the study fall within the mid-range of a 10-point scale. However, within that mid-range level there were certain board roles and responsibilities being performed more than others. The results from this dissertation show that charter school boards are more likely to perform monitoring and strategizing and conforming roles and responsibilities compared to boundary-spanning roles and responsibilities. Specifically, the findings indicate that charter school boards are more active in performing roles and responsibilities categorized monitoring and strategizing and certain conforming roles (e.g., assuring legal compliance for the organization and meeting professional standards for the organization) compared to roles and

responsibilities associated with boundary-spanning (e.g., advancing the organization's public image, developing community relationships, and enlisting financial resources).

Finally, this study adds to the research on charter school governance by showing what factors influence charter school boards to be more active in performing certain roles and responsibilities more than others. This study found charter school board attributes had the strongest relationship to how actively charter school boards performed their roles and responsibilities. However, the external environmental conditions of charter schools had almost no relationship to how active charter school boards performed their roles and responsibilities. Finally, the internal charter school characteristics had some relationship to charter school board roles and responsibilities.

Additionally, these findings contribute to the growing body of research on the environmental conditions of charter schools (Stone et al., 2010) and their influence on boards. This study found that neither the type of funds charter schools receive nor the state policy charter schools are under (based on how much autonomy the policy provides) matters to how charter school boards perform their roles and responsibilities. This finding is significant to charter school governance research because many point to state-level policy as a possible reason for differences among charter schools across the nation. However, this study shows that state policies did not contribute to how charter school boards perform their roles and responsibilities.

Also, this dissertation found that charter school board attributes had a strong relationship to board roles and responsibilities. This is consistent with previous nonprofit governance research that finds board attributes to have some of the largest effect on how

nonprofit boards perform certain roles and responsibilities. This study shows specifically that the size of the board and the board recruitment criteria for the charter school influence board performance of certain roles and responsibilities. This suggests that designing the board and recruiting board members with certain traits relate directly to what roles and responsibilities the charter school board will undertake.

6.4.2 Contribution to Theory-Based Typology of Nonprofit Board Roles and Responsibilities

Recent literature (Miller-Millesen, 2003; Brown, 2005) on nonprofit governance has attempted to move research beyond the common roles and responsibilities ascribed to nonprofit boards and explain them in the context of theoretical frameworks. Hillman and Dalziel (2003) explain that two of the most commonly used theoretical explanations for board roles and responsibilities are agency theory (Fama and Jenson, 1983; Miller-Millesen, 2003; Cornforth, 2004, Caers et al. 2006) and resource dependency theory (Pfeffer and Salancik, 1978; Miller-Millesen, 2003; Ostrower and Stone 2006; 2010; Brown and Guo, 2010). However, scholars have used additional theories to explain board governance: institutional theory (Miller-Millesen, 2003; Guo, 2007; Ostrower and Stone, 2010; Brown and Guo, 2010); stewardship theory (Low, 2006; Van Slyke, 2007); stakeholder theory (Mason et al., 2007); democratic theory (Cornforth and Edwards, 1999; Guo, 2007; Guo and Musso, 2007); group/decision processes theories (Zander, 1993; Brown, 2005); strategic management theory (Cornforth and Edwards, 1999); and transactional cost/ economic contracts theory (Speckbacher, 2008; Jergers, 2009).

Recently, scholars (Miller-Millesen, 2003; Cornforth, 2004) argue that it is unlikely a grand theory will be found that explains all aspects of nonprofit governance. These scholars argue that using multi-theory approach drawing from numerous theories are more useful in helping the field understand boards and their roles and responsibilities. Several researchers (Miller-Millesen, 2003; Cornforth, 2004; Guo and Acar, 2005; Wellens and Jegers, 2011; Van Puyvelde et al., 2012) suggest different multi-theory approaches to understanding nonprofit board governance. This study tested one of these multi-theory approaches for the dependent variable of this study.

This dissertation tested Miller-Millesen's (2003) multi-theory examining board roles and responsibilities. She explains that there are three dominant theories – agency theory, resources dependency theory, and institutional theory – that best explain various normative roles and responsibilities for nonprofit boards. Table 6.4 shows Miller-Millesen's theoretical typology for nonprofit board roles and responsibilities. This study used an adapted version of Miller-Millesen's theoretical typology to understand if the roles and responsibilities of charter schools can be grouped based on a multi-theory approach.

Table 6.4: Miller-Millesen’s Theory-Based Typology of Board Roles and Responsibilities

Monitoring (Agency Theory)	Boundary-Spanning (Boundary-Theory)	Conforming (Conforming)
<ul style="list-style-type: none"> • Determine Mission and Purpose • Oversee Programs and Services • Strategic Planning • Fiscal Control • Evaluate CEO 	<ul style="list-style-type: none"> • Reduce Uncertainty • Manage Problematic Interdependencies • Raise Money • Enhance Image 	<ul style="list-style-type: none"> • Assure Legal Compliance • Implement Mandates

This dissertation used an adapted version of Miller-Millesen’s theory-based typology in order to include other board roles and responsibilities examined in the literature (Cornforth, 2003, Ostrower and Stone, 2010; Brown and Guo, 2010) and to expand the multi-theory approach to include stewardship theory. Stewardship theory was included in the multi-theory approach because scholars (Eisenhardt, 1989; Davis et al., 1997; Miller, 2003; Van Slyke, 2007), including Miller-Millesen, argue that agency theory does not explain all of the possible relationships between the principal (e.g., charter school board) and the agent (e.g., ED/principal). Agency theory assumes there is goal conflict between a principal and an agent and because of this conflict, the principal needs to develop an incentive scheme or information system to make sure the agent is not opportunistic. In the case of the theory-based typology regarding charter schools, the board performs monitoring roles and responsibilities to ensure the ED/principal furthers the interest of the school.

However, Davis et al. (1997) argues that these assumptions of agency theory limit the generalizability of it and argue that an additional theory is necessary. They explain that stewardship theory is needed because it “defines situations in which managers are not motivated by individual goals, but rather are stewards whose motives are aligned with the objectives of their principals” (21). In a principal-steward (e.g., ED/principal) relationship, the focus for the principal is on developing strategies for long-term goal alignment (Van Slyke, 2007). In Miller-Millesen’s (2003) theory-based typology, monitoring (e.g., overseeing program and services) and strategic (e.g., strategic planning) roles and responsibilities are examined solely under agency theory. This study examined these concept separately using agency and stewardship theory to better understand if the principal and agent/steward relationships are different based on the roles and responsibilities performed by the charter school boards. Table 6.5 shows the theory-based typology for board roles and responsibilities examined in this study.

Table 6.5: Theory-Based Typology of Charter School Board Roles and Responsibilities

Monitoring (Agency Theory)	Strategizing (Stewardship Theory)	Boundary Spanning (Resource Dependency Theory)	Conforming (Institutional Theory)
<ul style="list-style-type: none"> • Selecting and evaluating the ED/principal • Overseeing the organization’s programs/ services • Providing fiscal and policy oversight 	<ul style="list-style-type: none"> • Defining the organization’s mission and purpose • Planning for the future of the organization through strategy and planning • Setting the organization’s policy 	<ul style="list-style-type: none"> • Advancing the organization’s public image • Developing community relationships • Enlisting financial resources 	<ul style="list-style-type: none"> • Assuring legal compliance for the organization • Implementing mandates for the organization • Meeting professional standards for the organization

This study asked survey respondents to identify, on a 10-point scale (0-not active to 10-very active), how actively involved the charter school’s board is in carrying out the 12 roles and responsibilities shown in Table 6.5. The responses to the 12 board roles and responsibilities were examined through an exploratory factor analysis (EFA) and, as previously shown in Table 4.15, the monitoring and strategizing roles factored as one construct, with the roles and responsibilities assigned to the boundary spanning and conforming construct factoring as expected. The roles and responsibilities assigned to the categories of monitoring (agency theory) and strategizing (stewardship theory) did not load on the prescribed categories based on theoretical assumptions (as shown in Table 6.6); however, they did load based on Miller-Millesen’s (2003) theory-based typology.

Table 6.6: New Theory-Based Typology of Charter School Board Roles and Responsibilities

Monitoring & Strategizing	Boundary-Spanning	Conforming
<ul style="list-style-type: none"> • Selecting and evaluating the ED/principal • Overseeing the organization’s programs/ services • Providing fiscal and policy oversight • Defining the organization’s mission and purpose • Setting the organization’s policy 	<ul style="list-style-type: none"> • Advancing the organization’s public image • Developing community relationships • Enlisting financial resources 	<ul style="list-style-type: none"> • Assuring legal compliance for the organization • Implementing mandates for the organization • Meeting professional standards for the organization

While previous researchers argue that board roles and responsibilities related to agency theory (monitoring) and stewardship theory (strategizing) should be examined separately, this dissertation found no evidence supporting the separation between these two categories. A possible explanation for the monitoring and strategizing categories factoring as one category, as shown in Table 6.6, is that this study showed only the roles and responsibilities of the relationship between the principal and agent/steward relationship and not the specific roles and responsibilities as defined by the internal workings of the relationship between the principal and agent/steward. However, it should be noted that this study only examined this through the lens of a specific type of nonprofit, charter schools, and not the entire sector. Finally, this study did provide support for the argument of how board roles and responsibilities (boundary-spanning and conforming) are categorized by resource dependency and institutional theories.

6.4.3 Contribution to Framework Examining Factors that Influence Nonprofit Boards

Several scholars (Ostrower and Stone, 2001; Cornforth, 2003a; Miller-Millesen, 2003; Ostrower and Stone, 2010) have created or adapted previous frameworks to examine how different types of factors influence board roles and responsibilities. This dissertation built off Miller-Millesen's (2003) and Ostrower and Stone's (2010) frameworks to better understand how factors, specifically external conditions, board attributes, and internal organization characteristics, influence charter school boards in performing certain roles and responsibilities more frequently than others. The results from this study add to the literature of previous frameworks examining factors that influence nonprofits board by:

1. Explaining board governance as a conditional phenomenon;

2. Emphasizing the importance of the relationships between board attributes and board roles and responsibilities;
3. Clarifying external and internal organization conditions and their relationships to board roles and responsibilities; and
4. Providing empirical analysis on what factors influence conforming roles and responsibilities.

First, while this dissertation found results similar to previous research (Miller-Millesen, 2003; Ostrower and Stone) on how board attributes were related to board roles and responsibilities, this research did not find that previous studies were similar to this dissertation in how external environmental conditions and internal organizational characteristics were related to board roles and responsibilities. Also, findings of this study are not generally supportive of Miller-Millesen's (2003) theoretical hypotheses on how certain factors influence nonprofit board roles and responsibilities. Thus, this dissertation supports an assumption provided by Ostrower and Stone (2010) that research needs to approach nonprofit board governance as a conditional phenomenon and expect different types of board roles and responsibilities to be influenced by certain factors based on the organization's specific circumstances. Overall, the results showed that the type of nonprofit or the subsector of nonprofit needs to be considered when examining the influence external environmental conditions and internal organization characteristics have on board roles and responsibilities. The dissertation's results showed that while charter schools are nonprofits in name (or tax-status), how factors influenced their board roles and responsibilities are different compared to other nonprofits.

Second, this dissertation contributed to the literature by finding that variables associated with the board attributes category had a strong relationship to charter school board roles and responsibilities. This is consistent with previous research (Miller-Millesen, 2003; Ostrower and Stone, 2010) that finds board attributes to have some of the largest effects on how nonprofit boards perform certain roles and responsibilities. These results emphasized the importance of board attributes in relationship to board roles and responsibilities, regardless of the type of nonprofit.

In addition, this study found that board recruitment criteria, an area that lacks empirical analysis, had some of largest effects on how active charter school boards are in performing roles and responsibilities. This dissertation showed that charter school governance research and previous nonprofit governance research is one area in which there are similar conclusions, which supports the need for additional research on how board attributes influence board performance in certain roles and responsibilities. Specifically, the results of this dissertation suggested that more research is needed around the work that goes into acquiring board members with certain traits. This type of research will continue to aid in building an empirical understanding of how recruitment criteria relates to what roles and responsibilities nonprofit boards perform.

Third, an area of the literature this dissertation contributed to is understanding how external conditions and internal organizational characteristics influence nonprofits. While this study found that nonprofit board governance should be viewed as a conditional phenomenon, frameworks (Miller-Millesen, 2003; Ostrower and Stone, 2010) as the ones tested in this study are still needed in order to better understand how factors influence

boards. Thus, through examining external conditions and internal organizational characteristics, the results in this study aid future studies in further defining the frameworks. This study was built on previous researchers suggestions that state policy regulations for nonprofits (Ostrower and Stone, 2010) need to be examined regarding their relationship with board roles and responsibilities. This dissertation examined the state regulation environment for charter schools and found no relationship to board roles and responsibilities. This dissertation found that the public policy environment based on the level of autonomy from bureaucratic controls afforded to charter schools does not have any relationship to any board roles and responsibilities. Future research needs to examine state policy regulations to better understand if this finding is conditional based on charter schools or if other types of state policy regulations of nonprofits have any relationship to board roles and responsibilities.

Also, previous frameworks (Miller-Millesen, 2003; Cornforth, 2003; Ostrower and Stone, 2010) have emphasized how internal organizational characteristics of professionalization and organizational stability influence board roles and responsibilities. However, previous research has not provided much in-depth analysis of these concepts, often examining them based on only one variable. This study attempted to expand these concepts and examine professionalization and organizational stability through multiple variables. The results showed that, compared to previous studies, the type of professionalization and organizational stability mattered in how it influences board roles and responsibilities. Thus, this dissertation showed that no assumption could be made for how overall professionalization or organizational stability influenced board roles and responsibilities. Future research needs to provide a more in-depth analysis of these variables

to better understand what types of professionalization and organizational stability influence board roles and responsibilities.

Finally, while previous scholars (Miller-Millesen, 2003; Ostrower and Stone, 2010, Brown and Guo, 2010) examine what factors influence monitoring, strategizing, and boundary-spanning roles and responsibilities, few scholars provide an in-depth analysis of how factors influence conforming roles and responsibilities. Ostrower and Stone do not include conforming roles and responsibilities in their study, and Miller-Millesen only discuss how certain factors (e.g., resources and funding) influence conforming roles and responsibilities. This study contributed to the literature by providing a more expanded model attempting to understand how factors are related to conforming board roles and responsibilities.

In terms of environmental external conditions of charter schools, this study found that receiving funding from government grants or contracts raises the board's activity level with regard to performing conforming roles and responsibilities. Also, this dissertation found that several board attributes were related to conforming roles and responsibilities. This study found that charter schools that emphasize recruiting board members based on their business or financial skills, knowledge of the organization's mission, membership in a group served by the organization, or reputation in the community raises the activity level of boards performing conforming roles and responsibilities. However, charter school boards that emphasize recruiting members based on a friendship to a current board member lowers the activity level in regards to boards performing conforming roles and responsibilities. Also, in terms of internal organization characteristics, this dissertation found that the older the charter

school, the more active the board is in performing conforming roles and responsibilities. Finally, the study found that a charter school having an ED/principal as a paid employee results in raising the activity level of the board performing conforming roles and responsibilities. The results show that frameworks examining factors influencing nonprofit boards need to include conforming board roles and responsibilities in order to obtain a complete understanding how board roles and responsibilities are influenced by different types of factors.

6.4.4 Contribution to Practitioners

This dissertation sought to fill a gap in the practitioner literature by providing information to charter schools and other nonprofits to better understand what factors need to be taken into account when considering what roles and responsibilities their boards perform. This dissertation showed that charter schools need to take into consideration board characteristics (e.g., size) and the types of members recruited to the board (e.g., board recruitment criteria) regarding what roles and responsibilities they expect their board to fulfill. Specifically, board members' knowledge of the organization's mission is by far one of the most important factors when it comes to how the board will perform certain roles and responsibilities.

6.5 Study Limitations

There are several limitations to this study. First, the generalizability of the findings presented here is limited because of differences that exist between the sample respondents and the non-respondents and overall population. The respondents of the survey compared to the non-respondents and the overall population represent schools that are older and larger in

size, which are often proxies for capacity to answer surveys. Also, compared to non-respondents and the overall population, combination schools (e.g., K-12 grade levels) are overrepresented in the sample. Due to these factors, users of these results must be careful in projecting any findings onto all charter schools. Due to nonresponse bias, this study should be seen as exploratory, not confirmatory, with regard to charter school board roles and responsibilities nationally.

A second limitation of this study was its response rate, 19.02%. Millar and Dillman (2011) explain that the average response rate of an email-only survey is 20.5%, similar to the response rate in this survey. Also, this study's response rate was similar to other national studies examining charter schools (Center for Educational Reform, 2013c; National Alliance for Public Charter Schools, 2012). However, a higher response rate would yield a more complete picture of charter school governance and would provide more confidence that the results from this dissertation are generalizable for all charter schools in the United States.

A third limitation was the wording of questions in this study's survey. While the survey was piloted before being administered nationwide and was built off of previous surveys (Ostrower, 2007), some questions could still be improved upon. Based on the wording of certain questions (e.g., board activity level in performing board roles and responsibilities), results of this study may have yielded significantly different results.

A fourth limitation was the potential for respondents to provide socially desirable answers. The study's findings may have a social desirability bias because of respondents answering survey items in a manner they expect the researcher or society to prefer. This may have led ED/principals to report that their boards are active in performing roles and

responsibilities when they are not. Further research should consider additional methods to control for this type of bias.

A fifth limitation of the generalizability of this study was that it only explored one type of nonprofit, charter schools. While the overall intent of this dissertation was to fill the gap in the literature on charter school governance, this study does project and compare results to the overall nonprofit sector. However, the generalizability of the findings from this dissertation should be limited to only charter schools in the United States.

A final limitation of this study was related to the statistical methods used. This dissertation employed the method of stratified sampling and used the default linear regression statistical procedures in SPSS. However, scholars recommend that when a sampling method other than simple random sampling is administered in a study, the “Complex Samples” module of SPSS should be used. This results in slightly different standard errors for this dissertation compared to a study using the complex samples module in SPSS.

6.6 Directions for Future Research

This study highlights important areas for future research. As previously stated, there is no one-size-fits-all governance framework for nonprofits. First, future research, as this study is attempting to do with charter schools, needs to focus on specific types of nonprofits or subsectors within the field of nonprofits in order to provide an inclusive understanding of what factors influence nonprofit boards to perform certain roles and responsibilities more frequently than others. Specifically, this study’s findings showed that the type of nonprofit or the subsector of nonprofit needs to be considered when examining the influence external environmental conditions and internal organization characteristics have on board roles and

responsibilities. The dissertation's results showed that while charter schools are nonprofits in name (or tax-status), how factors influenced their board roles and responsibilities are different compared to other nonprofits. Thus, future research should examine other types of nonprofits or subsectors within the field of nonprofits to examine if factors influence board roles and responsibilities similarly to how previous research shows the relationships or if the relationships are unique to that specific type/subsector of nonprofit.

Second, future research testing frameworks to examine what factors influenced board roles and responsibilities needs to incorporate additional factors beyond what is explained within this study and previous literature. As shown by the r-squared in this study's models, as well as the variance explained in the board roles and responsibilities in previous studies, more analysis is needed to find a better fitting model. Future research should build off previous frameworks and examine new variables associated with environmental external conditions, board attributes, and internal organizational characteristics of nonprofits and expand on current variables (e.g., professionalization, stability) used within the frameworks. Also, since this study found that variables associated with board attributes had the strongest relationship to how active charter school boards performed their roles and responsibilities but found that variables associated with external environment conditions and internal organizational characteristics had weak relationships to board roles and responsibilities, future studies should examine how interaction terms between organizational context (environmental and internal) and board attributes contribute to the framework.

Third, future research examining the overall framework of factors influencing board roles and responsibilities should continue to use a multi-theory approach drawing from

numerous theories to better understand nonprofit governance. Several researchers (Miller-Millesen, 2003; Cornforth, 2004; Guo and Acar, 2005; Wellens and Jegers, 2011; Van Puyvelde et al., 2012) suggest different multi-theory approaches to understanding nonprofit board governance. This dissertation adapted Miller-Millesen's (2003) multi-theory approach examining board roles and responsibilities to include agency theory, resources dependency theory, institutional theory and stewardship theory. Future research needs to continue the trend of using a multi-theory approach to examine board governance and expand the research beyond the previously used theories to incorporate more recent theories (e.g., stakeholder theory) found in the nonprofit governance literature.

Fourth, further research should examine the frameworks within the literature using more advanced statistical procedures than those employed in this study or previous studies. For example, examining the frameworks through a structural equation model would allow for confirmatory, rather than exploratory research, by testing to see if the model is valid. Incorporating more advanced statistical procedures into the research examining board governance frameworks will provide more engrained analysis supporting or disproving arguments of how certain factors influence board roles and responsibilities.

Fifth, future research examining charter school governance needs to focus more on how the external environmental conditions, specifically the institutional and regulatory environment, influence board roles and responsibilities. In this dissertation, the institutional and regulatory environment variable was based on the public policy environment of charter schools and not the general environment of all nonprofits. Specifically, this environmental variable examined the state charter school law, which was based on the amount of autonomy

from bureaucratic controls that was afforded to the school. This study used the annual state-by-state report card from the Center of Education Reform, grading each state's charter school legislation, in order to rank states based on which had the fewest and weakest restrictions (high levels of autonomy) on the formation and operation of charter school and which had the toughest restrictions (low levels of autonomy).

This study suggested that charter school boards raise their activity with regard to performing monitoring and strategizing roles and responsibilities and lower their activity in performing conforming roles and responsibilities when state legislation provides higher levels of autonomy from bureaucratic constraints. However, this study found no relationship between the autonomy level of charter schools, based on state law, and board roles and responsibilities. Since this is one of the first studies to examine how the institutional and regulatory environment of a charter school, based on state laws, influences board roles and responsibilities, more research is needed to better understand whether or not the findings of this study hold up. Future studies should examine charter school state laws not based on the year of a survey, as did this study, but based on the year that the charter school was incorporated because that possibly has a greater influence on their institutional and regulatory environment.

A sixth avenue for research regarding charter school governance is that future studies should incorporate within their frameworks how the roles and responsibilities performed by charter school boards influence the performance of the charter school. While understanding how a charter school board influences student performance within the school is needed, it would also be valuable to understand how a charter school board influences the overall

financial wellbeing of the school. This type of research would provide practical information to charter schools by explaining how charter school boards could make their roles and responsibilities within the school more valuable to the overall outcomes for the organization.

Finally, while this dissertation argues that future research should examine types or subsectors of nonprofits in order to provide an inclusive understanding of what factors influence nonprofit boards to perform certain roles and responsibilities, the framework used in this study offers a way to organize future research. Further studies should use this dissertation's governance framework in order to build off this study and previous studies (Miller-Millesen, 2003; Ostrower and Stone, 2010) that came before it. By building off these studies, an overall comparison of results can be made that will strengthen the growing body of research on nonprofit governance frameworks.

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APPENDICES

Appendix A: Charter School State Law Rankings

Table A-1: 2013 Charter School State Law Rankings and Scorecard

STATE	NUMBER OF CHARTER SCHOOLS	CHARTER SCHOOL LAW RANKING	CHARTER SCHOOL LAW SCORE	LEVEL OF AUTONOMY RANKING
District of Columbia	108	1	45	High
Minnesota	165	2	44	High
Indiana	77	3	43.5	High
Michigan	347	4	42	High
Arizona	554	5	41	High
New York	238	6	35.5	High
Florida	592	7	33	High
California	1103	8	32.5	High
Colorado	193	9	32.5	High
Idaho	44	10	32.5	High
Utah	93	11	32	High
Missouri	46	12	32	High
South Carolina	58	13	31	High
Wisconsin	278	14	30	High
Ohio	396	15	29.5	Medium
Louisiana	125	16	29	Medium
Georgia	125	17	29	Medium
Pennsylvania	183	18	28.5	Medium
Delaware	23	19	27.5	Medium
Oklahoma	24	20	26.5	Medium
New Mexico	96	21	26	Medium
Tennessee	46	22	25.5	Medium
Texas	448	23	25	Medium
Washington*	N/A	24	25	Medium
Massachusetts	84	25	24.5	Medium
Oregon	126	26	24	Medium
Nevada	32	27	24	Medium
North Carolina	123	28	23	Medium
New Jersey	96	29	23	Medium
Maine	2	30	23	Medium
Hawaii	32	31	20	Medium
Mississippi	0	32	20	Medium
Rhode Island	17	33	19.5	Low
Illinois	113	34	19	Low
Arkansas	39	35	19	Low
New Hampshire	17	36	18	Low
Alaska	28	37	13	Low
Connecticut	24	38	12.5	Low
Maryland	48	39	12	Low
Wyoming	4	40	12	Low
Virginia	4	41	9	Low
Iowa	5	42	9	Low
Kansas	19	43	8	Low
Total/Average	6175		25.84	

Note: Table based on data from The Center for Education Reform (2013b). The scores on this table are based on the status of each law in March, 2014. The total amount of points a state could score is 55. States with tie scores were ranked according to secondary factors including the effectiveness of their law, and the number of schools currently operating.

*Washington passed their Charter School Law in 2012 but the state has not currently issued any charters.

Appendix B: Charter School Governance Survey

A. INFORMED CONSENT

North Carolina State University **INFORMED CONSENT FORM for RESEARCH**

Title of Study: Understanding Factors Influencing the Behavior of Charter School Boards: A Contingency-Based Framework
Principal Investigator: Christopher A. Cody
Faculty Sponsor: RaJade M. Berry-James, Ph.D.

What are some general things you should know about research studies?

You are being asked to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. The purpose of research studies is to gain a better understanding of a certain topic or issue. You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those that participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher(s) named above.

What is the purpose of this study?

The purpose of this study is to understand why roles and responsibilities of some charter school board of directors differ compared to other charter school boards. This study will explore common roles and responsibilities of charter school boards and seek to understand the relative importance of internal organization characteristics, external environmental factors, and board attributes in accounting for differences among charter schools in their board roles and responsibilities. This research is important to the study of nonprofit organizations and charter schools as it seeks to better understand practices of nonprofit board of directors, specifically in the area of charter schools.

What will happen if you take part in the study?

If you agree to participate in this study, you will be asked to open and read an email invitation to participate in an online survey in the next two days. Next, you will be asked to open and read a second email containing consent information and then click on a link in this email to participate in a brief internet-based survey, which will last approximately 15 minutes.

Risks

The only foreseeable risk would be identification of the responses of participants by the researcher. However, no identifiable information will be collected from this research and no one will have access to files besides the researcher. After the data is collected, there will be no identifiable information of respondents in the dataset and any information presented from the dataset will only be reported in the aggregate.

Benefits

The research will inform nonprofit and education research on the relative importance of certain factors that account for the differences among charter schools in their board roles and responsibilities. The research will also increase knowledge about common roles and responsibilities of charter school boards and aid in understanding why some roles and responsibilities of some charter school board differ compared to other charter school boards. Products from this research, including the doctoral dissertation, will produce data on trends on the behaviors of nonprofit boards, specifically charter schools.

Confidentiality

The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely in password protected Microsoft Excel files on an encrypted password protected jumpdrive. Only the researcher knows the passwords. No identifiable information will be contained in these files when they are saved. No reference will be made in oral or written reports, which could link you to the study. You will NOT be asked to write your name on any study materials so that no one can match your identity to the answers that you provide.

Compensation

You will not receive anything for participating.

What if you have questions about this study?

If you have questions at any time about the study or the procedures, you may contact the researcher, Christopher A. Cody at cacody@ncsu.edu or (828) 246-3269.

What if you have questions about your rights as a research participant?

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator, Box 7514, NCSU Campus (919/515-4514).

Consent To Participate

“I have read and understand the above information. I have received a copy of this form. By clicking below, I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled.”

B. BOARD ATTRIBUTES

Q1. Approximately, how many voting board members currently serve on the board?

_____ # of voting board members

Q2. Approximately, how many meetings of the full board were held during the past year?

_____ # of meetings

Q3. On average, approximately what percentage of full board members attended these meetings?

_____ % of board members

Q4. On average, approximately how many hours did the full board meetings last this past year?

_____ # of hours

Q5. Is the Executive Director/Principal/School Administrator a voting member of the board?

_____ No

_____ Yes

Q6. Do parents of children in the charter school act as voting members of the board?

_____ No → Skip to Q7

_____ Yes

Q6B: How many parents of children in the charter school act as voting members of the board?

_____ # of parents that act as voting members of the board

Q7. On average, how long do voting board members sit on the board?

_____ # of years voting members sit on the board

Q8. How many members joined the board within the past two years? (If none, write '0')

_____ # of members

Q9. Is there a maximum and minimum number of board members stipulated in the organization's by laws?

_____ No → Skip to Q10

_____ Yes

Q9. What is the maximum and minimum number of board members stipulated in the organization's by-laws?

_____ maximum # of board members

_____ minimum # of board members

Q10. Does the board have an executive committee?

_____ No

_____ Yes

Q11. Does the board have a separate audit committee?

_____ No

_____ Yes

Q12. Does the board have standing (permanent) committees other than executive or audit committees?

_____ No → Skip to Q13

_____ Yes

Q12B. Please list all other standing board committees.

Q13. Are board members required to serve on one or more committees?

_____ No

_____ Yes

Q14. During the past year, were any board members paid a fee or honorarium for serving on the board? (Please do not include reimbursement for expenses.)

_____ No

_____ Yes

C. BOARD BEHAVIORS

Q15. How actively involved is your charter school’s board in carrying out the following functions:

Board Roles and Responsibilities	Not Active (0)	 (Sliding Scale 0-10)	Very Active (10)
A. Selecting and Evaluating the Executive Director/ Principal	0		10
B. Overseeing the organization’s mission and purpose	0		10
C. Providing fiscal and policy oversight	0		10
D. Defining the organization’s mission and purpose	0		10
E. Planning for the future of the organization through strategic planning	0		10
F. Setting the organization’s policy	0		10
G. Advancing the organization’s public image	0		10
H. Developing community relationships	0		10
I. Enlisting financial resources (i.e. fundraising, personal donations)	0		10
J. Assuring legal compliance for the organization	0		10
K. Implementing mandates for the organization	0		10
L. Meeting professional standards for the organization	0		10

Q15M. Please list any other function that your board is very actively involved in.

--

Q16. When was the last time the board reviewed and evaluated the organization's mission statement?

_____ Within the last year

_____ Within the last two years

_____ Within the last five years

_____ Within the last 10 years

_____ Over 10 years ago

Q17. How often does the board evaluate whether or not the organization is accomplishing its mission?

_____ Never

_____ Less than every two years

_____ Once every two years

_____ Every year

_____ More than once a year

Q18. Does the board require members to participate in fundraising by:

	No	Yes
A. Making a personal donation.		
B. Identifying donors and/or soliciting funds.		
C. Attending fundraising events		

Q19. During the past two years did the organization have a financial audit by an outside party?

_____ No → Skip to Q20

_____ Yes

Q19B. Was the board required to approve the audit?

_____ No 3

_____ Yes

D. BOARD RECRUITMENT CRITERIA

Q20. During the past two years, how important was each of the following in the selection of new board members

Recruitment Criteria	Not Important (0) Very Important (10)	
	← (Sliding Scale 0-10) →	
A. Ability to donate	0	10
B. Ability to fundraise	0	10
C. Business or financial skills	0	10
D. Knowledge of the organization's mission area	0	10
E. Previous volunteer work for the organization	0	10
F. Willingness to give time	0	10
G. Membership in group served by the organization	0	10
H. Reputation in the community	0	10
I. Friend or acquaintance of one or more current board members	0	10
J. Racial or ethnic diversity	0	10
K. Gender	0	10

Q20L. Please list any other very important factors in the selection of new board members.

E. BOARD COMPOSITION

Q21. How many board members are:

- _____ Hispanic/Latino
- _____ White (Non-Hispanic)
- _____ African-American or Black
- _____ Asian
- _____ Other (Please Specify)

Q22. How many board members are:

- _____ Male
- _____ Female

Q23. Please Estimate the number of board members in the following age groups: (*Your best guess is fine*)

- _____ Under 30
- _____ 31 – 40
- _____ 41 – 50
- _____ 51 – 60
- _____ 60 or older

Q24. Approximately, how many board members sit on corporate boards?

_____ # of board members that sit on corporate boards

Q25. Approximately, how many board members sit on other nonprofit boards?

_____ # of board members that sit on other nonprofit boards

F. ORGANIZATIONAL CHARACTERISTICS

Q26. How long has the charter school been in operation?

_____ # years in operations

Q27. How many full-time equivalent paid staff does the organization currently employ? (If none, please write '0').

_____ # full-time paid staff

Q28. Not counting members of the board, approximately how many volunteers does the organization currently have?

_____ # volunteers

Q29. How many students attend the charter school?

_____ # of students attending the charter school

Q30. Where is the charter school located?

_____ Rural Area

_____ Suburban Area

_____ Urban Area

Q31. In what state is your charter school located? _____ (Drop-down Box) _____

Q32. What is the name of your charter school? _____

Q33. Is the charter school you are the Executive Director/Principal/School Administrator of a virtual charter?

_____ No

_____ Yes

Q34. Which of the following grade levels does the charter school serve? (Check all that apply)

_____ Elementary School (K-5)

_____ Middle School (6-8)

_____ High School (9-12)

Q35. What percent of low-income individuals (below poverty income) do you estimate your organization serves?

_____ % of low-income individuals served by organization.

Q36. Is the Executive Director/Principal a paid professional staff member?

_____ No

_____ Yes

Q37. How many years has the Executive Director/Principal held that position?

_____ # of years

Q38. Does the Executive Director/Principal have a school administrator's license?

_____ No

_____ Yes

Q39. Does the Executive Director/Principal have a professional educator's license?

_____ No

_____ Yes

Q40. Does the Executive Director/Principal have an advance degree in leadership, administration, or management?

_____ No

_____ Yes

Q41. Is your organization currently planning major changes in any of the following areas?

	No	Yes
A. Large scale expansion of programs (i.e. incorporation of additional grade level; new academic or extracurricular programs)		
B. Internal staff structure		
C. Shift in mission		
D. Hiring new Executive Director/Principal		

Q41E. Please list any other major changes your organization is planning.

Q42. Does an Education Management Organization/Charter Management Organization manage the charter school?

_____ No

_____ Yes

Q43. What were the charter school's total operating expenses for your last fiscal year?

\$ _____ .00 total operating expenses

Q44. During the past fiscal year, what percent of the organization’s funding came from:

Funding Source	0%	1-9%	10-24%	25-49%	50-74%	75-100%
A. Student Fees and charges						
B. Federal, State, and Local Allocated Dollars to the School						
C. Government grants and contracts						
D. Foundation grants or contracts						
E. Donations from individuals						
F. Endowment Income						

Q44G. Please list any other major funding sources.

Appendix C: NCSU Institutional Review Board Approval

North Carolina State University is a land-grant university and a constituent institution of the University of North Carolina

Office of Research and Innovation
Division of Research Administration

NC STATE UNIVERSITY

Campus Box 7514
Raleigh, North Carolina 27695-7514

919.515.8754 (phone)
919.515.7721 (fax)

From: Jennifer Ofstein, IRB Coordinator
North Carolina State University
Institutional Review Board

Date: September 18, 2013

Title: Understanding Factors Influencing the Behavior of Charter School Boards: A Contingency-Based Framework

IRB#: 3477

Dear Christopher Cody

The research proposal named above has received administrative review and has been approved as exempt from the policy as outlined in the Code of Federal Regulations (Exemption: 46.101. b.2). Provided that the only participation of the subjects is as described in the proposal narrative, this project is exempt from further review. This approval does not expire, but any changes must be approved by the IRB prior to implementation.

NOTE:

1. This committee complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU projects, the Assurance Number is: FWA00003429.
2. Any changes to the research must be submitted and approved by the IRB prior to implementation.
3. If any unanticipated problems occur, they must be reported to the IRB office within 5 business days.

Please forward a copy of this letter to your faculty sponsor, if applicable.
Thank you.

Sincerely,



Jennifer Ofstein
NC State IRB

NC STATE UNIVERSITY

Campus Box 7514
Raleigh, North Carolina 27695-7514

919.515.8754 (phone)
919.515.7721 (fax)

From: Jennifer Ofstein, IRB Coordinator
North Carolina State University
Institutional Review Board

Date: October 22, 2013

Title: Understanding Factors Influencing the Behavior of Charter School Boards: A
Contingency-Based Framework

IRB#: 3477

Dear Christopher Cody,

Your addendum to the study named above has been reviewed by the IRB office, and has been approved. Changes include the addition of a "thank you" note and post-survey question. The addendum does not change the original IRB exemption status of this project and you are free to proceed with your study.

If you have any questions please do not hesitate to contact the IRB office at 919.515.4514.

Sincerely,



Jennifer Ofstein
NC State IRB

NC STATE UNIVERSITY

Campus Box 7514
Raleigh, North Carolina 27695-7514

919.515.2444 (phone)
919.515.7721 (fax)

From: Deb Paxton, IRB Administrator
North Carolina State University
Institutional Review Board

Date: April 3, 2014

Title: Understanding factors influencing the behavior of charter school boards: A
contingency-based framework

IRB#: 3942

Dear Mr. Cody,

The project listed above has been reviewed by the NC State Institutional Review Board for the Use of Human Subjects in Research, and is approved for one year. **This protocol will expire on April 4, 2015 and will need continuing review before that date.**

NOTE:

1. You must use the attached consent forms which have the approval and expiration dates of your study.
2. This board complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU the Assurance Number is: FWA00003429.
3. Any changes to the protocol and supporting documents must be submitted and approved by the IRB prior to implementation.
4. If any unanticipated problems occur, they must be reported to the IRB office within 5 business days by completing and submitting the unanticipated problem form on the IRB website.
5. Your approval for this study lasts for one year from the review date. If your study extends beyond that time, including data analysis, you must obtain continuing review from the IRB.

Sincerely,



Deb Paxton
NC State IRB

Appendix D: Emails Sent to Survey Participants

Email 1:

To: Executive Director/Principal

Dear Sir or Madam:

My name is Christopher Cody, and I am a doctoral student at North Carolina State University (NCSU). For my dissertation, I am currently conducting research on common roles and responsibilities of charter school board of directors through a survey sponsored by NCSU's School of Public and International Affairs. Specifically, I am researching the relative importance of internal organizational characteristics, external environmental factors, and board attributes in accounting for differences among charter schools in their board roles and responsibilities.

In emailing you, I hope you, as the Executive Director/Principal/School Administrator of a charter school, will consider assisting me in this research by completing a brief confidential web-based survey on (date). You were randomly selected to participate in this study and the survey should not last longer than 15 minutes. All responses for the survey will remain confidential. This research is approved by the University's Institutional Review Board and adheres to the University's guidelines for research on human subjects.

Thank you for considering this request and I appreciate your considering completing the brief survey on (date). Please be on the lookout for an email with the survey link attached on (day of the week).

Sincerely,

Christopher A. Cody
Doctoral Candidate
North Carolina State University
cacody@ncsu.edu

Email 2:

Dear Sir or Madam:

My name is Christopher Cody and I am a doctoral candidate at North Carolina State University (NCSU). As part of my requirements for my degree, I am conducting research on charter schools. The research seeks to understand why some roles and responsibilities of some charter school board of directors differ compared to other charter school boards, through a survey sponsored by NCSU's School of Public and International Affairs. The findings from this study will inform leaders of charter schools, as well as leaders in the nonprofit sector, on common roles and responsibilities of charter school boards and explore what factors account for differences among charter schools in their board roles and responsibilities.

As part of this research, I am asking the Executive Director/Principal/School Administrator of a charter school(s) to complete a brief confidential web-based survey through Qualtrics. This survey should not last longer than 15 minutes and all responses will remain confidential. This research is approved by the University's Institutional Review Board and adheres to the University's guidelines for research on human subjects. After data collection is completed, all results will only be reported in aggregated form.

Attached is a copy of the Informed Consent form for participation in this research. This form details the purpose of this research, outlines your rights as a participant in this study, outlines any foreseeable risks from participation, and contains information on the approval of this study from my University's Institutional Review Board.

By clicking the link below, you acknowledge you have received and read the attached Informed Consent information and grant the researcher permission to be included in this study:

(Qualtrics Link)

I greatly appreciate your consideration in completing this brief survey. The survey will be available to take until May 23, 2014. You can start and come back and finish the survey at any time during the next month. Throughout the next month you will also receive email reminders if you have not completed the survey. If at any time you have questions or concerns about this study, please feel free to contact me at cacody@ncsu.edu.

Thank you again,

Christopher A. Cody
Doctoral Candidate
North Carolina State University

Appendix E: Descriptive Statistics for Control Variables

Table E-1: Number of Board Meetings

N	Responses	Missing	Mean	Median	Standard Deviation	Minimum	Maximum
448	444	4	10.42	11	3.872	0	25

Table E-2: Length of Board Meetings (Hours)

N	Responses	Missing	Mean Hours	Median Hours	Standard Deviation	Minimum	Maximum
448	439	9	2.25	2	1.083	0	10

Table E-3: Type of School

		Frequency	Percent	Valid Percent
Responses	Elem	69	15.4	15.5
	Mid	12	2.7	2.7
	High	79	17.6	17.8
	Elem/Mid	143	31.9	32.2
	Mid/High	49	10.9	11.0
	Elem/High	1	0.2	0.2
	Elem/Mid/High	91	20.3	20.5
Missing		4	0.9	
Total		448	100	100

Table E-4: School Location

		Frequency	Percent	Valid Percent
Responses	Rural	115	25.7	25.8
	Suburban	151	33.7	33.9
	Urban	180	40.2	40.4
Missing		2	0.4	
Total		448	100	100

Table E-5: Virtual Charter School

		Frequency	Percent	Valid Percent
Responses	Yes	66	14.7	14.9
	No	378	84.4	85.1
Missing		4	0.9	
Total		448	100	100

Table E-6: Number of Paid Staff

N	Responses	Missing	Mean	Median	Standard Deviation	Minimum	Maximum
448	442	6	47.37	30.50	56.764	0	495

Table E-7: Percent of Low-Income Students

N	Responses	Missing	Mean	Median	Standard Deviation	Minimum	Maximum
448	438	10	54.77%	54.50%	29.718	0	100

**Appendix F: Analysis of Board Roles and Responsibilities with All Predictors
(Including Board Size Squared)**

Table F-1: Analysis of Board Activity of Monitoring and Strategizing Roles and Responsibilities with All Predictors (Including Board Size Squared)

Categories of Variables		Independent Variables	Original Model
External Conditions	Resources and Funding	Student Fees and Charges	-.044
		Gov. Grants/Contracts	.547
		Foundation Grants/Contracts	.529
		Donations	-.704
	Institutional and Regulatory (State Law)	Low Autonomy	1.899
		Medium Autonomy	-.955
High Autonomy		Omitted	
Board Attributes	Board Size (Variable Squared)	Number of Board Members	.017**
	ED/Principal Voting Member	ED/Principal Voting Member	-3.529**
	Board Demographics	Percent Minority	-.007
		Percent Female	.001
	Corporate Board Members	Percent Corporate Members	.002
	Recruitment Criteria	Ability to Acquire Resources	.030
		Business or Financial Skills	.574***
		Knowledge of Org. Mission	1.173***
		Previously Volunteered for Org.	-.235
		Willingness to Give Time	.730***
		Member of Group Served by Org.	.243*
		Reputation in Community	.062
		Friend of Current Board Member	-.537***
	Racial or Ethnic Diversity	-.035	
Gender	.224		
Internal Org. Characteristics	Age	School Age	.116
	School Size	School Size	-.188
	Stability	Large scale expansion of programs	-.174
		Internal Staff Structure	-.052
		Hiring new ED/Principal	-.909
	Professionalization	ED/Principal is a Paid Employee	1.736
		ED/Principal has Professional Licenses/Degrees	.538
	Management	School is Managed by EMO/CMO	-2.414**
Control Variables	Control Variables	Number of Board Meetings	.054
		Average Length of Board Meetings	.713*
		School Type	1.747**
		Rural School Location	-.361
		Suburban School Location	1.282
		Urban School Location	Omitted
		Virtual School	-2.252**
Percent of Low Income Students	-.021		
R-square			.426
Adjusted R-Square			.374

*p < .1. ** < .05. ***p < .01

Table F-2: Analysis of Board Activity of Boundary-Spanning Roles and Responsibilities with All Predictors (Including Board Size Squared)

Categories of Variables		Independent Variables	Original Model
External Conditions	Resources and Funding	Student Fees and Charges	-.156
		Gov. Grants/Contracts	.068
		Foundation Grants/Contracts	.505
	Institutional and Regulatory (State Law)	Donations	-.108
		Low Autonomy	1.545
		Medium Autonomy	.278
	High Autonomy	Omitted	
Board Attributes	Board Size (Variable Squared)	Number of Board Members	.019**
	ED/Principal Voting Member	ED/Principal Voting Member	1.003
	Board Demographics	Percent Minority	-.005
		Percent Female	.011
	Corporate Board Members	Percent Corporate Members	.046**
	Recruitment Criteria	Ability to Acquire Resources	.241**
		Business or Financial Skills	.072
		Knowledge of Org. Mission	.247*
		Previously Volunteered for Org.	.196
		Willingness to Give Time	.550***
		Member of Group Served by Org.	.394***
		Reputation in Community	2.78**
		Friend of Current Board Member	-.315**
		Racial or Ethnic Diversity	-.117
	Gender	.014	
Internal Org. Characteristics	Age	School Age	.027
	School Size	School Size	.261
	Stability	Large scale expansion of programs	-.020
		Internal Staff Structure	-1.075*
		Hiring new ED/Principal	-1.480*
	Professionalization	ED/Principal is a Paid Employee	2.235
		ED/Principal has Professional Licenses/Degrees	.584*
Management	School is Managed by EMO/CMO	1.002	
Control Variables	Control Variables	Number of Board Meetings	.057
		Average Length of Board Meetings	-.206
		School Type	-.109
		Rural School Location	1.537*
		Suburban School Location	.658
		Urban School Location	Omitted
		Virtual School	.055
		Percent of Low Income Students	.003

R-square .397
Adjusted R-Square .343

*p < .1. ** < .05. ***p < .01