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A Study of the Leadership Preparedness of U.S. Public University Chief Business Officers

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A STUDY OF THE LEADERSHIP PREPAREDNESS OF U.S. PUBLIC UNIVERSITY CHIEF BUSINESS OFFICERS

by

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A STUDY OF THE LEADERSHIP PREPAREDNESS OF U.S. PUBLIC UNIVERSITY CHIEF BUSINESS OFFICERS

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Despite the enormous role that Chief Business Officers (CBOs) play in administering the business and financial affairs of American public universities, little research has been conducted on their leadership preparedness. The primary objectives of this study were to assess the self-perceived preparedness of U.S. public university CBOs at the time they assumed their first position in the role, and to determine if specific factors could be associated with their overall preparedness.

With support from the National Association of College and University Business Officers, a survey was developed and mailed to the entire population of CBOs at four-year public universities in the U.S. A 45% return rate was generated from the population of 575. Sixty-five independent variables were tested against the dependent variable of self-perceived overall preparedness. Categories included employment history, educational attainment, acquisition of professional certifications, type of institution the subjects were first employed at, participation in professional development programs, and demographic variables. The survey featured three indices that measured and tested 41 variables in the categories of CBO management functions and competencies, relationship management abilities, and the subjects'

familiarity with their institutions. The survey also solicited information from the subjects regarding advice they would have like to have received when first starting their positions.

Seventeen variables were determined to significantly correlate with CBOs' overall perceived preparedness. These included knowledge of financial planning, ability to delegate tasks, ability to manage crises, overall management capabilities, and knowledge of contemporary issues in higher education. Knowledge of institutional policies, facility maintenance processes, budgeting processes, board governance procedures, and the institution's role in the state's overall higher education system were also considerably associated with overall perceived preparedness. A significant relationship existed between overall perceived preparedness and the earning of baccalaureate and master's degrees in business related fields and doctorate degrees in higher education administration. A content analysis of the advice shared by the subjects generated 10 leadership qualities and five management competencies integral to success in the CBO role. A model of CBO leadership preparedness, illustrating four evolving dimensions of the role, was created based upon the research.

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Daniel J. Hurley

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CHAPTER I

INTRODUCTION

The role of the public university chief business officer (traditionally referred to as chief financial officer or CFO, hereafter referred as "CBO") is a particularly challenging one. The individuals serving in this distinct capacity require all those attributes common to executive-level organizational leadership. The provision of adequate resources needed to sustain institutional growth while keeping tuition costs in check, in tandem with the pervasive impact of information technology on the college campus, are just two of the pressing contemporary issues that have resulted in the evolution of the CBO role to one of the most important and influential positions in public higher education administration.

The CBO provides the critical business, financial, and administrative support, as well as professional guidance that allow his or her institution to fulfill its academic missions of teaching, research, and public service (West, 2000). CBOs are the business leaders for their respective institutions, directing and overseeing a myriad of matters concerning numerous aspects of financial and administrative management. Indicative of the CBO title, the individuals serving in this role are chiefly accountable for their institution's financial health, fiscal integrity, and overall operational effectiveness.

In the current era, the increasing rate at which change is occurring significantly compounds the complexity of the CBO role. New technology, shifting demographics, rising costs, increasing regulation, changing workforce needs, and the arrival of market competition are just a few of the many external forces that are driving change. In order to respond to the pervasive and dynamic external forces that are impacting institutions of public higher education, the CBO role is rapidly being reshaped and expanded. American colleges and universities are among the most complex organizations in the world, however, they have traditionally relied upon operational and governance structures that do not adapt to rapid change, adding further challenge to the CBO role (Broad, 2000).

The CBO role in the public higher education environment is distinctly challenged in that the CBO must work in a setting quite unlike the large business organizations of the private sector. The academy – referring to the higher education environment in its entirety – holds certain tenets in particularly high esteem. Open debate, free speech, and collegiality are among the canons revered in the university setting. While collegial forms of governance offer several benefits that have added to effectual institutional governance over the years, collegial models of governance used in higher education are not as compatible with rapid change as are the hierarchical forms of governance used in the private, for-profit sector (Broad, 2000).

Another factor that tops the list of challenges unique to the public university CBO role is the broad array of stakeholders public institutions of higher education are accountable to. Among the many stakeholders are the media and the public at large;

both of whom pay special attention to the accountability of public institutions, and which therefore results in even greater scrutiny being placed upon the CBO's ability to demonstrate competence and leadership in his or her role.

Public university CBOs are truly *administrative conservators* as described by Terry (1995). From an institution's point of view, explains Terry, "administrative conservatorship is an active and dynamic process of strengthening and preserving an institution's special capabilities, its proficiency, and thereby its integrity so that it may perform a desired social function" (p. 25). As one of the oldest and cherished of our national institutions, America's colleges and universities are being entrusted to the CBOs who work diligently to advance their schools using all the tools afforded them in this modern era, and who are simultaneously working tirelessly to preserve those attributes that are distinct to the country's diverse higher education institutions.

Statement of the Problem

The level of trust, accountability, and responsibility placed upon the nation's public university CBOs is tremendous. As key leaders in the country's public higher education system, they must be prepared to meet the demands of their jobs. But are U.S. public university CBOs adequately prepared to lead in their respective roles? It is an important question, but one that has not been answered, at least not as a result of rigorous social science research.

Public university CBOs who find themselves ill prepared as they assume their positions can have a devastating effect on their institutions. The special and

important role they play suggests that a need exists for a well-established body of knowledge that assesses their preparedness for their roles, and which articulates areas in which their level of preparedness is lacking. However, such an established body of knowledge, or for that matter, any comprehensive study on the leadership preparedness of public university CBOs, does not exist.

Given the rising importance of advanced learning to the success of society and the American economy, higher education will increasingly find itself as the centerpiece of an increasingly important domestic policy of our nation (Broad, 2000). In consideration of the increasing role of public universities, and the challenges faced by the CBOs who are so integral to their effectiveness, this study was conducted to assess the leadership preparedness of public university CBOs at the time they assumed their first positions in this role. Evidence of the tremendous scope of the role assumed by public university CBOs and the corresponding lack of research on their preparedness for assuming these roles is shared at length in chapter two.

Among its many objectives, this study was designed to answer two broad research questions. The first sought to determine if U.S. public university CBOs perceive themselves to have been adequately prepared at the time they assumed their first position in this role. The objective of the second inquiry was to assess whether there exists a set of factors that represent a pattern of self-perceived preparedness among U.S. public university CBOs. In other words, are there certain variables that correlate with perceived preparedness that are indicative of public university CBO

preparedness? These and the study's other research questions are covered in more detail in chapter three.

The scope of this study was limited to CBOs from four-year public universities in the U.S. While business officers in both public and private or for-profit sectors share many common responsibilities, those individuals employed in the public sector face specific challenges that require them to assume responsibilities exclusive of their private or for-profit counterparts. Job responsibilities common to public university CBOs that are not ordinarily dealt with by private sector college business officers include working with state officials on central funding and capital outlay expenditures. Also, public university CBOs may address some issues pertaining to student tuition rates and state and federal financial aid that are seldom or never dealt with by private or non-profit higher education CBOs. However, it should be noted that public and private university CBOs nevertheless are more alike than not in terms of job responsibilities and therefore the findings from this study should be of interest to private college and university CBOs and all those entities that have a stake in their leadership abilities.

This research study, while intended to add to the field of knowledge on leadership, has as its primary aim to contribute significantly to the field of higher education administration, with specific regard to the preparation of public university business affairs executives. Beneficiaries of this research include current and aspiring university business administrators, as well as the institutions that employ them. Another beneficiary of this research are higher education professional associations

and societies, especially those related to business, administration, planning, and leadership, that seek to advance the professions they represent and that provide professional development for their membership. In addition, findings from this study may be used by post secondary curriculum planners who oversee academic programs that have objectives aimed at preparing higher education administrators for more advanced professional roles. A fifth and final obvious beneficiary of this research are firms that provide assistance to both individual job seekers and institutions in search of well-prepared business affairs executives.

To the benefit of the individual business officer in higher education, this study has identified several factors that are significantly associated with CBO preparedness, as perceived by CBOs themselves. As part of a business officer's concerted effort to enhance his or her ability to demonstrate successful leadership in the context of the public university setting, he or she may use the factors identified in this study as being indicative of CBO leadership preparedness and more intentionally incorporate them in an overall strategy for professional development. The conceptual model of contemporary leadership preparedness generated as a result of this research may further help current and aspiring CBOs to better plan for, and coordinate, their career development aspirations.

Though any institution can benefit from stronger leadership at any organizational level, the skills and abilities of leadership are especially important at the executive management level of the institution (Morley & Edie, 2001). "This is where the demands for strong leadership are most pressing, the institutional stakes are

highest, and the opportunity for powerful impact is greatest" (p. 4). From an organizational perspective, this study has provided some insights that can be used by public universities in their efforts to do a better job of recruiting, grooming, training, and retaining executive level business officers. The findings from this research may help public colleges and universities better prepare senior business officers to contribute more to institutional governance, leadership, and management, thereby enhancing their overall institutional capacity.

Professional associations, such as the National Association of College and University Business Officers (NACUBO), whose constituencies include individuals employed in university business and management-related occupations, are able to use the findings from this research to address training and professional development needs. This study will assist relevant associations by identifying training topics in the broad spectrum of business officer responsibilities that are related to the subject area knowledge requirements and competencies identified in this study as being indicative of leadership preparedness.

Individuals charged with overseeing the curriculum of graduate level programs pertaining to higher education administration may use the findings from this study in a similar manner. As the environment in both business and in higher education changes, so does the role of the public university CBO. It is for this reason that higher education administration graduate programs need to reflect current issues as they pertain to the entire spectrum of business management related issues in university administration. Higher education administration program curriculum

planners, therefore, should find this study to be of use in the review and revision of their program curriculum.

A trend evident in public higher education is for colleges and universities to outsource those services that are not central to their core mission of teaching, service, and research. One of the myriad services being contracted out to experts is that of executive recruitment. Search firms continue to expand their reach in the higher education arena. They may use the results of this study to identify individuals whose background, interests, and perceived aptitudes compare favorably with those identified in this research. The newly hired CBO and his or her employer will both benefit if the new employee's skills match the organization's needs.

Outline of the Study

This study emulated the process common to rigorous applied social research studies. The objectives of this examination of public university CBOs' leadership preparedness are to articulate the need for the study, conduct a thorough review of the literature on the topic, provide a thorough methodology for carrying out the research, concisely summarize the findings derived from the data collected, and to conclude with recommendations of how the findings can be of use in both a theoretical and applied context.

This chapter has introduced the problem statement and the primary associated research questions pertaining to the leadership preparedness of public university CBOs. In this chapter, a case has been made for the need to embark upon a study of

this issue by articulating how the research will contribute new knowledge on matters regarding higher education administration, and how this knowledge can be applied.

Chapter two consists of a review of the literature on topics relevant to public university CBO leadership. It begins with selected definitions of the concept of leadership. This is followed by a discussion of the evolution of leadership theory and a comparison of different leadership concepts and models. A brief look at some of the leadership qualities espoused by popular writers on the subject as critical for the successful leader to possess then takes place. Following this is a brief review of the state of leadership in the higher education environment today as viewed by contemporary writers on the subject and professionals currently working in the field. Presented next is an overview of the tremendous role played by today's public university CBO and, subsequently, the leadership qualities required of the CBO. The chapter concludes with an affirmation of a need for improved CBO leadership capacity.

Chapter three provides a detailed review of the methodology entailed in carrying-out this research endeavor. All of the major steps common to a quantitative social research study are described. Items such as the study's research questions, hypotheses, and the variables measured to test the hypotheses and answer the research questions are provided. Also presented are operational definitions of key terms used in the research and the methods by which the survey data were quantitatively and qualitatively analyzed. The reader should come away with a clear understanding of all steps involved in executing the study.

Chapter four consists of a description of the data collected from the survey instrument that was designed for the study. In addition to descriptive data on the population, key findings on the variables that were measured in an attempt to assess the leadership preparedness of public university CBOs are provided. These findings are derived from the survey data and are based upon rational analytical tests.

Responses to the study's primary research questions hypotheses are presented in chapter five. The study's conclusions are summarized in this chapter, and based upon the research a model of CBO leadership preparedness is presented. The study concludes with a review of the implications this research may have on different stakeholder groups and recommendations for further research tangential to CBO leadership preparedness.

Significance of the Study

It is hoped that this study will have a positive impact on the leadership development of university administrators in general, and public university CBOs in particular. Among the beneficiaries of this research are (a) current and aspiring university business officers, (b) the higher education institutions that employ them, (c) executive search firms, (d) associations that provide services and programming aimed at enhancing the administrative, management, and leadership competencies of business officers, and (e) collegiate academic programs that seek to prepare these professionals. It is possible, that if used to their fullest extent, findings from this research could add a small measure to the overall effectiveness of higher education.

Based upon the tremendous responsibility assumed by public university CBOs and their impact on higher education in its entirety, it is foreseeable that by increasing their leadership ability, their institutions and higher education in general will benefit.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

In accordance with the procedures for conducting a study of this magnitude, the researcher has conducted a thorough review and analysis of the literature pertaining to public higher education senior business officer leadership. This exercise has validated the need for this study and has also articulated how the study's findings will contribute knowledge to the field of public higher education in general, and the adequate preparedness of public university CBOs in particular.

In the review of literature that follows, the first item discussed is an overview of various definitions of leadership, especially as the term relates to the higher education environment in present times. The call for leadership exists in every field and in every occupation. It is therefore important to illustrate what leadership means in the field of higher education, and in the specific role of the CBO.

Following a brief examination of a few definitions of leadership, an overview of the evolution of leadership in the discourse of American society, with particular emphasis on its development in the fields of business and education, will be provided. The key concepts behind the popular leadership theories and models espoused by prominent writers are presented, compared, and contrasted. Inclusive of this

discussion is a review of those leadership qualities that are espoused by leading writers.

Next, a discussion of the status of leadership in higher education ensues. Here, prominent issues that are challenging today's senior public higher education administrators will be elaborated upon, and the state of leadership in U.S. public higher education will be discussed. The goal here is to describe the circumstances that are creating a need for competent leadership in the contemporary higher education environment.

The following section will then consist of an overview of the role of the contemporary public university CBO. Even a brief illustration of the CBO role will provide the reader with an understanding and appreciation of the tremendous array of responsibilities that accompany this important role, and why the capacity for solid leadership amongst the ranks of CBOs is a vital issue in today's society. This will then lead into a review of a wide range of leadership qualities required of effective public university CBOs.

In the concluding section, the major findings from the aforementioned discussion will be interweaved in support of the need for this study. The need for increased leadership capacity by public university CBOs is verified and a link is drawn demonstrating how this study contributes to the ability of all vested stakeholders to increase the leadership capacity of individuals serving in the CBO role.

Defining Leadership

The subject of leadership is prominent in all fields. From the fields of business, education, health care, and public policy, to name a few, comes a steady stream of literature on the topic. Few subjects in American society capture so much attention and are read with such unending interest. A quick search of the federally funded Educational Resources Information Center clearinghouse using the keyword *leadership* reveals nearly 36,000 documents on the topic.

Kets de Vries (2001) observes, however, that not all the literature on leadership is always helpful. "Papers, books, and articles claiming to delineate leadership proliferate, yet their conclusions can be confusing and even conflicting" (p. 212). Sorenson (2002) notes that Stogdill's *Handbook of Leadership*, first published in 1974, listed 4,725 studies of leadership and 189 pages of references, yet Stogdill himself concluded that the endless accumulation of empirical data has not produced an integrated understanding of leadership. Burns, in his landmark book, *Leadership* (1978) observed, "leadership is one of the most observed and least understood phenomenon on earth" (p. 2). Commenting on the subject of leadership, Northouse (2001) concludes that, "Despite the abundance of writing on the topic, leadership has presented a major challenge to practitioners and researchers interested in understanding the nature of leadership. It is a highly valued phenomenon that is very complex" (p. 11).

In his example of the incredible proliferation of literature on leadership, Kets de Vries (2001) notes that the latest (1990) edition of *Bass and Stogdill's Handbook*

of Leadership cites nearly 9,000 studies on the topic. Kets de Vries warns his audience that the amalgamation of writing on the topic of leadership from the perspective of management scholars, current leaders, researchers, and journalists can be daunting and confusing: "The naïve reader quickly discovers that finding one's way in the domain of leadership research is like wandering through a forbidding wilderness that offers few beacons or landmarks" (2001, p. 213).

While the word *leadership* is widely used, a unilateral meaning of the term does not exist (Carraway, 1990). Bass (1990) echoes this sentiment by suggesting, "There are almost as many different definitions of leadership as there are persons who have attempted to define the concept" (p. 11).

Bass, in laying the foundation for his 1,100-plus page book on leadership research (*Bass & Stogdill's Handbook of Leadership*, 1990), surmises that while historically many trends have overlapped in defining leadership, the earlier definitions of the concept identified leadership as a focus of group process or movement and personality in action. This trend gave way to a series of definitions that explained leadership as an art of inducing compliance. The more recent definitions of the term share many similarities, that when grouped together, allow for a rough classification that conceives of leadership in the following ways:

> ...as the focus of group processes, as a matter of personality, as a matter of inducing compliance, as the exercise of influence, as particular behaviors, as a form of persuasion, as a power relation, as an instrument to achieve goals, as

an effect of interaction, as a differentiated role, as initiation of structure, and as many combinations of these definitions. (p. 11)

For the purpose of delineating the concept for use in the *Handbook*, Bass defines successful leadership as "the interaction among members of a group that initiates and maintains improved expectations and the competence of the group to solve problems or to attain goals" (p. 20).

Gardner (1990) defines leadership as "the process of persuasion or example by which an individual (or leadership team) induces a group to pursue objectives held by the leader or shared by the leader and his or her followers" (1990, p. 1). Borrowing from Gardner's work, Syracuse University president Kenneth Shaw defines leadership as "the process of persuasion by example by which one person induces others to take action in accordance with the leader's purposes and the institution's goals and values" (1999, p. 11). The persuasion of human interaction with the objective of accomplishing mutually accepted goals are elements of Harlan Cleveland's definition of leadership, which he simply defines as "bringing people together to make something different happen" (Cleveland, 2002, p. xv). In her effort to define leadership, Carraway (1990) concludes that leadership does not result solely from individual traits, but also involves attributes of the transaction between those who lead, those who follow, and situational variables.

Burns (1978) provides a definition of leadership that articulates the leader-follower reciprocity inherent in leadership, the context within which it is demonstrated, and the nature of the goals intrinsic to the demonstration of leadership.

As defined in his celebrated book, *Leadership*, Burns defines leadership as "the reciprocal process of mobilizing, by persons with certain motives and values, various economic, political, and other resources, in a context of competition and conflict, in order to realize goals independently or mutually held by both leaders and followers" (p. 425).

According to Northouse (2001), four premises are central to the phenomenon of leadership: leadership is a process, involves influence, occurs within a group context, and involves goal attainment. Based on these principles, Northouse offers the following definition: "Leadership is a process whereby an individual influences a group of individuals to achieve a common goal" (p. 3).

Morley and Eadie (2001) describe leadership in a broad context:

> Far more art than science, leadership – and the leaders who practice it – has been defined in various ways: in terms of the impacts leaders produce; the practices successful leaders employ; the psychological makeup, attributes, and skills of effective leaders; the nature of the relationship between leaders and followers; and the environmental conditions that give rise to certain kinds of leadership. (p. 24)

Craig Bazzani, vice president for administration for the University of Illinois System, and 2001-2002 chair of the board of NACUBO, has characterized leadership at both the individual and organizational level. An institutional culture that facilitates leadership successfully utilizes shared governance, shared goals, communication and cooperation. At the individual level, "leadership means understanding the

environment, being able to define goals and objectives, and gaining consensus both within and outside the institution to meet those goals and objectives" (Romano, 2001, p. 40).

Leadership as a Product and as a Process

Kets de Vries (2001) suggests that a common problem associated with one's effort to understand the concept of leadership is that the term can be viewed as both a property and a process. He writes

> As a property, leadership is a set of characteristics – behavior patterns and personality attributes – that make certain people more effective at attaining a set of goals. As a process, leadership is an effort by a leader, drawing on various bases of power (an activity with its own skill set), to influence members of a group to direct their activities toward a common goal. (p. 215)

As a property, leadership is often defined in terms of traits. Physical attributes and personality mannerisms are examples of characteristics that make up leadership traits or a leadership property. Northouse (2001) explains that because the trait perspective conceptualizes leadership as a property or set of properties possessed in varying degrees by different people, it assumes that it resides in select people and therefore confines leadership to only those who are believed to have innate or inborn talents. The trait theory of leadership is examined more in depth later in this chapter.

As contrasted with leadership as a property or a trait, an alternative perspective is that of leadership as a process. "The process viewpoint" writes

Northouse, "suggests that it is a phenomenon that resides in the context and makes leadership available to everyone" (2001, p. 4). As such leadership can be observed through behavior and it is both teachable and learnable.

Assigned Versus Emergent Leadership

Leadership can be delineated in terms of whether a leader is defined as such because of his or her formal position within an organization, or because of the way he or she is responded to by others. The previous form of leadership is referred to *assigned leadership*, whereas the latter is known as *emergent leadership*. Assigned leaders receive their "leader" moniker by way of the role they play within an organization. Plant managers, sheriffs, company executives, and senior higher education administrators are examples of individuals who are inherently *assigned leaders*. However, Northouse (2001) observes that a person assigned to a leadership position does not always become the real leader in a given setting.

In contrast, emergent leaders are individuals who are perceived by others as being the most influential member of a group or organization, regardless of their job title (Northouse, 2001). Northouse explains how emergent leadership evolves: "The individual acquires emergent leadership through other people in the organization who support and accept that individual's behavior. This type of leadership is not assigned by position, but rather it emerges over a period of time through communication" (2001, p. 6).

Leadership and Power

The concepts of leadership and power are tangentially related because both involve *influence*. *Power* is the capacity or potential to influence. Individuals exercise power when they have the ability to affect others' beliefs, attitudes, and actions (Northouse, 2001). The author makes a distinction between the two primary types of power individuals may hold in an organizational context. *Position power* refers to the power a person derives from a particular office or rank within a formal organization. *Personal power*, on the other hand, refers to the power a leader draws from followers. "When leaders act in ways that are important to followers, it gives leaders power" writes Northouse (2001, p. 6). Although some power is an inherent byproduct of position, Kouzes and Posner (1996) articulate that position power is no guarantee of one's ability to lead. "Myth associates leadership with superior position. It assumes that leadership starts with a capital 'L,' and that when you are on top you are automatically a leader. But leadership is not a place; it is a process" (p. 108).

Burns (1978) states that leadership is an aspect of power and that all leaders are actual or potential power holders, but not all power holders are leaders. Power wielders use their power base to influence the behavior of others in order to achieve their own goals, regardless if these are also the same goals of the respondents. Leadership, in contrast, is exercised in order to fulfill the motives of both leaders and followers.

The most common types of power are that of reward, coercive, legitimate, referent, and expert, according to widely cited research performed on social power by

French and Raven (1959). While much of the literature on leadership acknowledges these five types of power, a commonly held assumption is that leaders should only draw on the latter three.

Leadership and Management

A clarification often made in the literature on leadership is the difference between leadership and management. While there are many commonalities in terms of the traits, skills, and abilities exercised by both managers and leaders, there are some distinctions as well. Gardner (1990) proposes six ways in which to differentiate the leader from the manager. Leaders, he explains, (a) think longer term, (b) think more globally, (c) influence constituents beyond their immediate jurisdictions, (d) emphasis intangibles such as vision, values and motivation, (e) possess good political and social skills, and (f) think in terms of renewal – of the processes and structure of the organization. A similar differentiation between leadership and management is affirmed by Bennis & Nanus (1985). "Management controls, arranges, does things right; leadership unleashes energy, sets the vision so we do the right thing" (p. 21).

The manager's skills facilitate the work of an organization because they make certain that the work is completed and done in accord with the organization's rules and regulations. The leader's skills ensure that the work of the organization is what it needs to be (Mendez-Morse, 1992).

Kotter (1990) make s a clear distinction between management and leadership. Management, he maintains, involves providing order, consistency, and stability to the

organization. Key management tasks include planning, budgeting, organizing, staffing, controlling, and problem solving. Leadership, to the contrary, is about seeking unified change and movement in an organization. Central to the activity of leadership is vision building, strategizing, aligning people, communicating, and motivating and inspiring people.

Bennis and Nanus (1997) equate management with compliance and leadership with empowerment. Management is consequently seen as consisting of mechanistic theories and processes, and of linear thinking devoid of the human aspects inherent in a people-based organization. Conversely, empowerment generated by successful leadership produces a culture that helps employees generate a sense of meaning in their work, challenge themselves to experience success, and motivates them to fulfill a common vision for the organization.

Hiebert and Klatt (2001) argue that management and leadership is not an either-or distinction, but rather a balance.

> While powerful leaders are more than just excellent managers, an essential aspect of their credibility stems from their management expertise...the distinction between management and leadership is not a dichotomy, but rather a blend or balance. Both are needed in today's knowledge-based organization. (p. 5)

Morley and Eadie (2001) make the distinction between the two terms as they pertain to the college business officer.

> Management is about the application of technical knowledge and skills within well-established institutional boundaries; it is focused on operational discipline and control within the walls of the institutional 'box,' rather than significantly pushing out the boundaries or fundamentally redesigning what goes on within the walls. (p. 2)

Managerial expertise, they warn, cannot guarantee enduring institutional success. For the business officer, honed management skills provide for the foundation of one's professional platform, but those who seek to advance must move beyond management and must cultivate effective leadership skills.

Despite the varying distinctions that are made between leadership and management, an accepted premise from the research is that those individuals who supervise people should strive to be both good managers and good leaders.

Leaders and Followers

Both leaders and followers are inherent in any conceptualization of leadership. To be a leader requires having followers. Being a follower requires being led. Leaders and followers are both involved in the process of leadership, and people may lead and follow simultaneously. Northouse (2001) notes that while leaders and followers are closely linked, the leader is most often found accountable for initiating the relationship, creating the communication linkages, and bearing responsibility for maintaining the relationship.

Chaleff (1998) portrays the leader and follower as part of one holistic framework:

> To think of leaders without followers is like thinking of teachers without students. Both are impossible. They are two sides of one process, two parts of a whole. Teachers and students form a learning circle around a body of knowledge or skills; leaders and followers form an action circle around a common purpose. (p. 2).

Noting the vast amount of literature on leadership in comparison to that of followership, Chaleff (1998) acknowledges that it is counterintuitive when considering the ratio of leaders to followers. The twentieth century model of dominant leaders and compliant followers working in hierarchical organizations worked well in centralized, labor-intensive operations. The author remarks, however, that information-age organizations often have a multitude of decentralized units that process and rapidly act on highly varied information within the design and purpose of the organization, which requires a very different relationship between leaders and followers.

Arguing that the improvement of the performance of followers deserves equal attention to that of leaders, the author proposes a proactive view of the follower's role in contemporary organizations. Chaleff's model of effective followership calls for (a) followers to possess the courage to assume responsibility, (b) the courage to serve, (c) the courage to challenge seemingly inappropriate behaviors or poor decision-making

of leaders, (d) the courage to participate in organizational transformation, and (e) the courage to leave a leader when it is deemed appropriate.

The Evolution of Leadership Research and Theory

Foundations of Leadership

The word *leader* stems from the root *leden*, meaning "to travel" or "show the way" and first appeared in the English language as early as the year 1300 (Sorenson, 2002). However, the word *leadership* did not appear until the first half of the nineteenth century in writings about the political influence and control of the British Parliament (Bass, 1990). The scientific study of leaders has since arisen primarily in the United States and almost entirely since the beginning of the twentieth century (Sorenson, 2002). Contributions to our understanding of leadership have come from an array of fields such as political science, education, history, public administration, business, management, anthropology, psychology, sociology, philosophy, and the military sciences.

As an introduction to his detailed review of leadership theories and models, Bass (1990) deciphers the difference between the two.

> Theories of leadership attempt to explain factors involved either in the emergence of leadership or in the nature of leadership and its consequences. Models show the interplay among the variables that are conceived to be involved; they are replicas or reconstructions of realities. (p. 37)

Both theories and models have been utilized to delineate social science research problems and subsequently have aided in improving prediction and control in the development and application of theory. Bass notes that despite complaints to the contrary, there has not been a lack of modeling and theorizing about leadership. Indeed, in *Bass & Stogdill's Handbook of Leadership* (3rd ed., 1990), Bass presents two-dozen different theories which underlie five broad categories: (a) personal and great-man theories, (b) interaction and social leadership theories, (c) theories and models of interactive processes, (d) perceptual and cognitive theories, and (e) hybrid theories.

Bass observes, however, that relatively few models and theories of leadership have dominated the research community and many have been interpretations of the obvious. To contrast to observation, Bass notes, "progress has been made when the models and theories have been built on astute observation and assumptions that are consistent with a more general body of propositions from social science" (1990, p. 37).

In the Beginning: The Trait Approach to Leadership

Several schools of thought have since prevailed, many simultaneously, since leadership was first studied. Bass (1990) notes that "early sociological theorists tended to explain leadership in terms of either the person or the environment. Later researchers tended to view leadership as an aspect of role differentiation or as an outgrowth of social interaction processes" (p. 11).

Research on leadership during the first half of the twentieth century focused on differentiating the characteristics of leaders and followers. Much of this research was based on the premise that leaders were individuals who were endowed with certain personality traits, which constituted their ability to lead (Mendez-Morse, 1992). These studies investigated a variety of individual traits pertaining to intelligence, as well as demographic and socioeconomic variables. Traits that have been consistently identified in studies on effective leadership include intelligence, self-confidence, determination, integrity, and sociability (Northouse, 2001).

However, in his review of the research on traits of leadership for the period 1904-1947, Bass (1990) concluded that a person does not become a leader by virtue of the possession of some combination of traits. He concludes:

> The findings suggest that leadership is not a matter of passive status or of the mere possession of some combination of traits. Rather, leadership appears to be a working relationship among member of a group, in which the leader acquires status through active participation and demonstration of his or her capacity to carry cooperative tasks to completion. (p. 77)

In his review of the previous twenty years' research on leadership theory, McGregor in 1960 concluded that it was quite improbable that a single pattern of abilities and personality traits could be attributed to all leaders. "The research during the past two decades has shown that we must look beyond the personal qualifications of the leader if we wish to understand what leadership is," (McGregor, 1960, p. 182). During this same time, the study of leadership deviated from an assessment of the

traits that supposedly defined leadership, to an examination of the impact of situations and of followers on leadership.

Among the weaknesses of the trait theory of leadership are its failure to take into account the impact of situations and an inability to link leaders' traits with outcomes such as group performance (Northouse, 2001). Another significant drawback of the trait theory, says Northouse, is that the approach is not very practical for training and development for leadership because individuals' personal attributes are relatively stable and fixed, and therefore their traits are less amendable to change.

Taylorism and the Founding of Scientific Management

While the study of leadership dates back to Aristotle, the study of management did not surface until the beginning of the twentieth century (Northouse, 2001). Concurrent with the concentrated study of the trait theory of leadership, another phenomenon occurred in the first quarter of the twentieth century that gave rise to the intense study of management, but which was absent many of those principles typically associated with leadership. The advent of scientific management by the founder of modern management, Frederick Winslow Taylor, launched the industrial revolution. Although the concepts of leadership and management are often overlapping, interweaved, and interrelated, this was not the case during the time in which the U.S. took its first serious interest into organizational effectiveness, especially as it pertained to organizations in the production business.

Taylor was an ardent advocate of the idea that managers should design and control the work process scientifically in order to guarantee maximum efficiency. By using time and motion studies, Taylor argued in his famous book *Principles of Scientific Management* (1911), that managers could maximize the efficiency of work by eliminating unnecessary or duplicative steps. "He believed in controlling the workforce rigidly and the work process in minute detail. His idea was openly and explicitly to stop skilled employees from making decisions about controlling the work process" (Cloke & Goldsmith, 2002, p 26.). It will become apparent later in this review of leadership theory that this approach to management is drastically different than most of the principles espoused by modern day writers on the subjects of leadership and management.

The Behavioral Approach to Leadership

The next major shift in the research into leadership dealt with examining the types of behaviors leaders exhibited in an effort to assess what makes effective leaders effective. This focus on people's actions was quite different from the trait approach, which centered on a person's physical and personality characteristics.

Researchers studying the behavior approach, also referred to as the *style approach*, determined that leadership is composed of essentially two kinds of behaviors: task behaviors and relationship behaviors (Northouse, 2001). The behavior approach attempted to explain how these two types of behaviors interfaced in a manner that allowed a leader to influence a group to reach a goal.

In the 1950s and 1960s, extensive research on leadership behavior took place at Ohio State University and the University of Michigan. One of the products of the researchers' work was the development of questionnaires aimed at identifying clusters of leader behavior in different situational contexts. These, and other studies of the time, generated similar clusters of leader behavior. In one example, leader behavior was categorized along two common dimensions: *initiating structures* – concern for organizational tasks; and *consideration* – concern for individuals and interpersonal relations. Initiating structures include activities such as planning, organizing, and defining and assigning the tasks for which people were to carry out, essentially, how the work is completed in an organization (Stogdill, 1974). Consideration addresses the social and emotional needs of individuals – how their recognition, work satisfaction, and self-esteem influenced their performance. Deducing which dimension, initiating structures or consideration, was more attributable in certain situations, led to the assessment of leaders' skills along these two dimensions (Mendez-Morse, 1992). Other studies classified leader behavior in terms of *employee orientation* versus *production orientation*.

Bass (1990), in his review of the research on the behavioral approach, found that leaders who were more highly rated by superiors and peers, who were most satisfying to subordinates, and whose approach resulted in good group performance, were most likely to demonstrate both high task orientation and a high relations orientation.

Among the strengths of the behavioral approach are its much broader conceptual framework, which includes the dimensions of both task and relationship behavior, and the fact that extensive research on the approach lent great substantiation to the concept in comparison to the trait theory of leadership. Conversely, the massive research effort into the behavior or style approach fell short of its overall objective of identifying a universal set of leadership behaviors. Another shortcoming of the approach was that it fails to adequately illustrate how leader behavior impacts the performance outcomes of followers.

Humanistic Psychology and Maslow's Theory of Human Motivation

According to the concept of the transformational leader, by engaging in the full person of the follower, the leader seeks to fulfill their follower's higher needs. Abraham Maslow, the famed U.S. psychologist and behavioral scientist, developed a theory that articulated how one must satisfy "lower" needs before "higher" needs could be met. Coming from the field of humanistic psychology in the mid 1950's, Maslow's *hierarchy of needs* theory made a great contribution to many fields in addition to psychology. When first presented in the early 1940s, his concepts were portrayed as general explanations of human behavior but they quickly became significant principles used in the study of workplace motivation theory. Breaking ranks with behaviorists and Freudian-aligned researchers, Maslow was one of the first researchers associated with humanistic, rather than a task-based approach to management.

The concept behind the hierarchy of needs theory was that human beings are motivated by unsatisfied needs and that certain lower needs must be satisfied before higher needs can be fulfilled. Maslow asserted that the four "deficiency needs" (physiological, safety, social, and esteem) must be satisfied before a person can act unselfishly and become self-actualized, that is, to become everything that one is capable and desirous of becoming. His needs hierarchy theory, along with hundreds of other articles he authored on topics pertaining to enlightened management techniques, human motivation, and self-actualization, were used by managers and leaders to facilitate the self-actualization process of followers. For the past five decades, many practitioners have praised Maslow's self-actualization approach to management. Wrote Maslow of the enlightened management techniques he espoused: the "proper management of the work lives of human beings, of the way in which they earn their living, can improve them and improve the world and in this sense be a utopian or revolutionary technique," (Kaplan, 1998, p. 1).

Leadership in the Context of the Situation

Research into the trait and behavioral approaches to leadership eventually shifted to investigations into the "situation" as a determinant of leadership effectiveness, which led to theories on situational leadership. These studies sought to identify distinguishing aspects of a given setting that could be ascribed to an individual's ability to lead. Among the concepts inherent in situational leadership theory were that different situations require different kinds of leadership, and that a

person could be a follower or a leader depending on the circumstances of the situation.

Attempts were made to identify specific characteristics of a situation that affected the performance of leaders. The situational leadership concept is comprised of two dimensions: a directive dimension and a supportive dimension. A leader must utilize the two dimensions to the extent they are required in a given situation.

Northouse (2001) explains that a leader must evaluate his or her subordinates and assess how committed they are to perform a give task, and that situational leadership requires that the leader change the degree to which they are directive or supportive to meet the changing needs of employees. Successful leadership occurs when the leader can accurately diagnose the development level of subordinates in a task situation and then exhibit the prescribed leadership style that matches the situation. This approach to situational leadership was substantially articulated by the work of Hersey and Blanchard (1996, 1969a). At the core of their theory is a premise that situational leadership requires a leader to match his or her style to the competence, maturity, and commitment of his or her subordinates (Bass, 1990; Northouse, 2001). Hersey and Blanchard's situational leadership model calls for leaders to balance four leadership styles they define as (a) *telling* (instructing and coaching), (b) *selling* (explaining and engaging), (c) *facilitating*, and (d) *delegating* behavior with the follower's ability and willingness to perform a task. "Effective leaders are those who can recognize what employees need and then adapt their own style to meet those needs," concludes Northouse (2001, p. 56).

Identifying the appropriate approach to leading a group, through the use of specifically designed questionnaires aimed at prescribing leader behavior in the context of the situation (normally the work environment) is widely used method for training and development purposes today. The situational approach to leadership effectiveness has been well received due to its practical application and its prescriptive nature. The approach also can be set apart from prior theories of leadership in that it does prescribe one "best" style of leadership.

Two Perspectives About Managing and Leading: Theory X and Theory Y

The esteemed American social psychologist and management theorist Douglas McGregor developed a set of theories that implored managers and leaders to question their basic assumptions about workers and followers. "Behind every managerial decision or action are assumptions about human nature and human behavior," wrote McGregor in his book *The Human Side of Enterprise* (1960, p. 33). His *Theory X* and *Theory Y*, which reflect two basic approaches to managing and leading people, are among the most recognized concepts in the history of management theory.

Theory X represents the actions characterized by an authoritarian management style. The assumptions behind Theory X are that people dislike work and seek to avoid it; must be coerced, controlled, directed, and threatened with punishment to generate results, and; have little ambition, desiring security most of all. Said another way, the theory assumes that the average person prefers to be directed, seeks to avoid responsibility, is relatively unmotivated, and desires security above everything else.

Theory Y, on the other hand, is representative of actions characterized by a participative management style. The theory assumes that work can be as natural as play, self-direction and self-control are equally natural and do not require external control or a threat of punishment, that motivation results from self-esteem and a sense of achievement, and that most people seek responsibility. Douglas portrayed Theory X as the traditional approach to management of direction and control and Theory Y as a management approach that integrates both individual and organizational goals.

Although related more directly to the organizational psychology theory at first, McGregor's concepts were widely adopted and expanded upon across many other fields. He legitimized the Theory Y approach to management, which embraced a more self-actualized approach to human motivation. The characteristics associated with the Theory Y approach to management were subsequently translated into techniques and behaviors requisite for the demonstration of effective leadership.

Leadership and Contingency Theory

Other research endeavors aimed at identifying leadership characteristics focused on the fit between personality characteristics, leaders' behavior, and situational variables (Mendez-Morse, 1992). While the situational leadership approach contains a fundamental assumption that different situations require different types of leadership, the contingency approach to leadership attempted to identify the conditions or variables that affect the leader's behavior in the context of a given situation. Thus, these contingency models of leadership involved more than just the

leader's behavior in a given situation. The theory suggests that by assessing the three factors of leader-member relations, task structure, and position power of the leader, an individual can appraise a situation and then adopt behavior contingent upon the composition of these three variables.

Fiedler is the most established advocate for the contingency theory approach to leadership (see Fiedler & Chemers, 1974). He describes contingency theory as a "leader-match" theory, denoting that the concept's premise is to match leaders to appropriate situations. The term *contingency* connotes that a leader's effectiveness depends on how well the leader's style fits the context (Northouse, 2001). "To understand the performance of leaders," explains Northouse, "it is essential to understand the situation in which they lead. Effective leadership is contingent on matching a leader's style to the right setting" (p. 75).

Similar to the study of situational leadership, contingency theory is backed by substantial research, is prescriptive in its application, and does not attempt provide a universal approach to provide effective leadership in all situations. Among the weaknesses of contingency theory are its insufficient explanation of the link between leadership styles and situations.

Leadership as a Teachable and Learnable Concept

Respected authors on leadership did not always advocate the idea that leadership is a teachable and learnable concept. The transition from the touted characteristic-based theories, such as trait theory, to more enlightened theories, such

as transformational leadership, was quite evident during the late 1950s through the 1970s and beyond. In the mid 1950s the prolific writer Peter Drucker exclaimed that leadership is not teachable, "...leadership cannot be created or promoted. It cannot be taught or learned" (1954, p. 158). In *The Practice of Management* (1954), Drucker argued that management could not create leaders, but rather could only create the conditions under which potential leadership qualities could be fostered. Fast-forward to 1996 and Drucker's opinion on leadership as a learnable concept changes: "...there may be 'born leaders,' but there surely are far too few to depend on them. Leadership must be learned and can be learned" (1996, p. xi).

Leadership is described by a variety of terms. Skills, traits, competencies, attributes, qualities, and behaviors are among the most commonly referenced descriptive terms that emerge from the literature. Out of these different ways in which to define leadership comes an age-old argument centering on whether leaders are born or are made. Most of the literature on leadership comes from the orientation that leaders are made and that leadership is a teachable and learnable art, more so than a science. "Some leaders may be born, but many more are made, and all outstanding leaders consciously practice their art," write Morley and Eadie (2001), adding, "There is wide agreement that leadership consists of attitudes and traits that can be developed and of skills, practices, and processes that can be learned" (p. 4).

In their widely publicized research on leadership, Kouzes and Posner are adamant in their belief that leadership is an observable and learnable set of practices. "...leadership is not the private reserve of a few charismatic men and women. It is

the process that ordinary people use when they are bringing forth the best from themselves and others" (1996, p. 110).

Since the 1970s *The Center for Creative Leadership* has studied the systematic process of leadership development and has subsequently created many models, tools, and programs to enhance personal leadership effectiveness. In its work, the Center makes an underlying assumption that individuals can expand their leadership capacities. The Center acknowledges that genetics, early childhood development, and the adult experience contribute to one's leadership capacity. However, the success of their programs is based on significant quantitative and qualitative research on leadership development that indicates that the enhancement of one's leadership capacity can be enhanced through a model that incorporates assessment, challenge, support, and plenty of developmental experiences (McCauley, Moxley, & Van Velsor, 1998).

Transactional and Transformational Leadership

The study of the two dimensions of leadership behavior, initiating structures and consideration, was connected to the extensive study of transactional and transformational leadership of which Burns (1978) is credited with developing theories distinguishing the two.

Transactional leadership, which involves the bulk of most leader-follower interactions, involves the exchange of something between the leader and the follower. The exchange can involve any valued thing and can be economic, political, or

psychological in nature. However, Burns (1978) notes that participants who engage in an act of transactional leadership, once the "bargaining" process is over, have no enduring purpose that holds them together, therefore, they may go their separate ways. While a transactional leadership act may have taken place, it is not one that binds a leader and follower together in a mutual and continuing pursuit of a higher purpose.

Much more research and writing has been conducted on *transformational leadership*, which is far more complex, but also much more effective. An individual exhibiting transformational leadership acknowledges and develops an existing need or demand of the follower (Burns, 1978). Burns describes the transformational leader's approach and its byproduct:

> ...the transforming leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower. The result of transforming leadership is a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents. (p. 4)

Transforming leadership, says Burns, eventually develops into moral leadership in that it raises the level of human conduct and ethical aspiration of both the leader and the led, and therefore has a transforming affect on both.

The crucial variable that distinguishes the two types of leadership is *purpose*.

Burns makes a critical distinction of how the purpose for demonstrating leadership is an integral part of differentiating between transactional and transformational leadership.

> Some define leaders as leaders making followers do what *followers* would not otherwise do, or as leaders making followers do what *leaders* want them to do; I define leadership as leaders inducing followers to act for certain goals that represent values and motivations – the wants and needs, the aspirations and expectations – *of both leaders and followers*. And the genius of leadership lies in the manner in which leaders see and act on their own and their followers' values and motivations. (1978, p. 19)

Burns classified transactional leaders as politicians, opinion leaders, bargainers or bureaucrats, legislative leaders, or executives. Transformational leaders, on the other hand, were categorized as intellectual leaders, leaders of reform or revolution, and heroes (Bass 1990).

"Vision" as a Crucial Leadership Quality

In recent decades the addition of a particular quality has so permeated the literature on leadership that it deserves special attention. The attribute pertains to a leader's ability to develop and share a collectively agreed upon *vision* for the organization. A vision is a forward-looking description of a desired future for an organization (Kouzes & Posner, 1996). Much of contemporary writing on literature characterizes the leader as the vision holder, the keeper of the dream, or the person

who has a vision of the organization's purpose and future state (Mendez-Morse, 1992). In her advice to new college presidents, Gaudiani (1996) conveys the importance for senior executives to convey a vision to widely diverse constituencies. Developing a vision for an institution should be a shared process, says Gaudiani, and one that is imaginative, allows the stakeholders to view the organization's future in fresh new ways, and contributes a sense of confidence about the organization's future.

Corbin (2000) advises leaders to learn how to proactively develop and carry out a vision for their organizations. Organizational leaders must gather intelligence, scan the environment, and monitor emerging global trends and conditions as they go about the process of developing scenarios. Among the major trends affecting all organizations, says Corbin, are increasing freedom, advancing technology, changing capitalism, growing world trade, and an increasing understanding of diversity.

Preparing an organization's workforce in responding to emerging trends is paramount to success in carrying out a vision. Including employees in the visioning process is imperative. Writes Corbin, "Great leaders work with knowledge workers on a big picture organizational vision. Leaders receive input from knowledge workers to design a project's vision and then mutually picture the project's deliverables" (p. 38).

Servant Leadership

Of the many models on leadership that have been developed in recent decades, the servant leadership model is one that carved out its own unique

perspective and which has been subsequently absorbed into both the literature and culture of American management and institutional leadership. Robert Greenleaf first advocated the concept of servant leadership in 1970 by way of an essay he wrote entitled *The Servant as Leader*. The basic philosophy of servant leadership is that people who choose to serve first will eventually find themselves leading as a way of expanding service to individuals and organizations (see The Greenleaf Center for Servant Leadership, 1998, 1991). A very non-self centered approach to leadership development, the leadership model implies that the servant leader is a servant first, and begins with the natural desire that one wants to serve. In turn, this conscious choice to serve brings one to aspire to lead.

The attributes of the servant leadership model were quite different than many of the hierarchical management and leadership models of the time. However, it shared some similarities with transformational leadership theories in that it espoused the need for leaders to make sure that followers' highest priority needs are being served. Larry Spears, chief executive office of the Greenleaf Center for Servant Leadership, describes the leadership model's place in modern management thinking:

> ...we are beginning to see that traditional autocratic and hierarchical modes of leadership are slowly yielding to a new model – one that attempts to simultaneously enhance the personal growth of workers and improve the quality and caring of many institutions through a combination of teamwork and community, personal involvement in decision-making, and ethical and

caring behavior. This approach to leadership and service is called servant leadership. (2002, Greenleaf Center for Servant Leadership, Online)

Greenleaf's concept of servant leadership has been adopted at both the individual and organizational level. The model has also generated other management and leadership approaches, such as Block's (1996) stewardship approach to enlightened management. Here again, the roots of leadership are derived through service to others, the democratization of power and decision-making, and accountability given to followers without undue control or compliance.

Emotional Intelligence

The concept of *emotional intelligence* had a significant impact in the field of literature on management and leadership in the 1990s, particularly as it pertained to the business setting. In his attempt to measure a leader's impact, from an emotional perspective, the late David McClelland, a noted Harvard University psychologist, discovered that leaders with strengths in a critical mass of six or more emotional intelligence competencies were much more effective than peers who lacked such strengths (Goleman, 2001a). Goleman's research and published work, *Emotional Intelligence* (1995) picked up on McClelland's theory and subsequently created a broad awareness of the management and leadership concept.

Goleman (1995, 2001a) argues that while technical competence and intelligence are important aspects of successful leadership, the five primary components of emotional intelligence – self-awareness, self-regulation, motivation,

empathy, and social skill – are more attributable to leadership ability. His research, based on both quantitative and qualitative analyses, was a significant digression from much of the mechanistic, process-oriented management approaches espoused in the business literature of the previous two decades, such as total quality management and re-engineering.

Cooper and Sawaf (1997) define emotional intelligence as the ability to sense, understand, and successfully apply the power and acumen of emotions as a source of human energy, information, connection, and influence. The authors call attention to the fact that many leadership thinkers in the 1970s and 1980s advocated a completely different approach: one that warned organizational leaders to rely on hard data rather than intuition in the process of leading, managing, and decision-making. This same line of thinking advised leaders to suppress their emotions and keep them separate from organizational life, which would supposedly allow them to do a better job of managing. Cooper and Sawaf note, however, that substantive research has determined that the use of our emotional and intuitive intelligences, in addition to our more rational analytical abilities, greatly add to our ability to make sensitive and wise decisions. Emotional intelligence also serves as a source of motivation, information feedback, innovation, and influence.

Building on prior research on emotional intelligence, Goleman, Boyatzis, and McKee (2002) advanced a new concept they refer to as *primal leadership*, which as its basic tenet ascribes the essential task of leaders as that of "priming" positive emotions into those they lead. When leaders convey positive emotions it creates a

positive resonance through a team or organization, argue the authors, that in turn causes the members to become inspired and committed, thereby bringing about increased performance for the leader, group, and entire organization.

Ethical and Moral Dimensions of Leadership

Despite the tremendous amount of research on all aspects of leaders and leadership, it is apparent that the study of leadership ethics is disproportionately low. However, a slow but evolving trend in the evolution of leadership theory has been an increasing focus on the moral and ethical dimensions of leadership.

The role of ethics is a vital aspect of the leadership process. Because leadership entails influence and leaders often have more power than followers, it therefore becomes a primary ethical responsibility for leaders to monitor how they affect other people through their actions and behavior (Northouse, 2001). Johnson (2001) asserts that true leaders acknowledge that there are ethical consequences associated with exercising influence over others, and that they should continuously develop their capacity to make more informed ethical choices and to follow through on choices.

Burns' (1978) theory of transformational leadership and Greenleaf's (1991, 1998) theory of servant leadership are well-established approaches that ardently support the inclusion of ethics in the practice of leadership. Burns' perception of leadership is distinctive in that it upholds ethics as a core attribute of the process. The needs, values, and morals of followers are emphasized in the concept of

transformational leadership. The theory calls upon leaders to increase followers' standards of moral responsibility to higher levels. This emphasis sets transformational leadership apart from most other leadership approaches in that it clearly states that the moral dimension of leadership is a core element (Northouse, 2001).

As discussed above, another popular leadership approach that was derived out of the 1970s was Greenleaf's servant leadership approach. As with Burns' transformational leadership, Greenleaf espoused the leader-follower relationship as a core aspect of ethical leadership. The servant leadership approach calls on leaders to vigorously tend to the needs and concerns of followers. It is the social responsibility of the leader to develop all followers, even the oppressed, in order to address inequalities and injustices that may exist in the context of an organization, community, or in the broader society.

In his review of leadership ethics, Northouse (2001) identifies five fundamental principles of ethical leadership. Ethical leaders, asserts the author, show respect for others, serve others, are concerned about fairness and justice, are honest, and possess a desire to build community.

Heifetz (1994) has developed a framework for ethical leadership that is based heavily on values and in setting parameters for certain conditions in an organizational context. Values and conditions integral to fostering leadership include (a) respecting conflict, negotiation, and a diversity of views within a community, (b) increasing community cohesion, (c) developing norms of responsibility, learning, and

innovation, and (d) keeping social distress within tolerable levels. A key responsibility of ethical leaders, according to Heifetz, is to use authority to mobilize the people within the organization to address issues and work toward common objectives. In doing so, the leader develops a supportive environment in which trust and compassion are nurtured in a caring environment.

Leadership Development as a Spiritual and Creative Endeavor

Finally, in this look into the study of leadership, it should be noted that a more recent trend has been to recognize leadership as a spiritual and a creative endeavor. This trend marks another shift, or another branch in the evolution in the study of research.

An example of a departure from a typical essay on the characteristics, behaviors, practices, or situational variables involved in the demonstration of effectual leadership, Moxley (2000) argues that the *spiritual* domain, in addition to the traditional physical, mental, and emotional domains that comprise our self well-being, needs to be linked with the process of leadership in order to promote new vitality and energy in individuals and in organizations. The author suggests that even organizations that are outwardly healthy in terms of economics and general perception can employ leadership practices and organizational structures that are in his words "dispiriting" (p. 9). Weaving together spirit with the practice of leadership will lead to inspired performance, says Moxley, because the people in the

organization can better live out their vision and better articulate their personal mission within the context of the organization's mission.

The key questions for contemporary managers and leaders do not revolve around issues of task and structure, but questions of spirit, argues Hawley (1993). His model of leadership is representative of the "spiritual leadership" new line of thinking, whereby leaders are seen as the moral architects of their respective organizations. By fusing together a deep sense of integrity, character, and human values, leaders are able to create a positive work environment and an inspired workforce.

Related to the concept of spiritual leadership are many who draw leadership lessons from a historical context and affirm their applicability in the present day. Drawing on ancient wisdom and lessons from eastern cultures, many writers have attempted to draw relevance to modern leadership applications. Some authors, like Chatterjee (1998), view leadership not as a process, but as a state of consciousness. The foundation of our leadership potential, he argues, starts with the need to obtain a greater sense of personal awareness and a keen understanding of our mental, emotional, and physical health and well being.

Infusing spirit into theories of leadership represents a departure in the process and behavior approach to management and leadership models. These new models of spiritual leadership focus less on process and more on leadership as an attitude, as a conscious state of being, and a holistic approach to life that is based on integrity, virtue, meaning, fulfillment, and purpose.

De Pree (2001, 1989) has written extensively on the importance of instilling creativity in the practice of leadership. Defining leadership as "liberating people to do what is required of them in the most effective and human way possible" (1989, p. 1), De Pree references Greenleaf's servant-as-leader concept as being integral to the success of releasing creativity and innovation. De Pree suggests that good leadership does not require the leader him or herself to be creative, however, it does require the leader to proactively work to ensure that the organizational climate is one that facilitates innovation and counteracts the bureaucratic tendencies to resist change. Key aspects of creative leadership include an emphatic respect for and embrace of diversity, openness, acceptance, and imagination.

Wheatley (2001) also places an importance on the role that leaders play in recognizing people's innate capacity to adapt, create, and innovate. The author proposes that leaders reject adopting the common worldview that people are innately resistant to change, and to the contrary should view people as inherently creative and accepting of change. Wheatley recommends that creating conditions that encourage human ingenuity to flourish requires leaders to discover what interests people and what they find important, and in turn engage them in these meaningful issues. She also advises leaders to abandon the tendency to make immediate assumptions and stereotypes about people, and in place of these assumptions, strive to harness the creativity that comes with having a diverse and actively engaged workforce.

Summary Comments on the Nature of Leadership

Having examined the foundations of leadership theory and reviewed some of the major advancements in its evolution, several observations can by made:

1. First, although the quest to identify an irrefutable model of effective leadership is entering its second century, it is apparent that there is no "one right way" to demonstrate successful leadership. Hundreds, perhaps thousands of models and prescriptions for practicing successful leadership have been created. Research, however, has shown that there are many ways to exhibit effective leadership. Related to this are the widely accepted premises that different people need to be led differently, and that the specific situation and variables that impact a given situation also largely affect how leadership transpires.

2. Leadership as a concept has advanced from being a product to a process, representing a shift from a focus on traits to an expanded, holistic view. Typically, leadership is defined as a process whereby the leader influences a group or individual to achieve a mutually held goal. However, identifying the significant traits of past and present leaders has renewed an interest in the trait approach to leadership (see Mendez-Morse, 1992; Northouse, 2001).

3. As a process, leadership is a teachable and learnable practice. Leadership can be taught and it can be learned. Many factors play into one's ability to demonstrate leadership, such as one's desire to learn, maturity level, and having sufficient opportunity to apply what has been learned. Although genetics and personality disposition may play a limited role in one's ability to exhibit leadership,

leadership is an art, to restate De Pree's (1989) mantra, and therefore it is something that can be learned and refined with practice.

4. Inherent in any definition of leaders and leadership are the core components of followers and followership. "The only definition of a leader is someone who has followers," proclaims Drucker (1996, p. xii). A leader's influence is not an inherent commodity, rather it is derived from the power followers willingly give the leader. The integral element of followers in the leadership equation helps make a distinction between leadership and power.

5. Fundamental to the exercise of leadership is a focus on mutually held goals between the leader and followers. Consequently, real leadership must extend beyond the leader's desires and motivations. Also in line with this thinking is that leaders should proactively seek to transform followers, and that they should seek to satisfy their desires and motivations, "in a relationship of mutual stimulation and elevation" Burns (1978, p. 4).

6. Leadership requires emotional intelligence and is a creative, and sometimes even spiritual endeavor. As a spiritual endeavor, leadership can be viewed as an attitude, as a conscious state of being, and as an overall approach to life that is based on moral values, personal and group fulfillment, and finding meaning and purpose in one's work.

7. Although noticeably absent from much of the literature on leadership, the role ethics plays in the exercise of leadership is integral to the process. A fundamental precept is that leadership should be ethically driven.

8. A final observation is that a leader's ability to lead, and a follower's ability to learn how to lead, is best cultivated when the people in the organization are empowered, when innovation and creativity are allowed to flourish, and when people find meaning and purpose in their work.

Espoused Leadership Qualities for Contemporary Times

Prominent writers on the topics of business, management, and leadership are often quick to tout their own recipes of leadership qualities required to be successful in contemporary times. A common theme that runs through the mass of advice on what leadership qualities are of utmost importance to develop is the rate at which change is occurring. The study of effective leadership has grown exponentially during the last century, and while we have learned much from this research, the forces impacting all aspects of society are changing at an equally impressive rate, which compounds the problem of identifying just what leadership qualities are most essential. Having stated this, it becomes clear that an overarching leadership competency, from an individual as well as an organizational perspective, is the ability to proactively address, and even create, change.

Drucker and Senge (2000), two fixtures in the business, management, and leadership literature of the past several decades, name four key tactics for leading change. The first is to become disciplined at abandoning current ways of doing things. By foreseeing the likely impacts of current trends, leaders should learn how to preempt change, rather than react to it after the fact. Second, they advise leaders to

focus on opportunities rather than problems. Leaders should have a *creation* orientation, rather than a *problem-solving* orientation, toward life and work. Third, they encourage leaders to preserve institutional values and to build trust in times of change. Lastly, Drucker and Senge suggest that a key element in the leadership effectiveness of an individual or organization is the ability to create and sustain worker satisfaction. Attracting and retaining knowledge workers requires the work environment to be infused with the opportunity to take risks, be creative, and to find joy and meaning in work.

The importance of embracing and leading change is one of several leadership qualities espoused by Kouzes and Posner (1996). Leaders, they state, do not wait, but rather proactively seek results, find solutions to problems, capitalize on opportunities, and engage others in a pioneering spirit. Other qualities espoused by the two leadership researchers include personal credibility and the clarification of personal values. Their examination of leadership has also led them to conclude that much focus needs to be put on the aspirations of constituents. Their aspirations must be in sync with those of the leader and must be founded on a common cause and a common set of principles.

Hesselbein (1996) asserts that leaders of the future must focus on *how to be*, rather than a common past practice of *how to do*. This shift places greater emphasis on a leader's character, values, mind-set, behavior, and his or her relationships with others. Leaders must recognize that people are the organization's greatest asset, states the author, and through their behavior and relationships, demonstrate this

philosophy. Through their behavior, Hesselbein further asserts that leaders demonstrate a belief in the worth and dignity of the people who make up the enterprise. Integral in this process is for leaders to build dispersed and diverse leadership throughout the organization in order to fully tap the power of shared responsibility.

Covey's (1996, 1991, 1989) research on the effective habits of leaders and attributes of leadership has been among the most recognized in the last decade. In his writings, Covey stresses the role principles play in the execution of leadership. "The leader of the future, of the next millennium, will be one who creates a culture or a value system centered upon principles" (1996, p. 149). He asserts that successful leaders are models of principled-centered leadership, with the principles being self-evident and self-validating natural laws. By abiding by principles such as continual learning, having a service orientation, always seeing the good in other people, leading a balanced life, and engaging in continuous self-renewal, leaders can serve as a model of principle-centered leadership. Covey maintains that the three roles of the principle-centered leader are that of *pathfinding* – instilling a sense of vision and purpose throughout the organization's culture; *aligning* – arranging the organization's structure, systems, and processes so that they contribute to the mission and vision, and; *empowering* – working to ensure that the missions and purposes of the people are in step with the mission of the organization.

In his well-received 1989 work, Covey espouses several habits of successful leadership. These habits, such as having a clear vision in mind for the future, living a

disciplined life, and possessing a "win/win" attitude in all situations, portrays effective leadership as being highly dependent on character, attitude, conscientiousness, and positive relationships with others. Some similar themes are evident in Kouzes and Posner's (1995) insights into effective leadership. The five fundamental practices of exemplary leadership according to the authors are to challenge processes, inspire a shared vision, enable others to act, serve as a model of good behavior, and encourage others by building their confidence and courage.

A strong emphasis on nurturing and serving followers, as is the case with the models of transformational leadership and servant leadership, remains a prominent theme in current leadership. Possessing a dedication toward the personal and professional growth of the people in the organization is a frequently noted leadership quality. Advice Drucker (1999) shares in this regard is for leaders to treat people differently, based on their strengths. Setting high standards for people, making regular performance reviews an integral part of the job, and recognizing that people learn the most when teaching others, are additional principles that leaders can embrace in order to cultivate leadership among people.

In his research on leadership, Kets de Vries (2001) has identified seven competencies that he claims are closely associated with personality traits and that are essential to leadership effectiveness. These competencies consist of assertiveness, sociability, receptivity, agreeableness, dependability, analytical intelligence, and emotional intelligence. In his overall synopsis of the most crucial leadership qualities, Kets de Vries offers a 4-H acronym representing hope, humanity, humility,

and humor. Each of these, he asserts, are qualities that exemplary leaders possess and utilize in their demonstration of effective leadership.

In their efforts to define effective leaders in the context of university administration, Morley and Eadie (2001) offer several attributes of successful leadership. Two of these attributes are the ability to "build capacity" and the ability to succesfully build and maintain human relationships. "As action-focused people, effective leaders devote serious time and attention to building the institutional capacities that are essential to developing and implementing the institution's strategic agenda: its values, vision, mission, and innovation and change targets" (p. 25). Pointing out the important aspect of relationship management, Morley and Eadie emphasize the significant role human relations plays in the leadership context. "Leaders lead people, not just institutions in the abstract, and strong leaders recognize that long-term institutional success depends not only on well-crafted plans and well-designed systems and processes, but also – and equally important – on motivated, committed, and empowered people" (p. 25).

An orientation toward achieving well-defined and measurable outcomes is a key element of effective leadership. This attribute is underscored by Sanaghan, Goldstein, and Jurow (2001), who assert, "The essential characteristic of a leader is the ability to achieve results. Without this, little else matters" (p. 43).

With regard to the literature on leadership as it pertains to higher education, much has been written on the college presidency. It is from this role, one would presume, that the need is greatest for effective leadership. In their overview of

articles written on college presidential leadership by eighteen higher education leaders, Fisher and Tack (1988) suggest that the five primary factors integral to successful executive-level leadership are the ability to shape a vision for the organization, courage, possession of a take-charge attitude, commitment, and a charismatic personal style.

In looking back on the college presidency, Fisher (1984) characterizes effective college presidential leadership by such qualities as a strong drive for responsibility, a willingness to delegate, an enthusiasm for sharing credit for successes, and a willingness to absorb virtually all of the stress of failure. Building on his prior work, Fisher (2002) portrays the essence of leadership as a euphemism for power. He suggests that leadership and power are synonymous because both represent the ability of one person to get another to do something he or she might not have otherwise done. Analyzing five forms of power – coercion, reward, legitimate, expert, and charisma – Fisher advises higher education administrators to hone and use the latter three in their quest to improve their leadership competency.

Theodore Hesburgh, long-time president of the University of Notre Dame, has also contributed much to the subject of leadership in the higher education environment. Citing key leadership qualities, Hesburgh (1977) points to good decision-making skills, courage, and the ability to develop and convey a vision for the institution as being integral to individual and organizational success. In a more recent book on successful college leadership, Shaw (1999) asserts that key leadership traits

consist of good communications skills, the ability to adapt to change, the capacity to manage effectively, and interpersonal competencies such as conflict resolution.

The Need for Leadership in the Contemporary Higher Education Environment

Issues and trends that must be dealt with confront every organization in all sectors of the economy, both in the U.S. and abroad. Identifying what the organization of the future will look like – and the leadership competencies required to run them, is a fundamental task at hand, asserts Bennis (2001). Other urgent questions Bennis says must be answered urgency are: What will the empowered organization of the future look like? How do we address the disparities in peoples' talents? How do we address the significant demographic changes that are occurring? What will the social contract between employers and employees look like in the future? And, How will we balance life and work in the future? These questions asked of Bennis represent just a few of the major issues that all organizations are faced with and which subsequently validate that the need for effective organizational leadership will only continue to escalate.

Higher education, as just one sector of the economy, is faced with greater economic uncertainty than has ever been previously witnessed. Demands for improved quality, increased competition for state and federal resources, the challenge of providing adequate and up-to-date technologies for a seemingly infinite number of applications, and changes in enrollment patterns are forcing colleges and universities to reexamine their missions (Lapovsky & McKeown-Moak, 1999). Cross (1995)

suggests that among the most important issues facing higher education are the need to make students the central focus, restoring public trust and accountability, managing limited resources more efficiently, and better utilizing the power of technology.

Morley and Eadie (2001) offer a list of challenges faced by contemporary business officers. These challenges include (a) spectacular advancements in technologies related to both institutional management and the educational process itself, (b) growing competition from nontraditional educational providers that are able to move faster and with greater fluidity, (c) the widespread and growing distrust of traditional institutions, and (d) student-consumers who expect to be treated more like customers rather than members of a captive audience. The pressure to meet these challenges are compounded by the public's perception that higher education is becoming increasingly unaffordable and their skepticism of colleges when it comes to setting the price of tuition (see American Council on Education study, 2000). Although the actual costs involved in obtaining a college education are lower than what is perceived, it makes little difference, for *perception is reality* when it comes to how Americans discern the image of higher education affordability.

Leaders in higher education acknowledge that the role played by postsecondary institutions will only continue to increase when it comes to shaping America's place in the future world economy. Patrick Callan, in commenting on an assessment of higher education conducted by The National Center for Public Policy and Higher Education (2000), underscores the integral function colleges and universities will play in the future:

> The quality of life of Americans and the civic and economic future of the country depend more than ever before on the availability and effectiveness of education and training after high school. For most Americans, college is no longer one of many routes to middle-class life, but a requirement for employment that makes such a life possible. (p. 12)

In a 2000 assessment of public policy and public attitudes affecting higher education, the American Council on Education identified five key considerations that leaders in education should bear in mind. Assumptions drawn from the study include (a) public support of higher education will bring greater scrutiny, (b) concern about access to post secondary education will continue to grow, (c) technology will reshape and may even redefine higher education, (d) concerns about paying for college by the middle-class will continue, and (e) increased government regulation is likely to occur. It appears certain that a large number of competent leaders will be needed in order to address these issues and thereby assure that higher education will continue to serve its integral role in maintaining America's position of global leadership.

In the past, universities were able to grow and implement far-sweeping strategies without critically assessing mission or scope of action and without being too preoccupied with financial accountability (Balderston, 1994). Such fiscal imprudence has long been superseded by a keen sense of the need to justify every institutional strategic direction. Funding agencies, the taxpaying public, the media, faculty, and students are just a few of the constituencies that are quick to analyze and evaluate a given university's resource allocation practices and strategies.

An analysis of the recent literature on higher education administration conducted by Kezar (2000) reveals a significant shift in the issues occupying university leaders' time. Issues reflecting recent trends include commercialization, privatization, assessment, technology, and collaboration. The single issue of institutional funding must be dealt with on many fronts and requires accountability to state, federal, and private grant-funding agencies. This is compounded by the rising cost of student tuition, which has come to be a politically sensitive issue and yet continues to comprise a larger portion of public universities' general fund budgets.

The new environment that higher education finds itself in naturally calls for an assertive response by proactive and assertive university administrators. While this is true, the academy setting requires that leadership be demonstrated in a manner reflective of the unique context within which higher education operates. Effective management and administration, which are inextricably linked to leadership, require a different approach on the university campus.

Kimbrough (1997) points out that what is defined as successful administration in the university context might be viewed quite differently in other fields. Noting that in no other field is the administrator expected to maximize both individual freedom and structural boundaries, Kimbrough asks, "If freedom of thought and behavior are maximized, does it not follow that the control function is minimized?" (p. 9). Fisher (1984) suggests that the ability to develop capable executive-level leaders is compounded by the democratization of society in general, and colleges in particular, which has resulted in administrators who often find themselves severely limited by

the internal constraints of powerful faculty, students, administrative groups, and over-involved governing boards. Kezar (2000) notes that the recent major trends apparent in the higher education administration literature have resulted in the development of a major tension among the themes – the need to reconcile corporate values and academic values.

At the center of administration in today's university now exists a struggle that will ultimately determine what the contemporary university will look like. "Performance assessment, planning, and legal issues reflect the rise of corporate values, whereas human interaction, diversity, collaboration, and mediation represent the traditional values of the academy" (Kezar, 2000, p. 4).

Napier and Sanaghan (1999) suggest that a disconnect exists between what is known and described about leadership and its limited application in the university setting. They assert that while the popular literature on leadership in the work environment is packed with research, strategies, and successful practices aimed at encouraging increased productivity and efficiency, this material is not used very advantageously on the college campus. According to the authors, those individuals who seek change by asserting themselves against the institution's power structure and traditional practices do so at great peril, "To attempt a leadership strategy or technique within an institution's tightly defined norms can result in instant vulnerability," (p. 49).

Napier and Sanaghan submit that leadership in higher education has traditionally focused on the value of concrete, linear, task-driven thinking and action

and that scant attention has been given to the social, relationship, and process dimensions of leadership. This is particularly the case with respect to the business officer. The early career demands and natural experiences of their roles tends to perpetuate business officers' non-relationship, non-collaborative view of leadership that results in thinking that is dominated by a focus on task completion and linear thinking.

Higher education institutions, especially those in the public sector, have occasionally served as an example of rigid tradition, stagnation, inefficiency, ineffectiveness, and bureaucracy. It is therefore perhaps no surprise that the literature on leadership as it pertains to leading in the private, for-profit business sector appears to be much more extensive than that which exists for the public or non-profit sectors. The rapidity with which change takes place, the relentless introduction of new technologies, unceasing competition from market competitors, workforce inadequacies, and economic fluctuations comprise just a few of the reasons why the improvement of individual and team leadership is a perpetual quest for those in the private, for-profit sector.

Public higher education institutions perceive the for-profit sector as being more proactive and successful in their ability to meet market demand. Jay Morley, president of NACUBO, has affirmed the perception that the for-profit sector is more responsive to students' needs and is able to operate more effectively (Shields, 2001). This sentiment is echoed by Mary Jo Maydew, vice president for finance and administration at Mount Holyoke College and 2002-2003 chair of the NACUBO

Board of Directors. "For-profit firms are going to be picking-off the most profitable products and competing with traditional institutions of higher education" asserts Maydew (Shields, 2001, p. 32).

Public sentiment toward higher education is often depicted by institutions that operate in a realm protected by centuries-old traditions and steeped in bureaucracies created and protected by bureaucrats themselves. However, while the public's perception of higher education institutions' utilization of outdated tenets may be slow in changing, the actual pace at which universities are changing is quite rapidly. A variety of external pressures are swiftly forcing universities to abide by many of the same operating principles championed by large for-profit organizations. "The pace and complexity of change will only increase over the next decade," allege Sanaghan, Goldstein, and Jurow. "The familiar term 'constant white water' accurately describes the higher education environment" (2001, p. 43).

The Role of the Public University Chief Business Officer

Higher education, like all other fields, is replete with calls to improve the leadership abilities of those individuals charged with guiding and directing their organizations. It has been noted above that the literature on college presidential leadership is quite plentiful. It is less so for the chief academic officer, and an even lesser so for the chief business officer. The amount of literature on CBO leadership is surprising when considering the enormous responsibilities that accompany the role. While university trustees are charged with setting policy and guiding the institution's

long-term strategy for growth, and university presidents are charged with enforcing the policy and carrying out the strategic plan, the CBO is directly accountable for the financial viability of the institution.

The definitive text on higher education business management, *College and University Business Administration* (6th ed., 2000) provides an insight into the remarkably diverse responsibilities with which business officers find themselves accountable for. The 1,400-page book, published by NACUBO, provides a comprehensive overview of the administrative policies, financial functions, legal guidelines, budgeting and planning processes, and business operations business officers must be familiar with.

Calver & Vogler (1985) indicate that the focus on the CBO role has evolved slowly.

> Although CBOs play an important role in American public colleges, history has shown that only modest attention has been focused on the CBO's role evolution or its scope of responsibility and influence, except when unacceptable financial audits were cited by external evaluators or other major operational deficiencies were identified by the institution's various college constituencies. (p. 37)

Career Preparation

West (2000) maintains that mapping out the preparation process for becoming a CBO can be difficult. One reason for this is that the role is continually increasing in

its complexity and scope, thereby requiring many different competencies. A second reason is that there is no clear career path for the CBO. Climbing "up the ladder" says West, "is often as much a question of opportunity and initiative as it is smoothly advancing from one position to the next" (Ch. 1, p. 24).

Some CBOs advance to their roles from within the profession while others are recruited from other public sector administrative roles, and yet others are recruited from the private sector or the military. Each career pathway has its benefits and drawbacks. Individuals whose career progression has been achieved solely in the higher education setting are more likely to be familiar with business operations as they relate to the college or university but may lack the breadth of knowledge of those who have worked in multiple settings. On the other hand, individuals who have been recruited from other government administrative roles, the for-profit sector, or the military, to the public university CBO position, may find themselves ill prepared for the special nuances inherent in a university's culture and system of governance.

Regarding educational qualifications, it has traditionally been a common practice for the CBO to be an accountant by training due to the importance of the financial aspects of the position in relation to the officer's total responsibilities (West, 2000). While the accounting aspect of the role remains vitally important, other responsibilities of the CBO have increased in both breadth and depth so that the accounting function is no longer dominant. An undergraduate degree in the fields of accounting, finance, business, or management is a common educational credential for the CBO. A master's degree in business administration and a certified public

(C.P.A.) certification are other credentials frequently possessed by CBOs. Terminal degrees, such as the Ph.D. or J.D. (law degree), are becoming increasingly common educational credentials for the CBO to possess. Advance degrees in higher education administration are particularly helpful in building peer relationships with faculty and thus help to bridge the gap between administration and faculty (West, 2000).

NACUBO and Business Officer Professional Development

The NACUBO organization recognizes the need for improved leadership competencies among all business officers employed in higher education. Founded in 1962, NACUBO is a nonprofit professional organization representing chief administrative and financial officers at more than 2,100 colleges and universities in the U.S. (NACUBO, 2002a). The association's mission is to promote sound management and financial practices at colleges and universities. As the self-proclaimed leader in addressing higher education's financial and management issues, the association includes as part of its vision statement, a quest to serve as the preeminent source of business and professional development for college and university personnel (NACUBO, 2002b). Members of NACUBO are also members of one of four regionally affiliated professional associations. The western, central, southern, and eastern associations of college and university business officers are distinguished by their respective geographic boundaries.

In recognition of the trends in higher education and the evolving role of the business officer, the organization will continue to place an emphasis on offering its

members programs that will strengthen skills in communication and group facilitation, as well as enhance their capacity to serve as change agents at their respective institutions (Shields, 2001).

One example of a leadership program offered by the Midwest NACUBO regional association, the Central Association of College and University Business Officers (CACUBO), is the Collegiate Management Institute (CMI). The CMI is a highly coordinated two-year curriculum that places an emphasis on a broad array of knowledge, skills, and abilities required of the contemporary CBO (see Atkinson, 2001; Lee, 2001). Similar to the services provided by other occupation-based professional associations, each of NACUBO's regional associations offers its members a variety of forums in which to receive leadership development training.

From Trained Specialist to Administrative Generalist

Some interesting insights into the leadership preparedness of business officers are offered by Napier and Sanaghan (1999). They suggest that business officers are highly trained specialists and task-focused individuals who are promoted through the ranks based upon their technical expertise rather than their leadership skills. By the nature of their work, business officers have traditionally been awarded career advancement by *not* challenging procedures, *not* questioning authority, and *not* exploring new methods or skills. Business officers, they argue, have been largely successful to the extent that they followed specific rules and lines of authority that demanded discipline and conformity in the highly stratified, hierarchical institutions

in which they were employed. They suggest that only by maintaining an image of cooperation and accommodation and by following clearly marked avenues for advancement could business officers receive promotions, and even then, it was largely based upon competence as perceived through their highly defined role.

Napier and Sanaghan note that business officers who have honed their leadership skills utilizing narrowly defined command and control behaviors in service-oriented roles will likely find themselves vulnerable once greater demands on their leadership are made. The challenge, say the authors, is for business officers to make the transition from having a limited view of leadership that focuses on efficiency, control, and stability, to one that includes a heightened consideration of innovation, empowerment, and relationships.

Macro View of the CBO Role

Commonly held job titles associated with the CBO position are chief financial officer, senior vice president, executive vice president, or vice chancellor. The CBO typically has several senior staff members report to him or her who are responsible for various functional areas and who carry job titles descriptive of the work they oversee. Associate vice president for auxiliary services, vice president for human resources, director of housing, and director of the physical plant represent a small sample of the large range of senior staff functions that typically report to the CBO.

The CBO is a member of an institution's senior management team, which is typically comprised of the heads of each of the organization's major functional areas.

The major functional areas – academic, administration and finance, student affairs, and institutional advancement – are interrelated and interdependent, making a team approach to their management essential (West, 2000).

The specific tasks CBOs perform are as diverse as the institutions that employ them. The exact accountabilities and responsibilities they assume will depend on factors such as the size, organization, complexity, mission, history, culture, and strategic direction of a particular institution (West, 2000).

As a member of the chief executive officer's cabinet, the CBO serves as a liaison with all key stakeholders. These stakeholders include administrators, faculty, staff, students, parents, alumni, emeriti, board members, policymakers, community members, and the media. Working with each type of stakeholder requires that the CBO follow the appropriate protocol and use the right approach. The CBO must work well with his/her vice presidential counterparts in academic affairs and student affairs to resolve issues, coordinate projects, and participate in collaborative planning for the future. As a senior executive, the CBO may even be called upon to serve in an interim role as the institution's president, chancellor or chief executive officer. The promotion from CBO to president provides further evidence of the broad competencies and leadership capacities held by CBOs.

The umbrella of responsibility assumed by CBOs is quite broad, ranging from financial minutiae such as the review of audits, to matters that deal with sensitive human resource matters. A challenge resulting from this broad range of responsibilities is for CBOs to strike a balance between "soft" subjects such as human

resource management and "hard" quantitatively oriented subjects such as financial planning (Ginsburg, 1993).

West (2000), in his overview of the role of the CBO, portrays the position as serving in three different roles; that of advisor, manager, and change leader. As an advisor, the CBO serves as an expert on technical matters pertaining to the institution's financial and physical assets. As a manager, the CBO oversees large and complex administrative functions that provide essential institution-wide business and financial services. West notes that while these two roles remain the mainstay of the CBO position, they too are being expanded and reshaped to incorporate new information, new tools, and new technologies. The third role of change leader has evolved out of necessity due to the rapidity with which change is occurring in public higher education. In the role of change leader, notes West, the CBO moves beyond the traditional functions to a role that is proactive in facilitating the transformation of the institution while preserving continuity with its mission. West differentiates this new emerging role:

> In the advisor and manager role, the CFO adds value to the institution through sound business practices. As universities and colleges face a time of fundamental and transformational change, CFOs will be asked to expand the dimension of their roles as leaders and facilitators of change. (ch. 1, p. 6)

During his chairmanship of the 2001-2002 NACUBO Board of Directors, Craig Bazzani placed an emphasis on the expanding role of the CBO. Among the priorities set forth by the association was the provision of professional development

programs that recognized the broadening role of the business officer. "The role of what used to be the chief business officer – maybe now the chief administrative officer – is expanding to include human resources, information technology, plant management, budgeting, and the like," observed Bazzani (Romano, 2001, p. 38). Bazzani suggests that a more contemporary title for the CBO might be chief administrative officer or chief operating officer because the work performed by CBOs extends well beyond the traditional tasks such as accounting, finance, payroll, and purchasing and now includes things such as capital improvement budgeting, facility maintenance, and workforce development (Romano, 2001).

Mary Jo Maydew, 2002-2003 chair of NACUBO's Board of Directors, has affirmed her predecessor's acknowledgement of the expanding role of the CBO, suggesting that the control-focused role of the CBO is no longer functional in the contemporary higher education environment. Says Maydew:

> Previously, the business officer, in many cases, had not been held accountable for the overall success, as opposed to the financial success, of the institution. The changing role includes being a major player within the institution and helping the college or university as a whole achieve its goals. This requires the business officer to lead very different kinds of activities on campus. (Shields, 2001, p. 32)

Roles within the Role

Chief business officers are generally held accountable for overseeing an institution's business and financial affairs, and specific functional areas such as planning and budgeting, real estate, legal affairs, procurement and purchasing, labor relations and equal opportunity, and the campus' physical plant (Ford, 1992; Weitman, 1997; West 2000). Greene (1992) points out that CBOs often oversee many auxiliary services such as student housing, dining operations, public safety, bookstore operations, human resources, and even athletics. Adding to these traditional responsibilities, managing the tremendous growth in information technology applications, and seeking out and entering into contracts with private sector vendors have now become added responsibilities incumbent upon the university CBO. What follows is a more specific overview of the commonly held responsibilities attributed to the public university CBO.

Financial Advisor

The CBO serves as the institution's primary internal financial advisor reporting to the university president and its board of trustees. Lapovsky and McKeown-Moak (1999) sum up the responsibility that comes with this role-within-a-role of the CBO:

> To the CFO fall the tasks of balancing the operating and capital budgets, planning for changes in the revenue mix, estimating enrollments, containing

costs, investing the endowments wisely, and managing the institution's level of risk so that assets are protected. (p. 1)

Administering the financial aspects of a college is perhaps the most important role function of the CBO. In their 1984 study of the roles and responsibilities of community college chief financial officers, Calver and Vogler (1985) found that fiscal and financial duties were perceived by business officers to be more important than their administrative or business functions. The study found that budgeting was the function that the CBO personally performed the most often.

As the individual who serves as the financial executive to the institution's president and financial advisor to the governing board, the CBO is held responsible for safeguarding the president and board by ensuring that business transactions are legally permissible, properly conducted, and accurately accounted for. In addition, they demonstrate prudence in going about the process of committing institutional resources (West, 2000).

Occasionally, a CBO will serve as an officer of the board as treasurer. Under this arrangement, specific fiduciary responsibilities of the institution may be delegated by the board to the CBO. CBOs typically present major contracts and make fiscal policy recommendations to the board for approval. The CBO consults with the board committees that have oversight responsibility for areas such as investments, budget, facilities, and external auditing (West, 2000).

CBOs typically supervise and are held strictly accountable for the oversight of institutional endowments, internal auditing, external auditing, student financial aid,

and on campus cash and banking operations. Debt management, cost containment, and the identification and implementation of operational efficiencies that bring about savings are skills that CBOs must be adept at.

In managing both the endowment and the external audit of a university's business and financial affairs, institution's generally contract out services to investment managers and accounting firms. The numerous large-scale corporate scandals involving the alleged misreporting of financial conditions that further dampened the American economy in 2002 has further compounded the scrutiny given to the auditing practices utilized by all institutions. This has further sensitized CBOs to the importance of adhering to ethical and accurate auditing and financial reporting practices.

It is common for the CBO to be responsible for coordinating interactions with separately incorporated, affiliated organizations such as foundations (West, 2000). The utilization of foundations are particularly useful to public universities, as they can serve purposes such as receiving cash and in-kind contributions for scholarships and grants, managing patents and copyrights, and acquiring and selling real estate.

The management of an institution's debt is an integral aspect of the CBO's role as financial advisor. While it is common for debt financing for facilities and major equipment to be carried out by the governing board, the CBO often provides leadership in negotiating terms of borrowing with financial institutions and in bringing debt issuance to market (West, 2000). Some of the parties CBOs work with in bringing debt issuance to market are the institution's key financial staff, legal

counsel, bond counsel, underwriters, bond trustees, external financial advisors, credit issuance firms, and of course, the institution's board of trustees and president.

The incredible proliferation of information technology has added to the challenging task of institutional financial planning. The growth of software and Internet applications, peripheral equipment, distance delivery modalities, and management information systems has made the task of budgeting for information technology especially challenging. According to Falduto (1999), the rapid proliferation of information technology, which requires institutions to prudently identify, fund, and provide ongoing support for appropriate technologies, has been one of the single largest cost burdens ever faced by higher education.

Business Manager

While public universities are non-profit organizations, they are nevertheless full-fledged business endeavors. With the possible exception of a university's board of trustees and its president, the CBO is typically the individual who is held primarily responsible for the institution's overall financial health. A solid understanding of an institution's revenue and expenditure streams is required of the CBO. Additionally, these individuals are held principally responsible for the oversight of auxiliary services such as bookstores, campus housing and dining operations, athletic arenas, and even golf courses – each one of which is a business operation in itself.

CBOs are usually charged with overseeing institutional business functions such as accounting, payroll, purchasing, budgeting, human resources, and student

financial aid. The purchasing of goods and services is often a reporting function to the CBO, although research suggests that this activity is one that is most often delegated because of the tremendous amount of administrative time involved in the process (Calver & Vogler, 1985).

Being prudent in the allocation of all of an institution's resources is a central responsibility of the CBO. Larry Faulkner, president of the University of Texas at Austin, has given emphasis to the business officer's special role as the chief custodian of an institution's resources. Speaking at the 1999 NACUBO Annual Meeting, Faulkner encouraged business officers to put an emphasis on resource allocation: "Cost sensitivity is an important factor now. (Business officers) have an important role in making better use of resources and alerting others about opportunities and innovations in business practices" (Klinger, 1999).

While the management of student enrollment is typically the responsibility of the chief academic or student affairs officer, the CBO is also directly or indirectly held accountable for maintaining or growing student enrollment. Enrollment management in a new era of competition requires new knowledge and skills.

The CBO's oversight of so many aspects of institutional operations leads to another area of responsibility – and a required skill set that calls out for leadership: the supervision of staff. Although the CBO may have a varying number of individual department heads that report directly to him or her, he or she is indirectly accountable for the hiring, supervision, training, and related human resource functions of all those

individuals employed in the departments that report to him or her, which can add up to several hundred people.

Collaboration is fast becoming the primary way that business will be conducted on the college campus, suggest Sanaghan, Goldstein, and Jurow (2001). "The complexities and challenges will not be manageable through singular action. An integrated approach to institutional business practices will be the key to survival and success in the future" (p. 43). Therefore, as the lead business managers of their organizations, CBOs must enhance their ability to lead teams, promote partnerships, and identify and implement strategies while involving numerous institutional stakeholders in the process.

Strategic Planner

Effective leaders in the executive ranks must devote significant time and attention to crafting and implementing their institution's strategic agenda. They must also create and maintain a clear institutional identity, and set long-term institutional directions (Morley & Eadie, 2001).

The CBO assumes a lead role in both short-term operational and long-term strategic planning. University budgets are inextricably linked to planning which therefore necessitates the involvement of the CBO. Although the CBO is often not the designated principle institutional planner, he or she works in concert with other administrators in the coordination of institutional planning.

As a member of the president's senior executive team, the CBO provides input on the overarching strategic plans for the university. He or she is charged with identifying strategic partnerships with other public institutions or private vendors, such as providers of bookstore services, housing management, and dining services. The CBO also works with the institution's president and many other stakeholders in the design and execution of the campus master plan, which is a long-term strategic plan for the campus' design.

Broad (2000) suggests that organizational boundaries are likely to become even less well defined, resulting in a need for strategic alliances to be developed on many fronts. "Already," says Broad, "academic centers and institutes are emerging that cut across multiple disciplines and multiple campuses and that require new ways of budgeting, managing, decision making, and ensuring accountability" (p. ix).

Business officers who are skilled strategic planners are action-oriented and focused on end results. "The acid test of leadership is not the publication of a beautifully crafted strategic plan, but the implementation of the targets and strategies described in the plan," state Morley and Eadie (2001, p. 24). The authors contend that business officer leaders are much more than "big picture" thinkers; they are individuals who pay close attention to the thorough design of implementation processes, the allocation of resources to innovative initiatives, and communication aimed at overcoming the natural human resistance to change.

Manager of Risk

An integral element of both short-term operational planning and long-term strategic planning pertains to risk management. Abraham (1999) defines risk management as not the elimination of risk, but rather, dealing with risk in the most effective and cost efficient manner while supporting the mission of the institution and the inherent risk its students, faculty, staff, and volunteers encounter in their pursuit of teaching, research, and student activities. Abraham contends that the most important role a CBO plays is that of risk manager. In both short and long-term planning CBO's must work with a team to identify and manage their institution's physical, casualty, fiscal, business, and reputational risks. The onus of safeguarding an institution's assets through the identification, control, and transfer of risk through insurance instruments lies with the CBO.

Steward of the Physical Plant

The CBO assumes primary responsibility and oversight for the physical elements of the college campus. Functions typically overseen by the CBO include (a) facilities planning; including design, construction, renovation, and repair, (b) facility upkeep; including operations and maintenance, and (c) maintenance of campus grounds. Many universities in the U.S. have been in operation for one to two-hundred years or longer and therefore have an aging physical plant, which consequently requires CBOs to create plans for addressing what are often building maintenance issues.

One of the most administratively contentious issues often dealt with by the CBO pertains to the issue of adequate parking. The CBO must listen to students' and employees' complaints on the issue of parking, and must try to respond to their satisfaction and within the constraints of physical plant and fiscal limitations.

Governmental Relations Liaison

Public sector higher education CBOs assume significant responsibility for working with their state budget offices and legislatures. CBOs often work with legislators, their staff, and others in the policy arena on matters pertaining to public higher education finance. They are often called upon to provide specific information for state higher education coordination boards, state agencies, and policymakers. Requests for information pertain to such things as funding requests, spending patterns, financial management problems, and internal or external audits that have been conducted (Lasher, Grigsby, & Sullivan, 1999). With regard to higher education finance patterns, CBOs need to have a firm understanding of the general trends that have existed in their state's funding formula. Additional areas of financial expertise required in the governmental relations forum include capital budgeting, tuition setting, and student financial aid.

The extent to which CBOs will work directly with state budget officials or others in the legislative arena will depend largely on how the state's higher education system is arranged. The more autonomous the coordination of the higher education system, the more likely the CBO will be involved directly with state officials.

However, even in those states with highly centralized higher education coordinating bodies, the CBO is still likely to play a significant role in assisting his/her president or chancellor in fulfilling the governmental relations duties required of the chief executive.

Governmental relations are not limited to the state level; indeed, much takes place at the local level. The CBO may work extensively with city, county, and township officials. The maintenance of good "town-gown" (university-community) relationships is carried out to a great extent by CBOs. Working to address issues at the local level may in fact prove more challenging due to the political ramifications that may come in the aftermath of critical decisions that have been made on contentious issues. At the local level, CBOs must maximize their ability to solve problems, make decisions, and build collaborative relationships in fulfillment of common goals.

Legal Advisor

When a given institution does not have a legal counsel on staff, the CBO may provide a leadership role to ensure proper oversight of legal matters or institutional compliance with federal, state, or local law (West, 2000). Ensuring compliance with federal, state, and local laws and regulations, overseeing the documentation of business transactions involving such things as land acquisitions or contracts, and defending the institution against lawsuits, are examples of activities that may result in the CBO being called upon for legal advice. West says that CBOs must see that legal

services are provided by external counsel when needed but that such services should not be used in excess. Says West, "The CFO must see that the legal services are provided when needed but not overused from either a cost or managerial standpoint. Legal counsel should serve as an advisor to management and not become a substitute for management" (ch. 1, p. 14).

It is incumbent upon the CBO to possess an understanding of higher education law. Although CBOs are not usually given primary responsibility for overseeing all legal issues a university may be engaged in, they often assist other senior administrators by providing information needed in legal cases. Addressing employee and student discipline issues, maintaining academic freedom, and responding to a myriad of other legal issues – all the while abiding by laws aimed at both protecting individuals' privacy and providing for the public disclosure of institutional information – requires the CBO to have a good understanding of pertinent state and federal law. Public university CBOs need to be well versed in a whole class of acronyms that are common to higher education law. FOI (Freedom of Information Act) and FERPA (Federal Education Rights and Privacy Act) are just two acronyms that are mainstays of the CBO's lexicon regarding higher education law.

Privacy issues, warns Brown University's Beverly Ledbetter, especially in light of the new electronic, network- and Internet-based environment now pervasive in higher education, requires that institutions keep track of all communications (Chase, 2000). Monitoring and archiving electronic communications requires a

whole new set of institutional policies and procedures, many of which may be the responsibility of the CBO. Olson (2001) writes:

> Before the advent of digital commerce, administrators had a clear sense of institutional responsibilities under FERPA. With Web-based applications, as students register on the Web, review their course requirements and degree certifications, check the status of their financial aid, and review and pay their bills, we have moved into truly unmapped territory for FERPA. (p. 36)

It is now apparent that business officers must also be cognizant of a growing body of law pertaining to the digital world. Whereas much of higher education law has been established and tested over time, advancements in new technologies are posing a challenge to the line of conventional thinking that parallels the creation of new laws aimed at addressing digital communications. Roy (2001) alleges that the evolution of cyber law is taking a different path than currently established law. He asserts that the convergence of communication technologies, computers, and broadcast media have given rise to cyberspace challenges to many of the traditional jurisprudential assumptions, which until now, were based on two-dimensional models of physical presence and space.

Pointing out the role business officers must now fulfill in responding to the evolution of new laws pertaining to cyberspace, Roy (2001) equates cyberspace to the Wild West:

> The environment is rapidly changing and unruly. College and university business and finance officers must be among those who step in and try to

bring order to the chaos. To accept this challenge, the CFO or CBO will need to be nimble in his or her institutional management approach, in other words a bit like legendary marshal Wyatt Earp. (p. 29)

Information Technology Manager

With each month that passes, the challenge of managing the incredibly complex task of planning for and maintaining the institution's management information systems becomes greater. The last fifteen years have required senior business officers to add an entire class of new terms to their repertoire of knowledge. Data warehousing, data mining, software licensing agreements, intellectual property, wireless networking, bandwidth management, networked database management, e-business and Web-interfaced applications are terms that would be largely foreign to CBOs pre-1990. Summing up the consensus of CBOs participating in a 2000 senior business officer roundtable discussion, Klinger (2000) equates dealing with IT strategy to herding cats. "Dealing with information technology strategy today involves the unknown, the unexpected, and the unpredictable" (p. 36).

Keeping up-to-date with the great variety of technology applications that seem to blitz the higher education marketplace could likely engage a whole team of employees full time in assessing the efficacy of these new technologies. However, in reality, much of the burden of providing adequate information technology (IT) campus-based and Web-based solutions rests on the shoulders of CBOs. This requires that they continually strive to understand IT problems as well as prospective

solutions to the problems. The extensiveness to which IT consumes much of the attention of CBOs is reflected by the inclusion of an entire chapter dedicated to the topic in the latest edition of the business officer profession's authoritative text, *College and University Business Administration* (6th ed., NACUBO, 2000). IT challenges confronting business officers as outlined by the book include (a) determining appropriate IT staffing levels and finding and retaining capable IT professionals, (b) identifying life-cycle budgeting and technology replacement strategies, (c) measuring the value of IT investments and (d) identifying IT funding mechanisms.

Implementing a campus electronic business (E-business) strategy is a particularly important task. Olson (2001) warns that the way in which higher education institutions conduct even their most basic business functions will be radically transformed in the next couple of years with the emergence of all-encompassing E-business applications. The author asserts that it is incumbent upon the business officer to meet the IT challenge:

> Today's business officers face an unprecedented opportunity to exercise a critical leadership role in the deployment of advanced information technology solutions on campus. The business officer community has the challenge to shape the delivery of tomorrow's E-business solutions in ways that have never been possible before. (p. 35)

The benefits derived from CBOs' proactive approach to implementing an E-business strategy will include reduced operating expenses, improved quality in the

delivery of services, the ability to outsource non-core business processes, and a return to a focus on education, research, and public service (Olson, 2001). "Among the critical issues included in such a strategy," writes Olson "will be privacy, security, electronic and digital signatures, and electronic payment solutions" (p. 36).

Among the primary concerns shared by attendees at the 2000 NACUBO Annual Meeting was the need to address IT matters, particularly with regard to costs, staff retention, and platform and software configuration, implementation, and coordination (Chase, 2000). Dealing with these issues requires CBOs to direct much of their energy toward matters involving IT. CBOs must therefore be careful to balance the time they spend addressing technology issues with all the other job related functions they are accountable for fulfilling. Fortunately for CBOs, the addition of a new category of higher education senior administrator – the Chief Information Officer (CIO) or Chief Technology Officer (CTO), is gradually having a positive effect by taking some of the burden of IT management off of the CBO role.

Facilitator of Quality and Process Improvement

The prudent allocation of fiscal, human, and physical resources is a major activity of the CBO. The need to identify and implement operational efficiencies and to minimize the impact of rising costs has necessitated that the CBO take a lead role in pursuing productivity improvements and innovative strategies for cost containment. This emphasis on the attainment of institution-wide operational efficiencies is affirmed by West (2000):

> Pressures on higher education to manage cost, quality, and productivity have steadily increased. Institutions are being held more accountable than in the past for measured performance in both administrative and academic outcomes such as graduation and retention rates. These and other outcomes are also accreditation issues. In this environment it is often expected that the CFO will leads efforts to improve institutional effectiveness. (ch. 1, p. 18)

Coordinating quality and process improvement initiatives aimed at improving services, reducing costs, and enhancing an institution's overall operational effectiveness are often the responsibility of the CBO. Promoting the need and benefits of quality and process improvements, providing staff training in specific techniques, and creating incentives for the identification and implementation of improvements are among the tasks required of the CBO. West (2000) notes that while all improvement initiatives involve the elimination of rework and other non-value-added steps in a process to reduce transaction processing time and costs, this approach to process improvement must be balanced with the responsibilities that finance and business units, in particular, have for maintaining regulatory compliance.

Crisis Manager

Although the role of the public university CBO requires that he or she be high energy, task-focused, and able to deal with issues that cause anxiety and stress, the responsibilities that accompany the role are nevertheless relatively consistent in nature. This consistency, however, does not give license for the CBO to ever become

complacent when it comes to reacting to major crises. In addition to an institution's president, other relevant senior executives, and emergency management personnel, the CBO is often held chiefly responsible for responding to crises that may strike a university without any warning.

CBOs likely do not take comfort in knowing that at any given time they may have to take the lead in coordinating an institutional response to an emergency such as a residence hall fire, tornado, or other natural disaster. Student illness, or even death, caused by any environmental factor on a given college campus often draws much attention and requires a proactive university response. And campus crime, especially acts involving assault, may require the CBO to oversee an assertive response involving many departments on campus.

Natural disasters, human illness or death, or actions involving inappropriate human conduct have served as common reasons for a CBO-led institutional response to a crisis. However, this list of potential crises was significantly amended on September 11, 2001 when terrorists attacked the United States. While university leaders had passively addressed the threat of terrorism in the 1990s, the subject received intense attention in light of the 2001 terrorist attacks (see Fender, 1996; Romano, 2001). Many of the conventional steps taken in response to traditional crises such as dormitory fires, power outages, or criminal acts, are rendered ineffective when dealing with the pernicious acts of terrorism. It is now therefore incumbent upon CBOs to devise and implement – and be prepared to execute at a

moment's notice – a set of plans in response to a variety of terrorist acts that may occur.

Leadership Qualities Required of the Chief Business Officer

The prior discussion on the roles of the CBO only begins to illustrate all the responsibilities and complexities inherent in the position. An extensive and diverse array of subject area knowledge, and specific skills and abilities are required by individuals who fulfill this public sector senior executive position. Maintaining command of the different function-specific areas noted above requires the CBO to possess no small measure of knowledge, in terms of both breadth and depth, in each of these subject areas. The management functions the CBO must be competent in are numerous, but the preparedness of CBOs is measured by much more than subject area knowledge. An array of effective human relations skills are required of the CBO, as is an in-depth familiarity with the institution he or she is employed.

Business and financial officers, as partners in the success of the overall enterprise, must contribute to leadership development, team building, collaborative partnering with the institution's many and varied constituencies. "Effective administrative leaders must be able to work broadly across this organizational complexity. Building consensus out of conflict is an important part of successful leadership" (Broad, 2000, p. ix).

The comprehensiveness of the issues and tasks engaged in by CBOs requires that they approach the job holistically. The must weave together a cross section of

the entire university community and adequately balance conflicting priorities. It is imperative that the CBO be aware of the potential consequences and impact a given decision will have on all aspects of university operations.

Sanaghan, Goldstein, and Jurow (2001) conducted a qualitatively designed research study in an effort to identify a set of qualities and skills CBOs should possess if they are to provide exemplary leadership for their respective institutions. From their research came a distinct set of qualities – elements pertaining to character, skills, and abilities – that they determined CBOs should develop over time. The top three leadership qualities identified in the study were self-awareness, trustworthiness, and agility, while the top three skills identified consisted of creativity, communication, and decision-making.

Also identified as part of the study were three new roles CBOs should fulfill in order to serve as exemplary leaders. These new roles consisted of *capacity builder*, *cultural traveler*, and *horizon thinker*. As capacity builders, CBOs need to recruit, develop, and retain good people in order to build the capacity of their institutions. As cultural travelers, CBOs must extend themselves, be accessible to others, and possess the ability to interact meaningfully with diverse stakeholders. As horizon thinkers, CBOs must possess the ability to think strategically and be able to anticipate and interpret those events, trends, and issues that will change the way business will be conducted on campus. The authors of the study maintain that the ability of CBOs to think about and envision the future, and help develop creative responses to what is on the horizon, will help ensure the long-term viability and success of their institutions.

The CBO role requires an intensive interpersonal relationship leadership style. Creamer's (1990) study into the leadership style of chief finance officers at state and land grant colleges and universities illustrated that the CFOs employed a highly participatory leadership style. The study's population of 109 CFOs were found to prefer high relationship leadership styles – selling and participating – to low relationship leadership styles – telling and delegating. In a similar study of self-perceived leadership styles, this one of community college CBOs, Rhames (1996) determined that the population of 124 preferred high leadership styles and were either unable or unwilling to use a delegating leadership style.

In her dissertation research study on the leadership traits, behaviors, and characteristics of public two-year CFOs, Harrop (2001) found that community college CFOs and their CEOs are more similar than different in their perceptions of effective leadership traits, behaviors, and characteristics for the CFO to possess. The study's results indicated that both groups identified the traits of integrity, honesty, good ethics, knowledge of the job, and credibility as being important for the CFO to possess. Additionally, behaviors both groups rated as important consisted of accountability, responsibility, objectivity, collaboration, commitment, fairness, and decisiveness.

The Need for Improved Chief Business Officer Leadership Capacity

In reviewing the state of leadership in higher education today and in recognition of the tremendous role public university CBOs assume in running their

respective higher education institutions, it becomes very apparent that the need exists for the identification of new strategies that will enable aspiring CBOs to realize their full potential and for current CBOs to further enhance their leadership abilities.

Today's CBOs must continually improve their leadership competencies if they are to contribute to their respective institutions' future vitality. The issues facing senior leadership in higher education will only increase in scope, intensity, and complexity, warn Sanaghan, Goldstein, and Jurow (2001). The CBO, they proclaim, will be at the center of trustee relationships, stakeholder inclusion, policy making, administrative and faculty relationships, strategy, customer responsiveness, and the improvement of core processes.

The assertion that contemporary times will demand strong leadership in higher education administration is affirmed by Morley and Eadie (2001).

> In these constantly changing, always challenging, and frequently threatening times, the race will go to the most creative, innovative, nimble, and flexible institutions that are able to lead their own change, turning challenges into opportunities, while also preserving their core values and sacred traditions. This is to say that the race will go to those institutions that are well led, not just well managed. (p. 23)

In conclusion, this review of the literature on higher education administrative leadership, with particular regard to the CBO, indicates that this study should indeed contribute to the standing body of knowledge currently in existence. The researcher has not identified any large-scale quantitatively designed cross-sectional study that

has been completed on any aspect of leadership as it pertains to newly incumbent CBOs in the public university context. This indicates, therefore, that this study should contribute a degree of original knowledge to the important field of public-sector higher education executive-level administrative leadership.

For the purpose of this study, leadership is defined using Gardner's (1991) definition of the term and has been augmented by the researcher to reflect the role-specific nature in which leadership is demonstrated. Leadership has been defined as the process of persuasion or example by which an individual induces a group to pursue objectives held by the leader or shared by the leader and his or her followers, and the effective demonstration and persuasive use of knowledge, skills, and abilities essential to a given occupation.

CHAPTER III

RESEARCH DESIGN

Type of Research

This study embraces methods and procedures common to quantitative research approaches. An inherent characteristic of quantitative studies is the inclusion of many cases and many variables, which are measured in a predetermined and specific way (O'Sullivan & Rassel, 1999). Data that are collected using quantitative approaches are in numeric form and therefore can be summarized numerically. An essential goal of quantitative studies is to compare cases on different variables; therefore, factors unique to individual cases are not included.

This study involved a non-experimental, single-group posttest research design, which integrated the cross-sectional collection of data. A cross-sectional design is one used to collect data on all relevant variables at one time. A distinctive feature of the cross-sectional design is that its data represent a set of people or cases at one point in time (O'Sullivan & Rassel, 1999).

Survey research serves as the method by which this study was conducted. Survey research is a widely accepted and commonly used technique for collecting data. A questionnaire mailed to the population under study, eliciting primarily close-ended, highly measurable responses, served as the primary data collection instrument.

The questionnaire that was developed tested the relationship between a number of independent variables and the dependent variable. Operational definitions are delineated for key terms comprised in this assessment of public university CBO leadership preparedness. The assumptions made with regard to the research design and the study's limitations are also presented. The procedures used in the research design, including the steps for data collection and data processing are also provided. The data analysis methods are elaborated upon, including the methods by which the data are described, displayed, and analyzed.

Rationale for Selection of Type of Research

Survey research has long been established as an effective method of measuring the characteristics, attitudes and perceptions of a population. Researchers use surveys as a scientifically sound method in which to interview a representative sample instead of an entire population (Dillman, 1994). Monette, Sullivan, and DeJong (1998) espouse the flexibility the survey provides, noting that the data collection technique can be used for exploratory, descriptive, explanatory, and evaluative studies.

The utilization of a survey allowed the researcher to infer generalizations from the respondents to the broader population of public university CBOs. Given that the primary collection of data for this study came from the distribution of a questionnaire to the population under examination, the utilization of a non-experimental single-group posttest research design was appropriate.

Research Questions

The primary research question that this study was designed to answer is: *Is there a consistent pattern in the self-perceived leadership preparedness among U.S. public university CBOs?* The identification of correlations between a number of independent variables and the dependent variable addressed this question. Another primary research question is: *Do U.S. public university CBOs perceive themselves to have been adequately prepared at the time they assumed their first public university CBO position?*

The study's survey questionnaire was designed to answer the above two questions and twenty-three additional research questions that are more focused and represent factors that conceptually could affect leadership preparedness. All but one of the research questions were designed to allow for the collection of data that could be used in statistical analyses which would in turn identify whether or not significant relationships existed between a number of independent variables and the dependent variable.

One research question provided for the inclusion of qualitative data analysis in the study. Data generated from this inquiry came from an open-ended question provided on the survey questionnaire that sought to identify common themes engendered from the feedback received from public university CBOs. The open-ended question solicited advice the subjects indicated they would have liked to have received when they started their first position as public university CBOs. A summary

of the study's corresponding research questions, hypotheses, variables measured, and resultant outcomes is provided in Appendix A.

Research Hypotheses

The review of literature conducted for this study did not reveal a set of variables indicative of a pattern attributable to the leadership preparedness of U.S. public university CBOs. The researcher has not identified any previously conducted research that measured university CBOs' perception of their leadership preparedness at the time they first assumed their roles, therefore, a specific leadership pattern has not been hypothesized.

The study's primary hypothesis (H_1) is stated as follows: *There is a consistent pattern of leadership preparedness among U.S. public university CBOs*. The null hypothesis (H_0), which will be accepted or rejected based on the decision criteria, is: *There is not a consistent pattern of leadership preparedness among U.S. public university CBOs*. The term *consistent pattern* is used to describe the aggregate uniform relationship that exists between the independent variables measured in the study and the dependent variable of public university CBOs' overall perceived preparedness at the time they started their first position in this role.

The research design features a direct relationship between each of the study's research questions, a corresponding hypothesis, and one or more variables that have been measured. The resultant data were statistically analyzed and the corresponding hypotheses were either accepted or rejected based on the decision criteria described

later in this chapter. Again, Appendix A provides a summary of the study's research questions, hypotheses, and the related variables measured via the survey instrument used in the study.

Variables

Dependent Variable

The dependent variable in this study consisted of U.S. public university CBOs' overall perception of their preparedness at the time they assumed their first role as public university CBOs.

Independent Variables

The independent variables that were tested for the existence, strength, and significance of their relationship with the dependent variable were identified for inclusion in the study based primarily upon the review of literature. However, some variables were included in the study based upon the researcher's recommendations. The independent variables included in the study can be divided into a number of categories, which reflect the study's different research questions. The first two categories of independent variables consisted of CBOs' employment history and academic preparation. In the employment history category, the following variables were measured: (1) total number of years employed as a public university CBO; (2) total number of public university CBO positions held; (3) the existence of any employment history in public university administration positions the subjects had

prior to assuming their first role as public university CBOs (and if "yes," number of years); (4) the existence of any employment history in community college administration positions the subjects had prior to assuming their first role as public university CBOs (and if "yes," number of years), and; (5) the existence of any employment history in private, for-profit sector administrative-management positions the subjects had prior to assuming their first role as public university CBOs (and if, "yes," number of years). An additional variable of college level teaching experience was measured in this section.

The academic preparation section measured the subjects' acquisition of bachelor's, master's, and doctorate degrees. In addition to determining whether participants had earned any or all of these degrees, information on the specific name of the major for each degree earned was recorded. The respective degree categories (bachelor's, master's, doctorate) were then categorized according to specific occupational fields, which in turn served as independent variables measured against the dependent variable of overall perceived leadership preparedness. Two additional variables pertaining to the acquisition of the professional certifications of Certified Public Accountant (CPA) and Certified Financial Analyst (CFA) were documented and tested.

The next category of independent variables consists of three scales that measured public university CBOs' perception of their preparedness in three broad leadership competency areas. Twenty-one items measured management functions and competencies common to the CBO position, 10 items measured CBOs' ability to

manage relationships with key stakeholders, and 11 items measured CBOs' familiarity with several aspects of the public universities in which they were first employed at as CBOs. These variables are listed in Appendix A.

Data were collected via the survey instrument to determine if a statistically significant relationship existed between the subjects' perceived level of leadership preparedness at the time they started their first position as public university CBOs and the type of institution (according to the Carnegie Classification System) they were first employed at in this position. In addition, data were collected to assess whether such a relationship existed between the dependent variable and subjects' participation in professional development programs, both prior to and subsequent to their first public university CBO appointment, that the subjects felt significantly prepared them for their the role.

Finally, four demographic variables were measured and tested to determine if a relationship existed that would assist in the identification of a pattern in the population's self-perceived leadership preparedness. The variables consisted of (a) the subjects' current age, (b) the subjects' age at the time they first became employed as public university CBOs, (c) ethnicity, and (d) gender.

Levels of Data

Nominal, ordinal, and interval data were collected via the survey questionnaire and subsequently were utilized in hypothesis testing. Variables

measured at the nominal level are listed in Table 1 and generally represent "yes-no" questions or questions that provide a limited number of alternative choice responses.

Table 1

Variables Measured at the Nominal Level

Area of Measurement	Specific Item Being Measured
Employment and Teaching Experience	Employment in public university administration positions prior to subjects' first role as public university CBOs
	Employment in community college administration positions prior to subjects' first role as public university CBOs
	Employment in private, for-profit sector management positions prior to subjects' first role as public university CBOs
	College level teaching experience prior to subjects' first role as public university CBOs
Academic Achievement and Acquisition of Professional Certifications	Subjects' acquisition of bachelor's, masters, or doctorate degrees
	Field in which subjects had earned a bachelor's, master's, or doctorate degree
	Subjects' acquisition of the Certified Public Accountant (CPA) or Certified Financial Analyst (CFA) certification
Type of Institution	Type of institution subjects were first employed at as public university CBOs (doctorate, master's, or baccalaureate-granting according to the Carnegie Classification System)
Professional Development Programming	Participation in significantly beneficial professional development programming prior to subjects' first role as public university CBOs
	Participation in significantly beneficial professional development programming subsequent to subjects' first role as public university CBOs
Demographic Data	Subjects' ethnicity
	Subjects' gender

The utilization of a Likert scale was used to collect ordinal data on forty-one independent variables representing the three categories of the subjects' perceived level of preparedness in areas pertaining to management functions and competencies, relationship management, and institutional familiarity. The dependent variable of public university CBOs' overall perceived level of preparedness was also measured using this scale. Likert scaling is a method of index construction, also known as summated rating, and is often used to measure opinions or attitudes of individuals (O'Sullivan & Rassel, 1999). The use of a Likert scale allowed the characteristic of perceived preparedness to be measured and given a numerical value, which allowed for a more extensive statistical analysis of the data. The Likert scale that was included into the survey questionnaire offered five alternative responses: very under prepared, some under prepared, adequately prepared, well prepared, and very well prepared. Table 2 lists the variables measured at the ordinal level.

Table 2

Variables Measured at the Ordinal Level

Area of Measurement	Specific Item Being Measured
Self-perceived Level of Knowledge	Knowledge of financial planning Knowledge of financial reporting Knowledge of information technology issues Knowledge of management information systems Knowledge of facilities management Knowledge of capital (construction) planning Knowledge of campus master planning Knowledge of human resource law Knowledge of private contract management Knowledge of risk management practices Knowledge of public safety issues

Table 2 – Continued

Area of Measurement	Specific Item Being Measured
Self-perceived Level of Knowledge	Knowledge of contemporary issues in higher education Knowledge of the institution's policies Knowledge of the institution's labor contract processes Knowledge of the institution's facility maintenance processes Knowledge of the institution's planning processes Knowledge of the institution's budgeting processes Knowledge of the institution's capital outlay process Knowledge of the state's public university funding processes Knowledge of the institutional board governance policies Knowledge of the institutional board governance procedures Understanding of the institution's role in the state's higher education system
Self-Perceived Level of Ability	Ability to hire staff Ability to manage crises Ability to solve problems Ability to make timely decisions on critical issues Ability to effectively delegate tasks Ability to facilitate meetings effectively Ability to manage change and foster innovation Ability to supervise staff Ability to resolve interpersonal conflicts Ability to provide discipline to staff members Ability to make effective public presentations Ability to work effectively with the institution's president Ability to work effectively with members of the president's cabinet Ability to work effectively with members of the state budget office Ability to work effectively with members of the state legislature Ability to work effectively with the institution's board of trustees
Overall Self-Perceived Preparedness	Administrative management capabilities Human relations skills Familiarity with the institution Overall level of preparedness

Variables measured at the interval level resulted in the collection of data that could be calculated in terms of length of time (in years). The duration of administrative work experience in different settings and the demographic variable of subjects' age are two examples (see Table 3).

Table 3

Variables Measured at the Interval Level

Area of Measurement	Specific Item Being Measured
Employment Experience	Total number of years subjects were employed as public university CBOs
	Total number of public university CBO positions subjects had held
	Total number of years in public university administrative positions prior to subjects' first role as public university CBOs
	Total number of years in community college administrative positions prior to subjects' first role as public university CBOs
	Total number of years in private, for-profit management positions prior to subjects' first role as public university CBOs
Demographic Data	Subjects' current age
	Subjects' age at the time they first became employed as public university CBOs

Operational Definitions

Several key terms used in the study are operationally defined here in order to clearly articulate their significance and to diminish any ambiguity that may exist in their meaning. Appendix B provides a thorough summary of other terms used in this study. The terms defined in Appendix B generally reflect functions typically

associated with the public university CBO position. It should be noted that the survey questionnaire pre-test results did not generate any comments from the respondents that revealed confusion or ambiguity concerning any of the terms.

Public University Chief Business Officer:

Individuals typically employed at the vice presidential level at a four-year public higher education institution who assume primary oversight of the university's administrative, business, and financial operations. Common job titles associated with this role include vice president for administration and finance, vice president for business affairs, and chief financial officer.

Leadership:

Leadership is defined using Gardner's (1991) definition of the term and has been augmented by the researcher to reflect the role-specific nature in which leadership is demonstrated. Leadership, for the purpose of this study, has been defined as follows: The process of persuasion or example by which an individual induces a group to pursue objectives held by the leader or shared by the leader and his or followers, and the effective demonstration and persuasive use of knowledge, skills, and abilities essential to a given occupation.

Leadership Preparedness:

This term represents the extent to which the U.S. public university CBOs

participating in this study perceived themselves to have been prepared to lead at the time they assumed their first position as public university CBOs. Due to the indices used on the survey instrument to measure the subjects' self-perceived preparedness on a variety of variables, the term is used in this study to equate the subjects' preparedness using the following five categories: very under prepared, somewhat under prepared, adequately prepared, well prepared, very well prepared.

Consistent Pattern:

This term, used in the study's hypothesis, describes the uniform relationship that exists between selected independent variables and the study's dependent variable of overall self-perceived preparedness. Based on both a quantitative and qualitative analysis of the survey data, a composite of these variables is used to build a conceptual model of U.S. public university CBO leadership preparedness.

Relationship Management:

The ability of a public university CBO to demonstrate competence in creating and maintaining strong, positive, and mutually beneficial interpersonal and group relationships among a variety of individual stakeholders and institutional stakeholder groups.

Institutional Familiarity:

The extent to which a public university CBO is familiar with specific policies and processes unique to the institution he or she is employed at, as well as the institution's broader role in the state's higher education system.

Knowledge and Ability:

The three indices included in the survey questionnaire contain items that seek to assess the subjects' perceived preparedness in a number of areas pertaining to CBO-relevant management competencies, the ability to manage relationships, and the extent to which they were familiar with different aspects of the institution they were employed at in their first CBO roles. The term *preparedness*, as used in the survey questionnaire, is measured in terms of the respondents' perceived level of knowledge or ability in a given area. The term *knowledge*, as used in this study, specifically refers to the extent the respondents were familiar with, aware of, and understood a given topic relevant to the public university CBO role, at the time they first assumed the role, and according to their own perception. Knowledge consists of specific information acquired and retained through both study and experience. In comparison, the term *ability* connotes the quality of being able to do something that may extend beyond the mental or intellectual domain. The possession of specific skills, competencies, or aptitudes in carrying–out tasks relevant to the CBO position signifies an ability to demonstrate effective leadership in that particular area.

Source of Data – The Population

The source of data for this study consisted of CBOs from all public universities in the contiguous United States. A questionnaire was sent to all public university CBOs in the U.S. The population was 575. Institutions selected for inclusion in the study were those public four-year degree-granting institutions listed in the *2002 Higher Education Directory*, published by Higher Education Publications, Incorporated (see Rodenhouse, 2002). Campuses that are a part of a university's multi-campus system were included if they offered minimally a four-year degree and employed a designated CBO. The National Association of College and University Business Officers provided the research with a database consisting of the names of CBOs and their employment mailing addresses.

Assumptions of the Study

In any study, certain assumptions are made with respect to the quality of the data that are collected. Provided below is a summary of those assumptions that were made with respect to this research study.

Integrity of the Data

One assumption made was that the questionnaires that were completed and returned contained honest and correct data. Another assumption made in this study was that one type of experience is assumed to have the same effect on one's perceived leadership in the same manner as the same experience of another

individual. This is related to an additional assumption that each CBO will assess his or her leadership preparedness using similar criteria, when in fact, this is not possible. Each CBO's judgments about his or her abilities were measured based upon his or her individual perceptions, which may vary.

Role Responsibility

Another assumption is that all public university CBOs assume approximately the same level of responsibility when entering their first CBO role. However, the responsibilities assumed by CBOs may in fact vary greatly. The size of the institution, organizational structure, and reporting lines are among the factors that may contribute to variations in job responsibilities among CBO positions.

Validity of Measurements

A third assumption is that items that seek to measure public university CBOs' self-perceived leadership preparedness are valid, that is, the items serve as an accurate assessment of role-leadership. A review of the literature on the role of the public university CBO, combined with input from executives at NACUBO, the researcher's own experience, and a pretest of the instrument, suggest that the survey instrument does indeed provide an accurate assessment of CBOs' level of leadership preparedness.

Respondents' Memory

A final assumption made in this study pertains to the subjects' ability to recall information. The survey instrument used in this study collected data that required the respondents to recall their self-perceived level of preparedness on numerous subject areas, skills, and management competencies. An assumption made is that all respondents, regardless of how long they had to think back to the time at which they began their first public university CBO role, were able to accurately recall their level of preparedness in various aspects of the position.

Limitations of the Study

While steps were taken to ensure that the data collection instrument used in this study was valid and that the overall design for this study was methodologically sound, there still exists a number of limitations to the research project that should be disclosed.

Cross-sectional Design

While the utilization of a cross-sectional methodological design has its advantages, one of its drawbacks is that the design does not allow the researcher to measure the change in values of variables over time. Because investigators cannot control or manipulate the occurrence of independent variables in a cross-sectional study, they are unable to demonstrate causal relationships and therefore are unable to rule out alternative explanations as to the outcome of a given measurement.

Reliability of the Survey Instrument

Reliability is defined as the degree of random error associated with a measurement. Reliable measures are those that produce consistent and dependable data (O'Sullivan & Rassel, 1999). The researcher created the data collection instrument used in this study and therefore no past history of the instrument's provision of reliable measurements exists. However, in order to assess the instrument's validity – the degree to which an item accurately measures what is intended – the instrument was pretested by a select group of practicing public university CBOs.

Respondents' Self-Evaluative Abilities

One of the limitations of the study pertains to the issue of self-perception regarding the self-evaluative items on the questionnaire. The accuracy with which an individual assesses his or her level of knowledge and ability may not be as valid as other's assessment of his or her knowledge, ability, and overall competency to lead.

Respondents' Memory

The survey questionnaire created for this study required respondents to recollect and assess how well they were prepared in terms of their knowledge, skills, and abilities at the time they started their first public university CBO roles. A rational assumption, therefore, is that the longer a respondent had served as a public university CBO, the more difficult it will be for he or she to accurately recall how

well he or she was prepared in these different areas. The respondent who has served in his or her CBO position for twenty years will likely find it harder to recall certain aspects of his or her preparedness than a respondent who has served in the CBO role for just two years. The possibility that respondents will possess a diminished ability to accurately recall old information is therefore a limitation of the study.

Access to Data

Steps have been incorporated into the study's design that facilitated access to CBOs and encouraged them to complete and return the questionnaire. However, it may have been possible that some of the CBOs on the mailing list that was used to distribute the questionnaire were in transition betweens jobs and institutions and were therefore unable to respond to the questionnaire. Related to the issue of data access is the presumption that, for varied reasons, CBOs in the population refused to complete and return the questionnaire.

Data

A limitation that was reflected in the data obtained from the questionnaire was that public university CBOs encompass a broad and diverse array of responsibilities. Therefore, their opinions, perceptions, and attitudes will reflect different work experiences, which may in turn have resulted in measurements that are based upon unequal exposure to the items being measured.

Focus on the Public University

Insofar as the population for this study includes only CBOs employed at public universities, the conclusions drawn from the analysis of the data cannot justifiably be generalized to those CBOs employed in non-profit or for-profit organizations.

Biased Response to Professional Development Programming

One of the items contained in the survey questionnaire asks respondents to name professional development programs that they found to be particularly helpful in preparing them for their roles. The sponsorship of the study by NACUBO, combined with a desire to be affiliated with a reputable professional association, may bias responses to this question in favor of NACUBO versus other occupation-based professional development associations or organizations.

The aforementioned limitations were addressed to the extent they could, given the research design and the resources accorded the study. Despite these limitations, the overall research design meets social science standards for this type of a study.

Overview of Procedures

In accordance with established social science research procedures, steps were taken to address all facets of participant consent, and the collection, recording,

analysis, and archiving of data. What follows is an overview of the procedures that were used in carrying out this research.

Access to the Population

Consistent with the ethical tenets of social science research, the researcher abided by all of the procedures required by the Western Michigan University Human Subjects Institutional Review Board (HSIRB). The HSIRB Application for Project Review, which was completed by the researcher and approved by the Board, provided a concise summary of the proposed study and included information on the targeted participant pool, the protocol for data collection, and the process for ensuring informed consent of study participants (see Appendix C).

The researcher received the endorsement for the study by the National Association of College and University Business Officers (NACUBO), the premier professional association for higher education CBOs. NACUBO's endorsement of this study included the generation of a database of names and contact information for the distribution of the survey questionnaire to the population. The researcher abided by the terms set forth in the NACUBO Mailing List Rental Agreement.

The researcher also secured permission from the president of the institution in which he is employed to use the university's mail services and a secretarial staff person in his office to assist with the collection of the survey questionnaires.

Pre-Test of Survey Questionnaire

Upon approval by the Western Michigan University Human Subjects Institutional Review Board, the researcher pre-tested the survey questionnaire with a small but diverse cross-section of CBOs in the U.S. A total of six pretest participants, representing each of the four regional NACUBO associations as well as both small and large institutions, participated in the pretest. The returned questionnaires appeared to have been completed without difficulty or ambiguity, and no changes were made to the instrument based upon feedback provided by pre-test participants. The names of the individuals who participated in the pretest of the questionnaire were eliminated from the population database.

Steps for Data Collection

Summarized below are the steps involved in the collection, transfer, and archiving of the data collected for the study.

Publication Announcing the Study

Using Dillman's (1994) advice on survey design, the researcher incorporated several elements aimed at encouraging members of the population to participate in the study by completing and returning the survey's questionnaire. A first step in creating awareness about the study and to encourage participation was to have an announcement of the study published in the April, 2002 edition of *Business Officer*,

NACUBO's monthly-published magazine. The short article explained the study's purpose and emphasized the importance of participation in it.

Mailing of Pre-Questionnaire Distribution Call-to-Action Postcard

A postcard was sent to the population (N=575) approximately two weeks in advance of the survey questionnaire's distribution. The objective in sending the postcard was similar to that as the *Business Officer* magazine article in that it apprised the population of the study, emphasized the importance of participation in it, and alerted them that a survey questionnaire would be forthcoming in the mail. The postcard was signed by the study's researcher along with that of the senior vice president of NACUBO, and featured the association's logo and Washington, D.C. return mailing address.

Mailing of the Survey Instrument

The mailing of the survey instrument included three elements.

Survey Questionnaire Cover Letter. The inclusion of a questionnaire cover letter, printed on NACUBO letterhead, was co-signed by the researcher as well as the senior vice president of NACUBO. This letter sought to accomplish two broader tasks. First, having the letter printed on NACUBO letterhead and having it co-signed by the senior vice president of the NACUBO organization conveyed the study's importance and its endorsement by the profession's premier professional association. Second, the cover letter included those elements common to survey questionnaire

cover letters: (1) an explanation of the importance of the study; (2) how respondents will benefit by participating in it; (3) the confidentiality of the data; (4) how respondents can learn about the study's findings; and (5) an appeal to participate.

Survey Questionnaire. The questionnaire served as the data collection instrument. Included on the questionnaire were a reiteration of the study's benefits, a reminder of the confidentiality of the data provided, and directions for completing and returning the instrument (see Appendix D).

Survey Questionnaire Return Envelope. A standard-sized, self-addressed, stamped return envelope accompanied the questionnaire and cover letter. In order to promote anonymity, no request was made to have respondents include their return address on the envelope.

Mailing of Post-Questionnaire Distribution Postcard to Non-Respondents

Approximately two weeks after the survey questionnaires were mailed, a follow-up postcard was sent to non-respondents. The postcard, which again displayed NACUBO's endorsement of the study by means of the organization's logo and return mailing address, reiterated the importance of the study and requested that members of the population complete and return the questionnaire.

Steps for Processing the Data

A secretarial staff member in the researcher's office of employment collected the returned questionnaires. To ensure anonymity, the secretary detached and discarded the envelopes the questionnaires were returned in. She cut off the upper right hand corner of the survey questionnaire that indicated the number that was associated with the study participant. She then eliminated the correlating institution from the population database. Data collection ceased six weeks after the questionnaires were mailed. Once the researcher received the returned and completed questionnaires, he transferred them to a working office in his place of residence. As the questionnaires were returned, the researcher hand-inputted the data from the questionnaires into a computer using the SPSS® software program.

It should be noted that all data collected as part of this study were stored in a safe and secure place in the researcher's place of residence, where it will remain for a period of three years, at which time the data will be destroyed.

Data Analysis Techniques

The data collected via the survey questionnaires, once inputted into a SPSS® (v 10.0) database (see SPPS Inc., 1999) was analyzed to in order to provide answers to the study's research questions and to determine if the study's primary hypothesis should be accepted or rejected. Extensive data analysis was conducted to describe the population and to identify significant and interesting findings from the survey, from

which conclusions were drawn, recommendations made, and a model of leadership preparedness created.

Selection of Descriptive and Display Methods

For nominal data, the mode is presented in order to provide the measure of central tendency. Pie charts provide a visual illustration of variables measured using nominal data. For ordinal data, the mode and median, the appropriate measures of central tendency, were computed and displayed. Bar graphs serve as the method by which ordinal data are visually depicted. For interval data, the mode, median, and mean are furnished to provide the appropriate measures of central tendency.

Selection of Analytic Methods and Decision Criteria

For nominal data involving bivariate analyses describing one population, the Chi-square goodness-of-fit test was conducted to determine the significance of the relationship between the independent and dependent variable. For this test, significance was determined at the .05 level. For nominal data involving multivariate analyses comparing two or more populations, the Kolmogorov-Smirnoff test was used to determine whether there was a significant difference in the perceived level of leadership preparedness among the populations. For this test, a significant difference was determined at the .05 level.

For ordinal data involving bivariate analyses, the Spearman's Rank Order Correlation (Rho) test was conducted to determine the strength and relationship

between the ordinal independent variable and the ordinal dependent variable. In all statistical analyses, relationships will be determined to be significantly different from random to be of interest if the statistic is less than -.65 or greater than .65. For ordinal data involving multivariate analyses, the Kolmogorov-Smirnoff test was conducted to determine whether there was a significant difference among the populations. The two populations consisted of those subjects who perceived themselves to have been "very" or "somewhat" under prepared in a given competency area and those that perceived themselves to have been either "adequately," "well," or "very well" prepared. Here again, significant difference will be determined at the .05 level.

Multiple regression tests were used in the statistical analyses of data from the three indices used in the questionnaire. The regression tests involved the correlation of the subjects' perceived level of preparedness of each variable within a given category with the dependent variable of overall perceived preparedness.

For interval data involving bivariate analyses, the Spearman's Rank Order Correlation (Rho) test was used to determine the strength and relationship between the interval independent variable and ordinal dependent variable. Relationships were determined to be significantly different from random to be of interest if the statistic was less than -.65 or greater than .65.

CHAPTER IV

FINDINGS

This chapter contains three sections. The first section provides a descriptive analysis of the survey data. Using the appropriate measures of central tendency, this descriptive analysis provides an overview of the data. The second section provides a summary of the results generated from the analytical tests used to test the study's hypotheses. The third section contains a synopsis of the qualitative data provided via the open-ended question that was incorporated into the survey instrument.

Descriptive Analysis

In order to provide a descriptive illustration of the data, a frequency distribution for each variable was conducted and is presented below. A table for each frequency distribution is presented, followed by a figure, which provides a visual depiction of the distribution. The descriptive data from the study's one dependent variable are presented first. Thereafter, the frequency distributions for the study's independent variables are presented by level of data, beginning with nominal.

Two hundred-sixty of the 575 individuals that comprised the population responded to the survey, which translates into a questionnaire return rate of 45.2%. This return rate is an impressive number for a social science survey of this nature.

Frequency Distribution – Dependent Variable

The study's dependent variable measured the subjects' self-perception of their overall preparedness at the time they started their first position as public university CBOs. The result of the distribution, which numbers 258 with two missing values, reflects a population quite confident in its leadership preparedness.

A full one half of the respondents (130 or 50.4%) perceived themselves as being well prepared overall at the outset of their first public university CBO position (see Table 4 and Figure 1). Another one tenth of the respondents (25 or 9.7%) felt they were very well prepared, and nearly one third (82 or 31.8%) felt they were adequately prepared overall. While no respondent felt very under prepared at the start of his or her first public university CBO position, 21 individuals (8.1%) felt somewhat under prepared.

It should be noted that both the respondents as well as stakeholders who have a vested interest in the preparedness of CBOs may interpret the term "adequately prepared" differently. While the term "adequate," as used in this study, conveys a sense of being sufficiently prepared to carry out a particular aspect of the CBO role, it also expresses an acknowledgement of *not* being well prepared. For the purpose of describing the data and conducting analytical tests, the researcher has chosen to categorize "adequately prepared" with the more positive terms of "well prepared" and "very well prepared." However, it should be recognized that respondents who indicated they were only adequately prepared in any given aspect of their roles have room for growth and improvement in that particular area.

Table 4

Frequency Distribution: Public University CBOs' Overall Perceived Level of Preparedness

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	21	8.1	8.1	8.1
Adequately Prepared	82	31.5	31.8	39.9
Well Prepared	130	50.0	50.4	90.3
Very Well Prepared	25	9.6	9.7	100.0
Total	258	99.2	100.0	
Missing	2	.8		
Total	260	100.0		

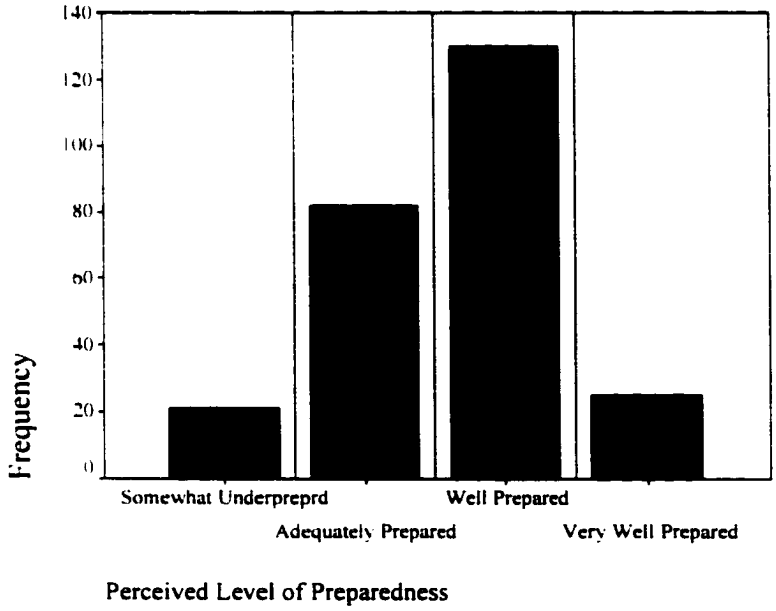

Figure 1. Frequency Distribution: Public University CBOs' Overall Perceived Level of Preparedness*

* Due to limitations in the SPSS® software program, the term "somewhat under prepared" is missing the last "e" in "prepared" in all figures where the term appears. Also, a bar is not shown in cases where no respondents indicated they were "very under prepared" with respect to a given variable.

Frequency Distributions – Nominal Level Data

The frequency for the variable of *previous public university administrative experience* was 260 or 73.8%, which had no missing values, indicating that nearly three-quarters of the respondents had some administrative experience working in a public university prior to their first public university CBO appointment (see Table 5 and Figure 2).

Table 5

Frequency Distribution: Prior Public University Administrative Experience

	Frequency	Percent	Valid Percent	Cumulative Percent
No	68	26.2	26.2	26.2
Yes	192	73.8	73.8	100.0
Total	260	100.0	100.0	

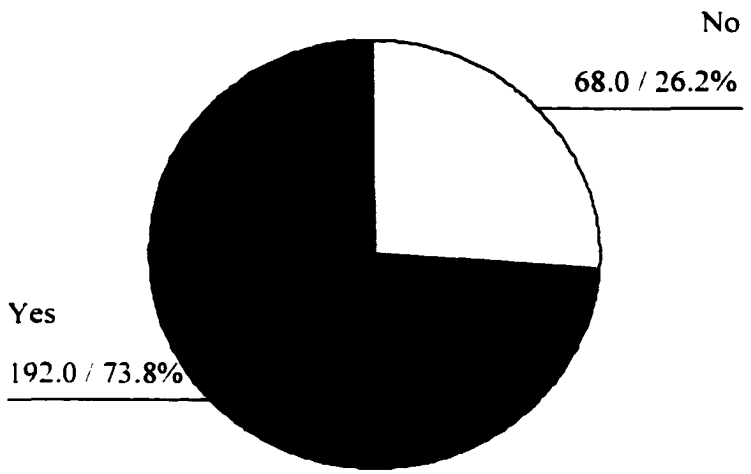

Figure 2. Frequency Distribution: Prior Public University Administrative Experience

The frequency for the variable of *previous community college administrative experience* was 29 or 11.2%, which had no missing values, indicating that over one in ten of the respondents had some administrative experience working in a community college prior to obtaining their first CBO position (see Table 6 and Figure 3).

Table 6

Frequency Distribution: Prior Community College Administrative Experience

	Frequency	Percent	Valid Percent	Cumulative Percent
No	231	88.8	88.8	88.8
Yes	29	11.2	11.2	100.0
Total	260	100.0	100.0	

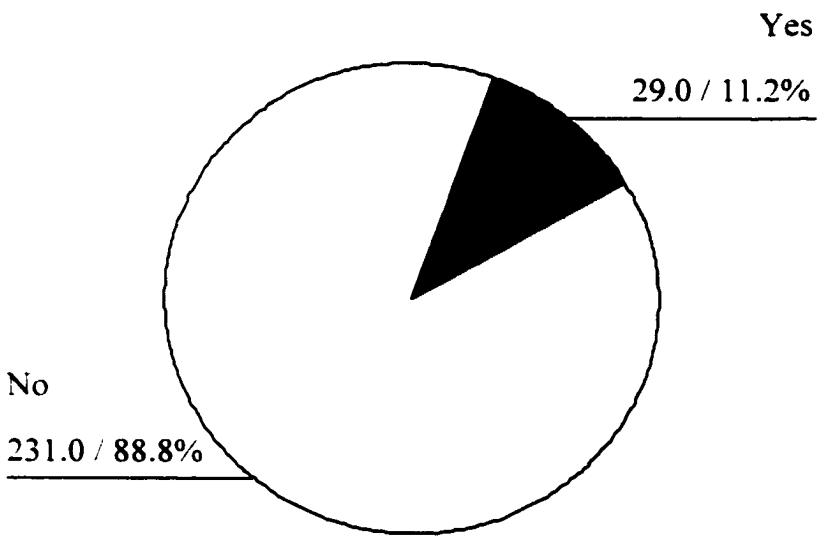

Figure 3. Frequency Distribution: Prior Community College Administrative Experience

The frequency for the variable of *prior experience in administrative or management experience in the private or for-profit sector* was 70 or 26.9%, which had no missing values, indicating that just over one fourth of the respondents had some experience working in this regard (see Table 7 and Figure 4).

Table 7

Frequency Distribution: Prior Private or For-Profit Sector Management Experience

	Frequency	Percent	Valid Percent	Cumulative Percent
No	190	73.1	73.1	73.1
Yes	70	26.9	26.9	100.0
Total	260	100.0	100.0	

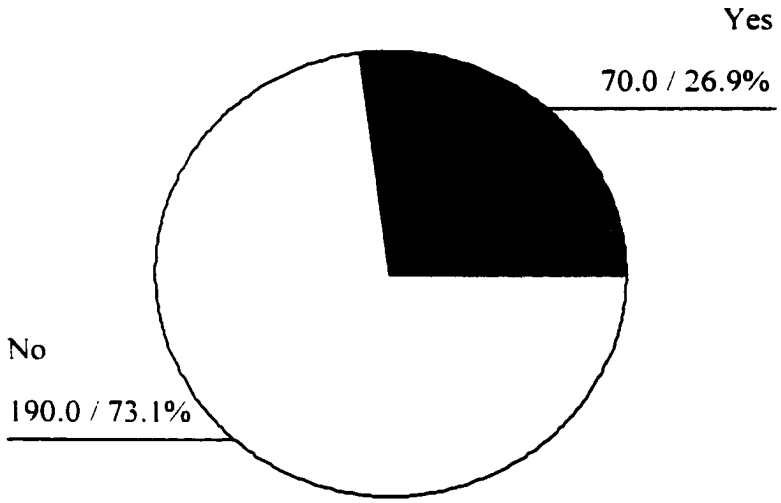

Figure 4. Frequency Distribution: Private or For-Profit Sector Management Experience

The frequency for the variable of *prior college teaching experience* was 97 or 37.3%, which had one missing value, indicating that well over one third of the responding public university CBOs had taught a college level course prior to assuming their first CBO roles (see Table 8 and Figure 5).

Table 8

Frequency Distribution: College Level Teaching Experience

	Frequency	Percent	Valid Percent	Cumulative Percent
No	162	62.3	62.5	62.5
Yes	97	37.3	37.5	100.0
Total	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

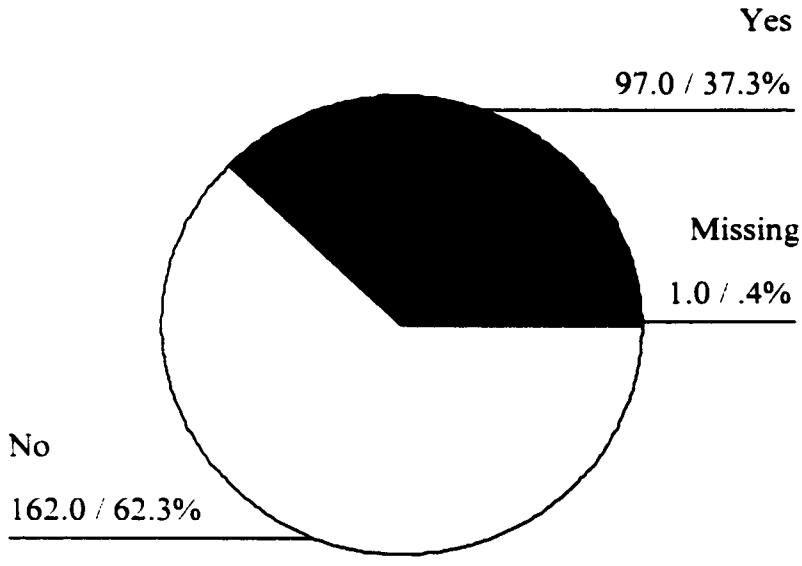

Figure 5. Frequency Distribution: College Level Teaching Experience

The frequency for the variable of *earned doctorate degree* was 58 or 22.3%, with no missing values, indicating that over one fifth of the participating university CBOs had earned a terminal degree (see Table 9 and Figure 6).

Table 9

Frequency Distribution: Earned Doctorate Degree

	Frequency	Percent	Valid Percent	Cumulative Percent
No	202	77.7	77.7	77.7
Yes	58	22.3	22.3	100.0
Total	260	100.0	100.0	

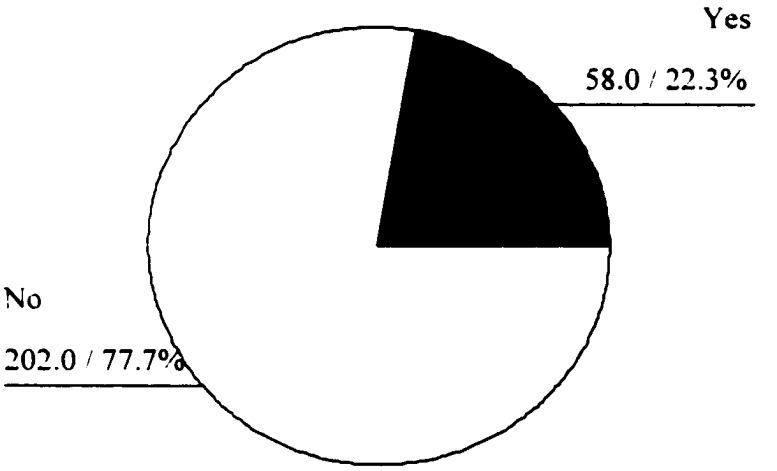

Figure 6. Frequency Distribution: Earned Doctorate Degree

The frequency for the variable of *field in which doctorate degree was earned* revealed that nearly one half (47%) had earned the degree in the field of education (see Table 10 and Figure 7). Coming in a distant second were business and

management related doctorate degrees. Business degrees were followed by degrees in the arts and sciences related fields, which 17.5% indicated they had earned. Law degrees had been earned by 12% of those who had received a doctorate degree.

Table 10

Frequency Distribution: Field in which Doctorate Degree was Earned

	Frequency	Percent	Valid Percent	Cumulative Percent
Business & Management Related	13	5.0	22.8	22.8
Education Related	27	10.4	47.4	70.2
Law	7	2.7	12.3	82.5
Arts & Sciences Related	10	3.8	17.5	100.0
Total	57	21.9	100.0	
No Degree Earned	203	78.1		
Total	260	100.0		

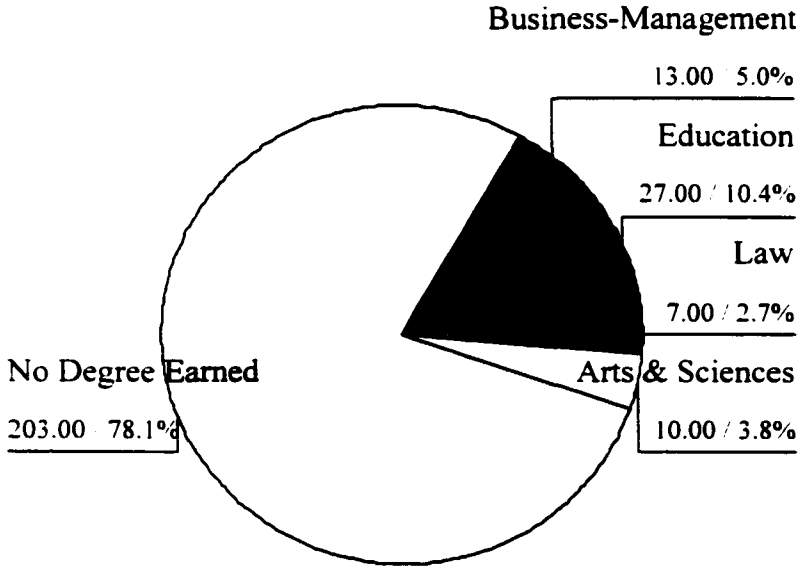

Figure 7. Frequency Distribution: Field in which Doctorate Degree was Earned

The frequency for the variable of *earned master's degree* was 211 or 81.2%, with no missing values, indicating that over four-fifths of university CBOs had earned a master's degree (see Table 11 and Figure 8).

Table 11

Frequency Distribution: Earned Master's Degree

	Frequency	Percent	Valid Percent	Cumulative Percent
No	49	18.8	18.8	18.8
Yes	211	81.2	81.2	100.0
Total	260	100.0	100.0	

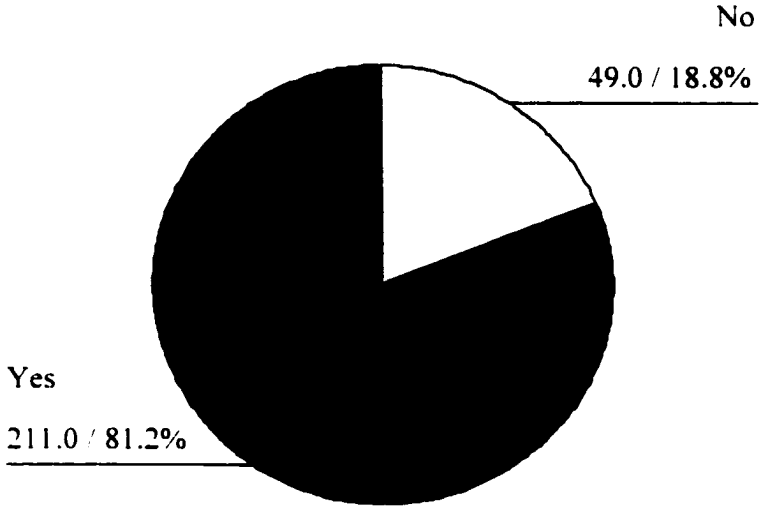

Figure 8. Frequency Distribution: Earned Master's Degree

The frequency for the variable of *field in which master's degree was earned* revealed that a majority of the respondents had received a master's in fields related to business and management, which together represented 147 or 56.6% of the

population (see Table 12 and Figure 9). Between 6.2% and 9.2% of those who had earned a master's degree received the degree in the fields of education, public administration, or the arts and sciences. A mere 2% had received master's degrees in fields relating to engineering and technology.

Table 12

Frequency Distribution: Field in which Master's Degree was Earned

	Frequency	Percent	Valid Percent	Cumulative Percent
Business & Management	147	56.5	56.5	56.5
Education	20	7.7	7.7	64.2
Public Administration	16	6.2	6.2	70.4
Arts & Sciences	24	9.2	9.2	79.6
Engineering & Technology	5	1.9	1.9	81.5
No Degree Earned	48	18.5	18.5	100.0
Total	260	100.0	100.0	

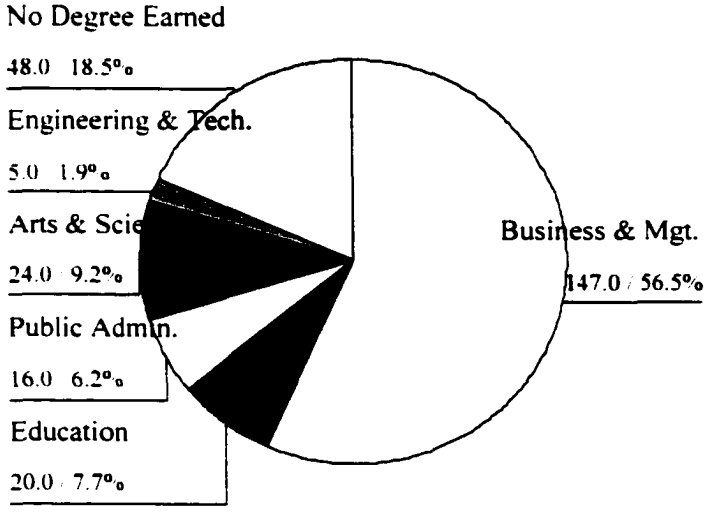

Figure 9. Frequency Distribution: Field in which Master's Degree was Earned

The frequency for the variable of *earned bachelor's degree* was a full 100%, with no missing values, indicating that all of the CBOs who had participated in the survey had earned an undergraduate degree.

The frequency for the variable of *field in which bachelor's degree was earned* revealed that six out of every 10 respondents had earned an undergraduate degree in a field pertaining to business or management (see Table 13 and Figure 10). Over one fourth (28%) of the respondents indicated that they had earned a bachelor's degree in fields representing the arts and sciences. Nearly 7% had earned a bachelor's degree in an education related field, with one half as many (3.5%) indicating that their undergraduate degree was earned in an engineering or technology related field. Two respondents, less than 1%, had earned a bachelor's degree in public administration. One respondent did not report the field in which his or her bachelor's degree had been earned, thus resulting in one missing value.

Table 13

Frequency Distribution: Field in which Bachelor's Degree was Earned

	Frequency	Percent	Valid Percent	Cumulative Percent
Business & Management	157	60.4	60.6	60.6
Education	18	6.9	6.9	67.6
Public Administration	2	.8	.8	68.3
Arts & Sciences	73	28.1	28.2	96.5
Engineering & Technology	9	3.5	3.5	100.0
Subtotal	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

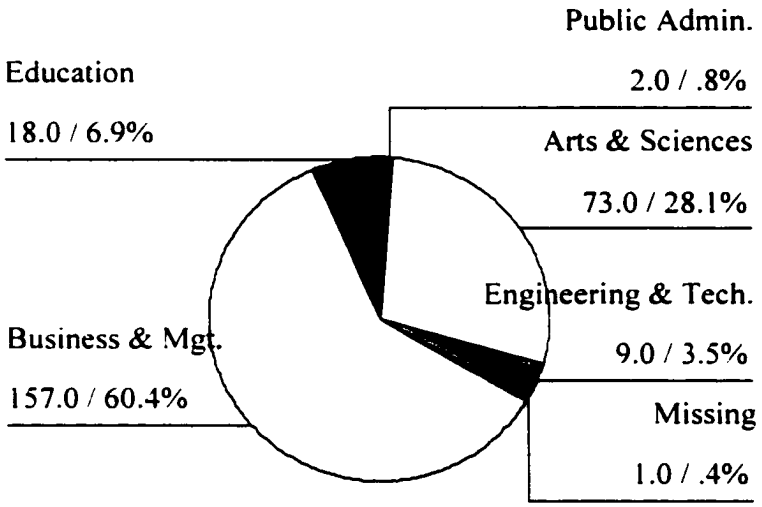

Figure 10. Frequency Distribution: Field in which Bachelor's Degree was Earned

The distribution of respondents who had *earned the Certified Public Account (CPA) credential* was 64 or 24.6%, with no missing values, indicating that nearly one fourth of public university CBOs had earned the professional certification (see Table 14 and Figure 11).

Table 14

Frequency Distribution: Certified Public Accountant Licensure

	Frequency	Percent	Valid Percent	Cumulative Percent
No	196	75.4	75.4	75.4
Yes	64	24.6	24.6	100.0
Total	260	100.0	100.0	

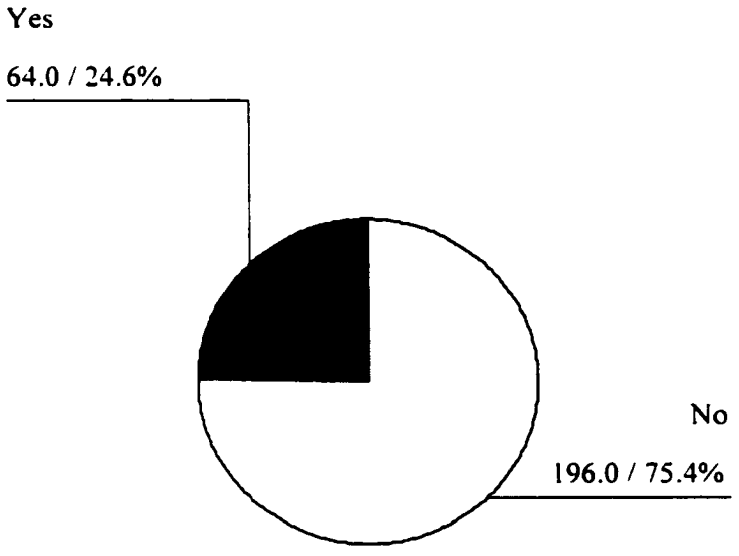

Figure 11. Frequency Distribution: Certified Public Accountant Licensure

Just two respondents, or .8%, indicated that they had earned the *Certified Financial Analyst (CFA) certification*, with no missing values. This indicates that the CPA certification remains a much more common professional credential than does the CFA.

The frequency distribution for the *type of institution* the respondents were employed at when first becoming public university CBOs revealed that individuals were split about evenly in representing doctorate granting schools versus master's granting schools, with distributions of 111 or 42.7%, and 116 or 44.6% respectively (see Table 15 and Figure 12). Thirty-three or 12.7% of the respondents indicated that they were employed at baccalaureate granting institutions when they obtained their first CBO role. This distribution contained no missing values.

Table 15

Frequency Distribution: Institutional Type

	Frequency	Percent	Valid Percent	Cumulative Percent
Doctorate-granting	111	42.7	42.7	42.7
Masters-granting	116	44.6	44.6	87.3
Bachelors-granting	33	12.7	12.7	100.0
Total	260	100.0	100.0	

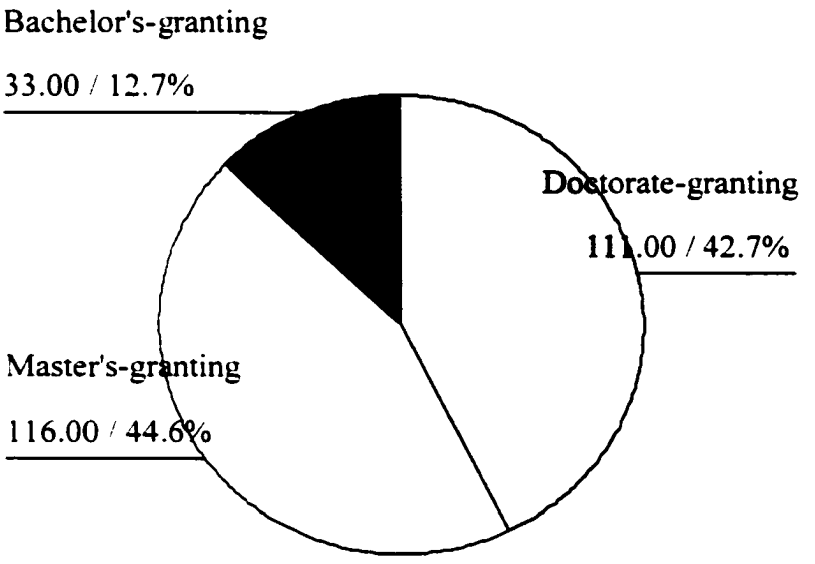

Figure 12. Frequency Distribution: Institutional Type

Four in ten (107 or 41.2%) of the respondents indicated that they had *participated in a professional development program prior to their first appointment as a CBO* that they felt significantly contributed to preparing them for their leadership roles as public higher education senior administrators (see Table 16 and Figure 13). This frequency distribution contained no missing values.

Table 16

Frequency Distribution: Professional Development Prior to First CBO Role

	Frequency	Percent	Valid Percent	Cumulative Percent
No	153	58.8	58.8	58.8
Yes	107	41.2	41.2	100.0
Total	260	100.0	100.0	

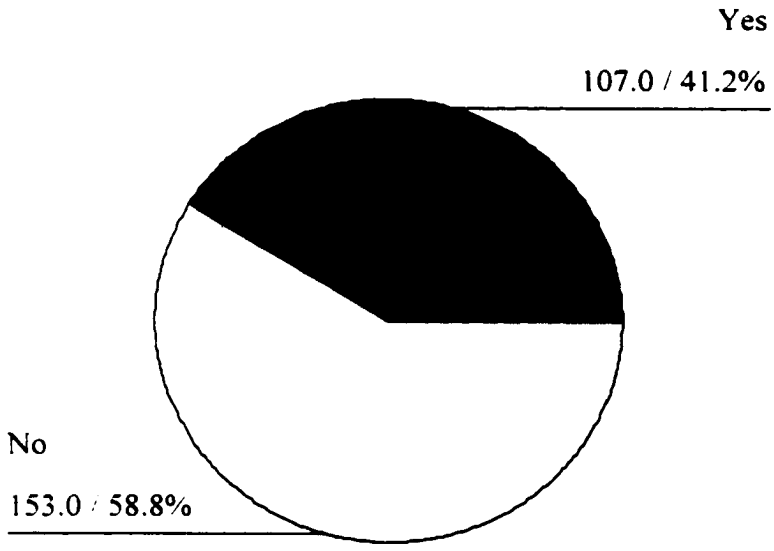

Figure 13. Frequency Distribution: Professional Development Prior to First CBO Role

Of those who indicated that they had participated in some significant preparatory professional development programming prior to assuming their first CBO role, over three-fourths (78 or 75.7%) indicated that the *topic of the training* was business or management related (see Table 17 and Figure 14). Twenty-two or 21.4% indicated that the training was leadership related and just three respondents or 2.9%

specifically identified the topic as planning related. Four (3.7%) of the respondents did not indicate the topic of the training that they found to be beneficial.

Table 17

Frequency Distribution: Topic of Preparatory Professional Development Programming Prior to First CBO Role

	Frequency	Percent	Valid Percent	Cumulative Percent
Leadership Related	22	8.5	8.6	8.6
Business-Management Related	78	30.0	30.5	39.1
Planning Related	3	1.2	1.2	40.2
No Significant Professional Development	153	58.8	59.8	100.0
Subtotal	256	98.5	100.0	
Missing	4	1.5		
Total	260	100.0		

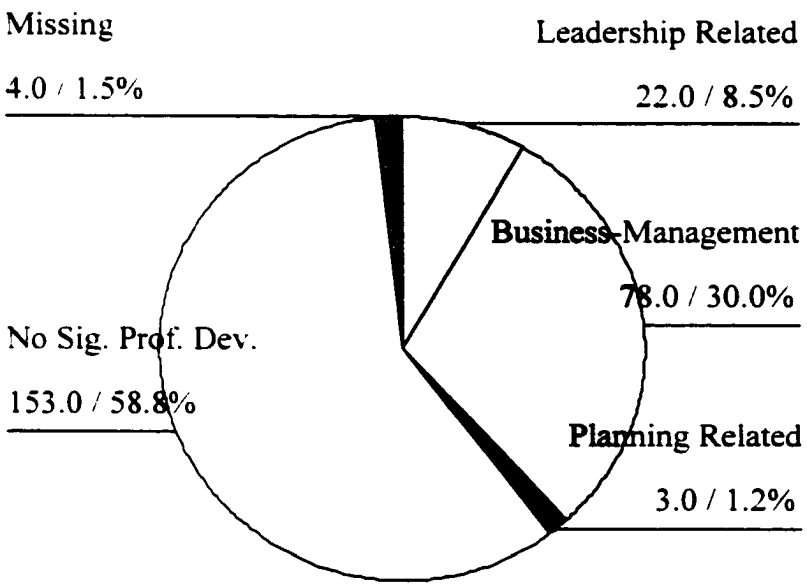

Figure 14. Frequency Distribution: Topic of Preparatory Professional Development Programming Prior to First CBO Role

Seventy or 68% of the respondents who indicated that they had participated in a significantly helpful professional development program prior to their first CBO appointment revealed that NACUBO was the source of the training. while 33 others (32.0%) indicated it was an organization other than NACUBO (see Table 18 and Figure 15). Four individuals (3.9%) did not identify the source of the training.

Table 18

Frequency Distribution: Organization Delivering Preparatory Professional Development Programming Prior to First CBO Role

	Frequency	Percent	Valid Percent	Cumulative Percent
NACUBO	70	26.9	27.3	27.3
Other Organization	33	12.7	12.9	40.2
No Significant Professional Development Training	153	58.8	59.8	100.0
Total	256	98.5	100.0	
Missing	4	1.5		
Total	260	100.0		

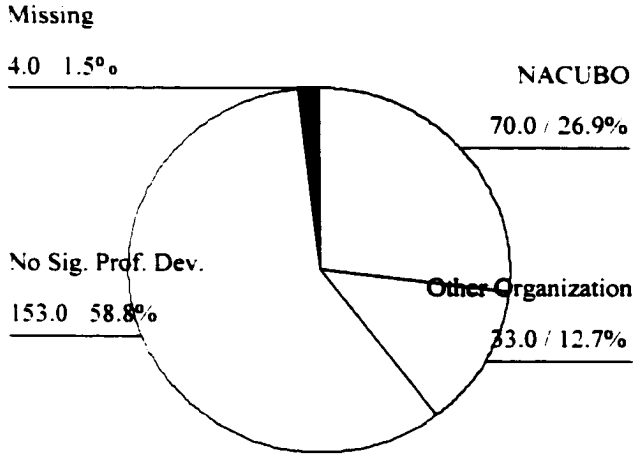

Figure 15. Frequency Distribution: Organization Delivering Preparatory Professional Development Programming Prior to First CBO Role

One hundred twenty-six or 48.5% of the respondents, with no missing values, indicated that they had participated in one or more professional development programs *since their first appointment as a public university CBO* that contributed to preparing them for their leadership roles (see Table 19 and Figure 16).

Table 19

Frequency Distribution: Professional Development Subsequent to First CBO Role

	Frequency	Percent	Valid Percent	Cumulative Percent
No	134	51.5	51.5	51.5
Yes	126	48.5	48.5	100.0
Total	260	100.0	100.0	

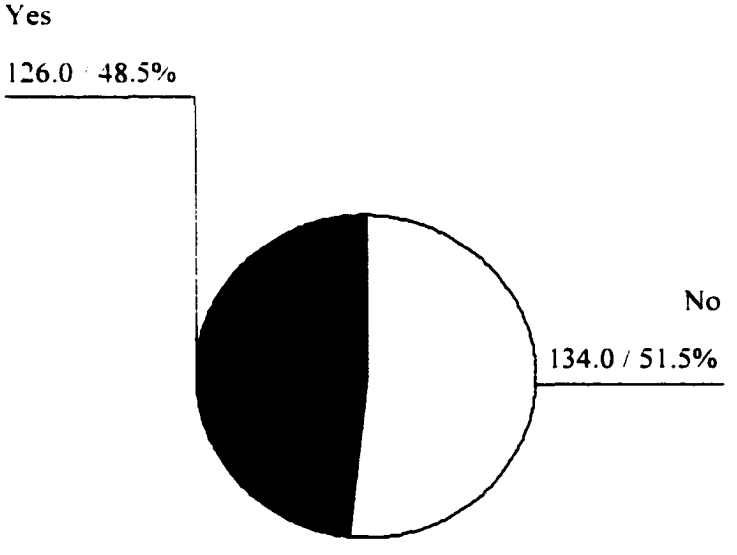

Figure 16. Frequency Distribution: Professional Development Subsequent to First CBO Role

Of those who indicated that they had participated in some significantly helpful professional development programming subsequent to assuming their first CBO role,

79 or 66.9% indicated that the topic of the training was business or management related (see Table 20 and Figure 17). Thirty-two or 27.1% indicated that the training was related to leadership, while seven respondents (5.9%) identified the professional development topic as planning related. Eight respondents did not indicate the topic of the training they found to be beneficial.

Table 20

Frequency Distribution: Topic of Preparatory Professional Development Programming Subsequent to First CBO Role

	Frequency	Percent	Valid Percent	Cumulative Percent
Leadership Related	32	12.3	12.7	12.7
Business & Management Related	79	30.4	31.3	44.0
Planning Related	7	2.7	2.8	46.8
No Significant Professional Development Training	134	51.5	53.2	100.0
Total	252	96.9	100.0	
Missing	8	3.1		
Total	260	100.0		

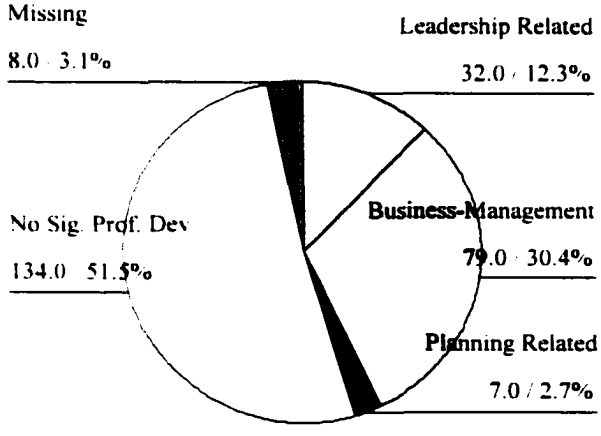

Figure 17. Frequency Distribution: Topic of Preparatory Professional Development Programming Subsequent to First CBO Role

Eighty-eight or 74.6% of the respondents who indicated that they had participated in a significantly helpful professional development program subsequent to their first CBO appointment specified NACUBO as the source of the training, while 30 or 25.4% indicated an organization other than NACUBO provided the training (see Table 21 and Figure 18).

Table 21

Frequency Distribution: Organization Delivering Preparatory Professional Development Programming Subsequent to First CBO Role

	Frequency	Percent	Valid Percent	Cumulative Percent
NACUBO	88	33.8	34.9	34.9
Other Organization	30	11.5	11.9	46.8
No Significant Professional Development Training	134	51.5	53.2	100.0
Total	252	96.9	100.0	
Missing	8	3.1		
Total	260	100.0		

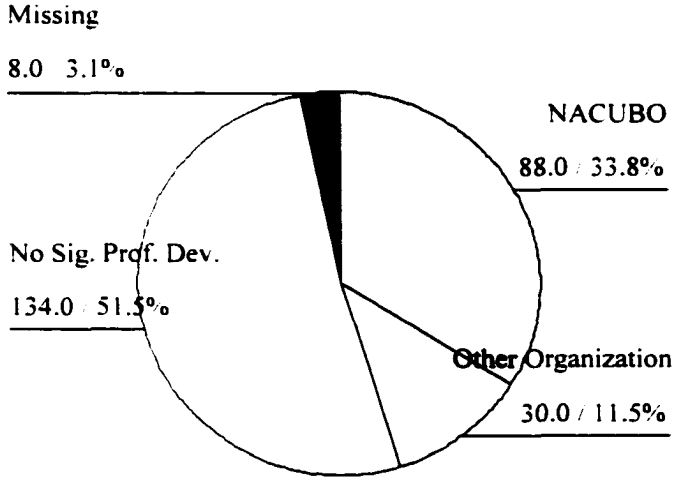

Figure 18. Frequency Distribution: Organization Delivering Preparatory Professional Development Programming Subsequent to First CBO Role

The frequency distribution for ethnicity revealed that the great majority (236 or 90.8%) of the respondents were Caucasians (see Table 22 and Figure 19). Hispanics and African Americans represented a very small minority of the population, at 3.8% and 3.5% respectively. Three of the respondents were of multi-ethnic backgrounds while two were of Asian American decent. There were no missing values in this frequency distribution.

Table 22

Frequency Distribution: Ethnicity of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
African American	9	3.5	3.5	3.5
Asian American	2	.8	.8	4.2
Hispanic	10	3.8	3.8	8.1
Caucasian	236	90.8	90.8	98.8
Multi-Ethnic	3	1.2	1.2	100.0
Total	260	100.0	100.0	

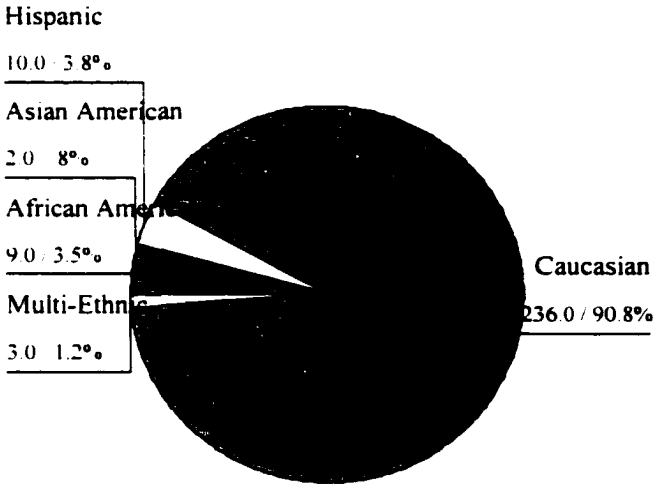

Figure 19. Frequency Distribution: Ethnicity of Respondents

The distribution for the variable of gender was 222 or 85.4% male, and 38 or 14.6% female, with no missing values, indicating that the public university CBO position appears to be primarily occupied by males (see Table 23 and Figure 20).

Table 23

Frequency Distribution: Gender of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	222	85.4	85.4	85.4
Female	38	14.6	14.6	100.0
Total	260	100.0	100.0	

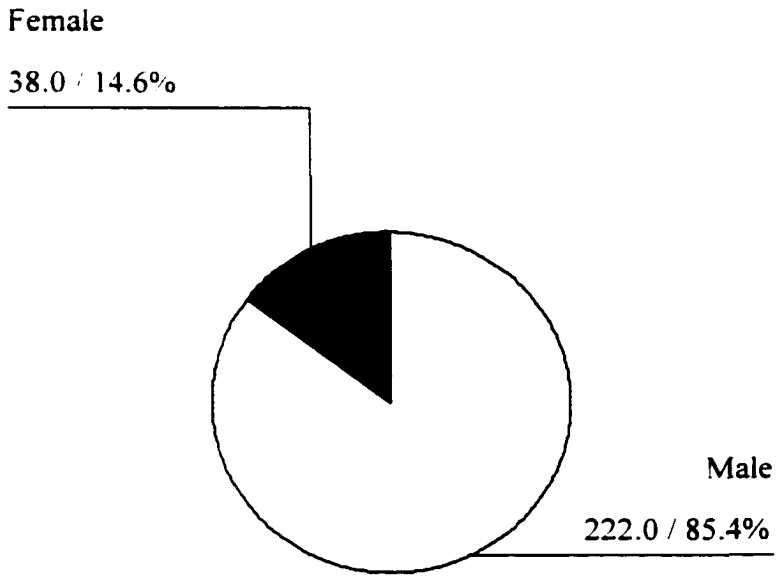

Figure 20. Frequency Distribution: Gender of Respondents

Frequency Distributions – Ordinal Level Data

The next series of descriptive data covers the three indices that measured variables aimed at assessing CBOs' self-perception in the areas of management

functions, relationship management, and institutional familiarity. The 31 variables that comprise this section were measured using a Likert scale and therefore resulted in ordinal data. For each variable, a table illustrating the frequency distribution of the data is provided, as is a visual depiction of the data in the form of a bar graph.

The first of 20 variables measured under the category of *management functions and competencies* was *knowledge of financial planning*. The number of subjects who responded to the item was 260, which had no missing values and a mode and median of four (well prepared). Two hundred twenty-five or 86.5% of the respondents perceived themselves as having been either adequately, well, or very well prepared with respect to their knowledge of financial planning at the time they started their first public university CBO roles (see Table 24 and Figure 21). To the contrary, 35 respondents (13.5%) perceived themselves to have been either very or somewhat under prepared in this respect.

Table 24

Frequency Distribution: Perceived Preparedness–Knowledge of Financial Planning

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	2	.8	.8	.8
Somewhat Under prepared	33	12.7	12.7	13.5
Adequately Prepared	60	23.1	23.1	36.5
Well Prepared	96	36.9	36.9	73.5
Very Well Prepared	69	26.5	26.5	100.0
Total	260	100.0	100.0	

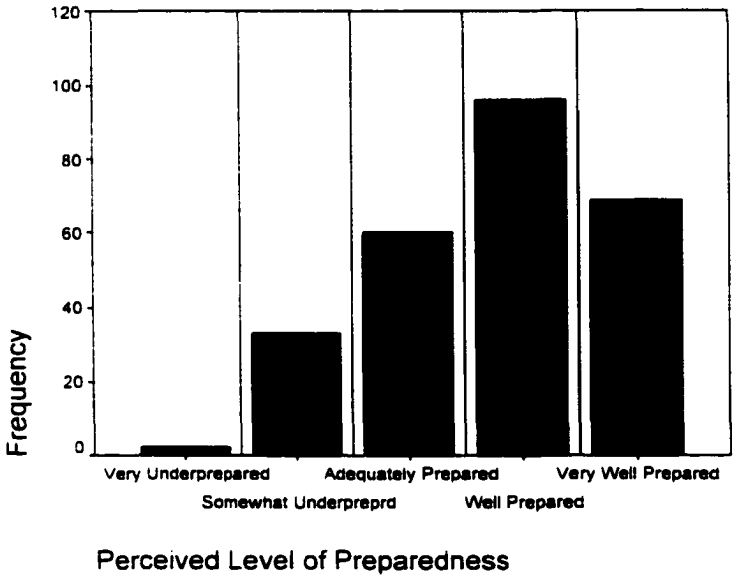

Figure 21. Frequency Distribution: Perceived Preparedness–Knowledge of Financial Planning

The distribution for the variable of *knowledge of financial reporting* consisted of 260 values, which had none missing, a mode of five (very well prepared) and a mode of four (well prepared). In such instances in which the mode and median disagree, the disagreement is not significant since the values are both positive. Two hundred twenty-one or 85% of the respondents perceived themselves as having been either adequately, well, or very well prepared with respect to their knowledge of financial reporting at the time they started their first public university CBO position (see Table 25 and Figure 22). Thirty-nine or 15% perceived themselves as having been either very or somewhat under prepared regarding their knowledge of financial reporting.

Table 25

Frequency Distribution: Perceived Preparedness–Knowledge of Financial Reporting

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	2	.8	.8	.8
Somewhat Under Prepared	37	14.2	14.2	15.0
Adequately Prepared	60	23.1	23.1	38.1
Well Prepared	71	27.3	27.3	65.4
Very Well Prepared	90	34.6	34.6	100.0
Total	260	100.0	100.0	

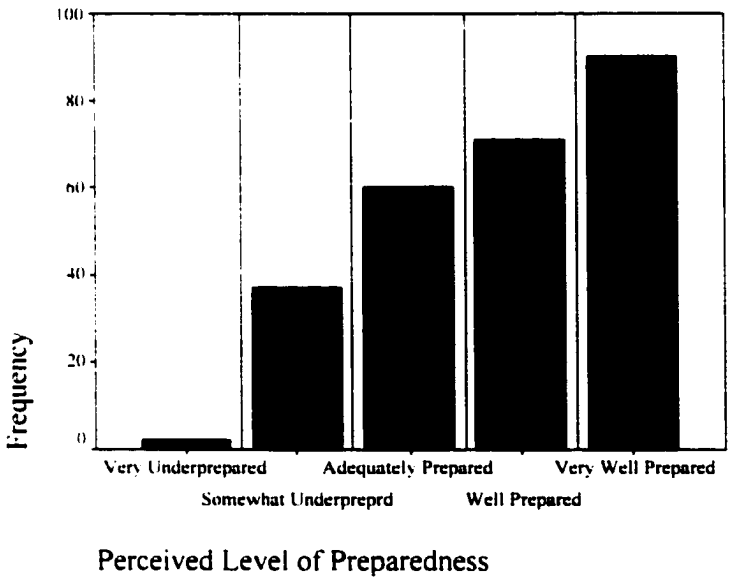

Figure 22. Frequency Distribution: Perceived Preparedness–Knowledge of Financial Reporting

The distribution for the variable *knowledge of information technology issues* consisted of 260 values, with none missing, and a mode and median of three (adequately prepared). One hundred ninety-seven (75.8%) indicated that they had been either adequately, well, or very well prepared with respect to their knowledge of information technology issues at the time they started their first public university

CBO roles (see Table 26 and Figure 23). To the contrary, 63 or 24.3%, nearly one quarter of the respondents, indicated that they were either very or somewhat under prepared in this respect.

Table 26

Frequency Distribution: Perceived Preparedness–Knowledge of Information Technology Issues

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	8	3.1	3.1	3.1
Somewhat Under Prepared	55	21.2	21.2	24.2
Adequately Prepared	84	32.3	32.3	56.5
Well Prepared	79	30.4	30.4	86.9
Very Well Prepared	34	13.1	13.1	100.0
Total	260	100.0	100.0	

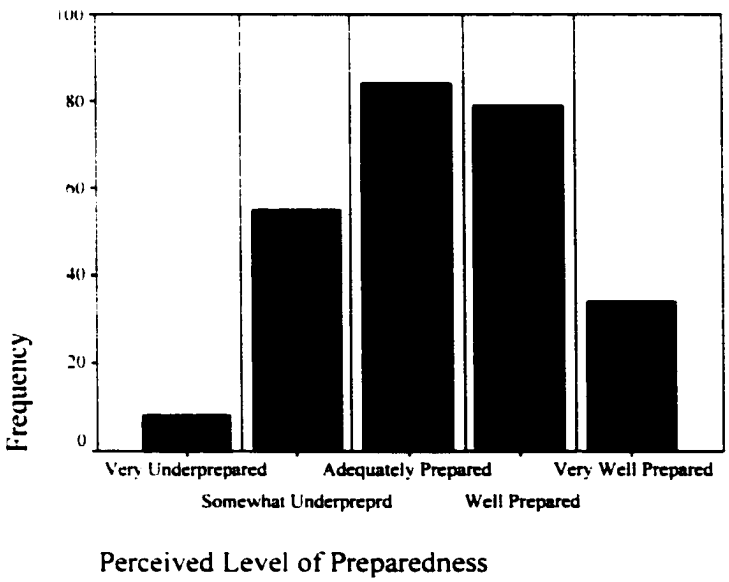

Figure 23. Frequency Distribution: Perceived Preparedness–Knowledge of Information Technology Issues

All 260 subjects responded to the variable *knowledge of management information systems*, which had a mode and median of three (adequately prepared). Two hundred-six or 79.2% of the respondents perceived themselves to have been either adequately, well, or very well prepared with respect to their knowledge of management information systems (see Table 27 and Figure 24).

Table 27

Frequency Distribution: Perceived Preparedness–Knowledge of Management Information Systems

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	8	3.1	3.1	3.1
Somewhat Under Prepared	46	17.7	17.7	20.8
Adequately Prepared	88	33.8	33.8	54.6
Well Prepared	84	32.3	32.3	86.9
Very Well Prepared	34	13.1	13.1	100.0
Total	260	100.0	100.0	

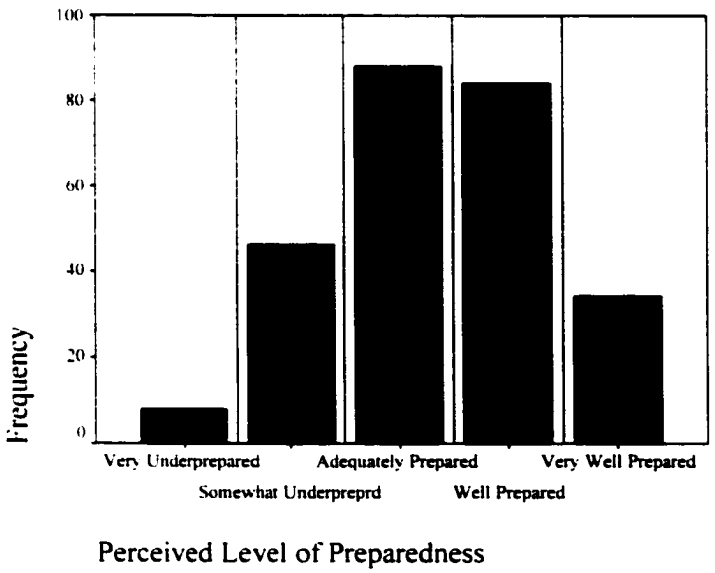

Figure 24. Frequency Distribution: Perceived Preparedness–Knowledge of Management Information Systems

The distribution for the variable *knowledge of facilities management* consisted of 260 values, with none missing, and a mode and median of three (adequately prepared). One hundred seventy-four or 67% of the respondents perceived themselves as having been either adequately, well, or very well prepared with respect to their knowledge of facilities management (see Table 28 and Figure 25).

Table 28

Frequency Distribution: Perceived Preparedness–Knowledge of Facilities Management

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	11	4.2	4.2	4.2
Somewhat Under Prepared	75	28.8	28.8	33.1
Adequately Prepared	78	30.0	30.0	63.1
Well Prepared	55	21.2	21.2	84.2
Very Well Prepared	41	15.8	15.8	100.0
Total	260	100.0	100.0	

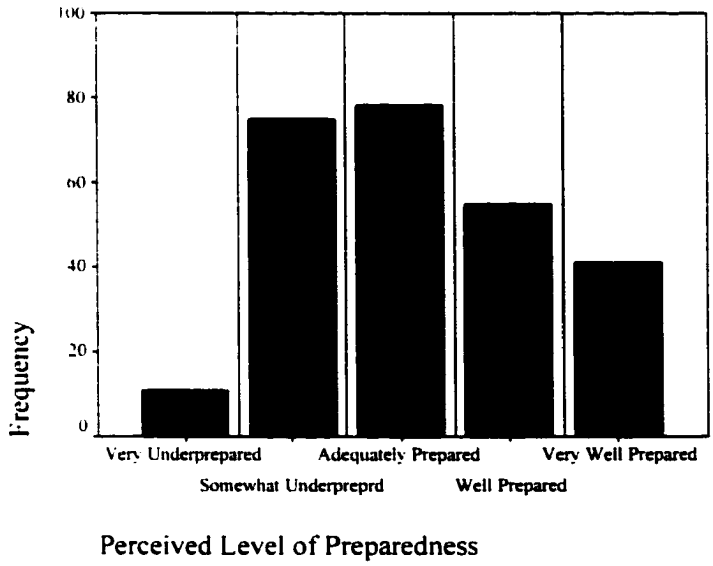

Figure 25. Frequency Distribution: Perceived Preparedness–Knowledge of Facilities Management

Eighty-six or 33%, one third of the respondents, indicated that they were either very or somewhat under prepared when it came to their knowledge of facilities management.

The distribution for the variable of *knowledge of capital (construction) planning* was 260, with no missing values. The distribution resulted in a mode of two (somewhat under prepared) and a median of three (adequately prepared). One hundred sixty-five (63.5%) respondents indicated that they were either adequately, well, or very well prepared with respect to their knowledge of capital/construction planning. On the other hand, a significant number – 101 or 36% – indicated that they were either very or somewhat under prepared on this subject (see Table 29 and Figure 26).

Table 29

Frequency Distribution: Perceived Preparedness–Knowledge of Capital/Construction Planning

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	23	8.8	8.8	8.8
Somewhat Under Prepared	72	27.7	27.7	36.5
Adequately Prepared	70	26.9	26.9	63.5
Well Prepared	55	21.2	21.2	84.6
Very Well Prepared	40	15.4	15.4	100.0
Total	260	100.0	100.0	

All 260 participating subjects responded to the variable *knowledge of campus master planning*, which produced a mode and median of three (adequately prepared).

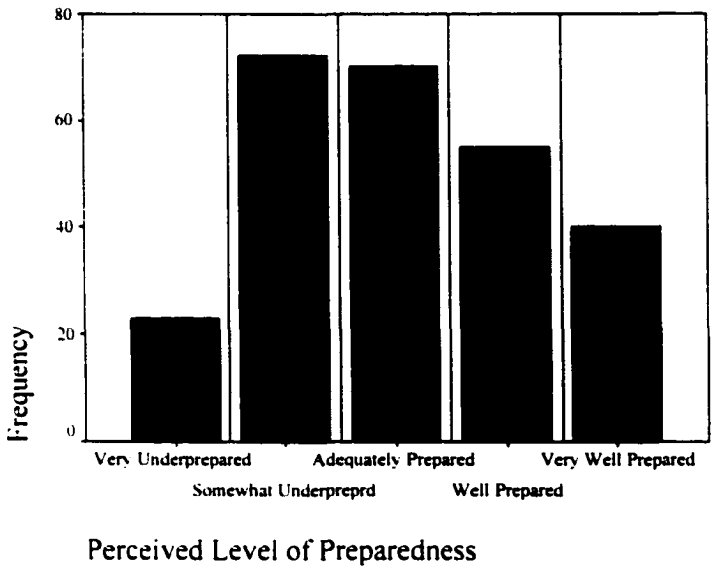

Figure 26. Frequency Distribution: Perceived Preparedness–Knowledge of Capital/Construction Planning

One hundred fifty-eight or 60.8% of the respondents perceived themselves to have been either adequately, well, or very well prepared with respect to their *knowledge of campus master planning* (see Table 30 and Figure 27). One hundred-two respondents, just under 40%, felt that they were either very or somewhat under prepared on the subject of campus master planning.

Table 30

Frequency Distribution: Perceived Preparedness–Knowledge of Campus Master Planning

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	23	8.8	8.8	8.8
Somewhat Under Prepared	79	30.4	30.4	39.2
Adequately Prepared	90	34.6	34.6	73.8
Well Prepared	46	17.7	17.7	91.5
Very Well Prepared	22	8.5	8.5	100.0
Total	260	100.0	100.0	

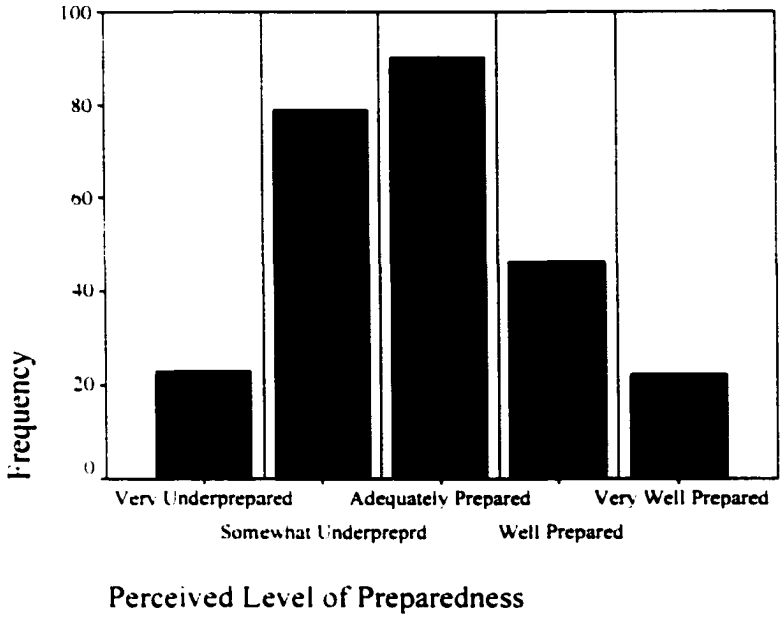

Figure 27. Frequency Distribution: Perceived Preparedness–Knowledge of Campus Master Planning

The distribution for the variable *knowledge of human resource law* consisted of all 260 values and a mode and median of three (adequately prepared). One hundred eighty-eight or 72%, nearly three-quarters of the respondents, perceived themselves as having been either adequately, well, or very well prepared on this subject at the time they assumed their first public university CBO position. Still, over one quarter of the respondents (72 or 27.7%) indicated that they were very or somewhat under prepared on this subject matter (see Table 31 and Figure 28).

The variable of public university CBOs' perceived *ability to hire staff* resulted in a full distribution of 260 and a mode and median of four (well prepared). An overwhelming 255 or 98.1% of the respondents indicated that they perceived

Table 31

Frequency Distribution: Perceived Preparedness–Knowledge of Human Resource Law

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	12	4.6	4.6	4.6
Somewhat Under Prepared	60	23.1	23.1	27.7
Adequately Prepared	100	38.5	38.5	66.2
Well Prepared	66	25.4	25.4	91.5
Very Well Prepared	22	8.5	8.5	100.0
Total	260	100.0	100.0	

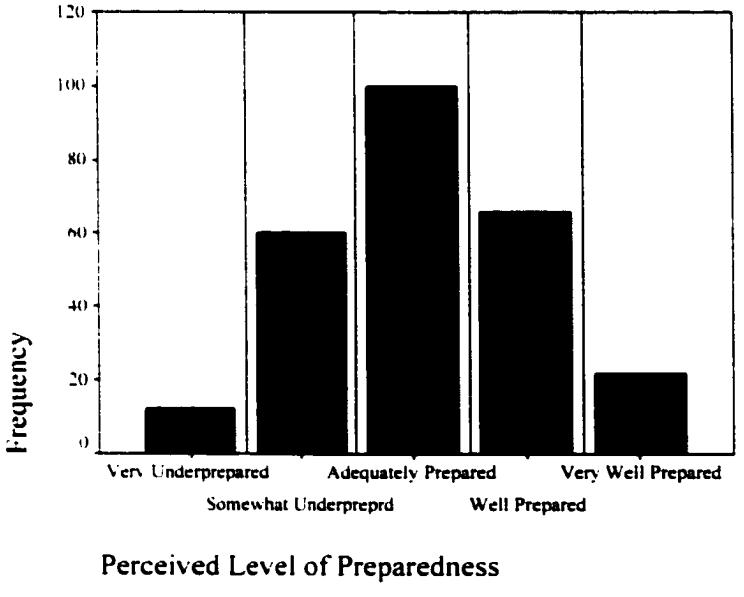

Figure 28. Frequency Distribution: Perceived Preparedness–Knowledge of Human Resource Law

themselves as having been either adequately, well, or very well prepared in their ability to hire staff (see Table 32 and Figure 29). A mere five respondents (1.9%) indicated that they were somewhat under prepared in their ability to hire staff.

Table 32

Frequency Distribution: Perceived Preparedness–Ability to Hire Staff

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	5	1.9	1.9	1.9
Adequately Prepared	52	20.0	20.0	21.9
Well Prepared	113	43.5	43.5	65.4
Very Well Prepared	90	34.6	34.6	100.0
Total	260	100.0	100.0	

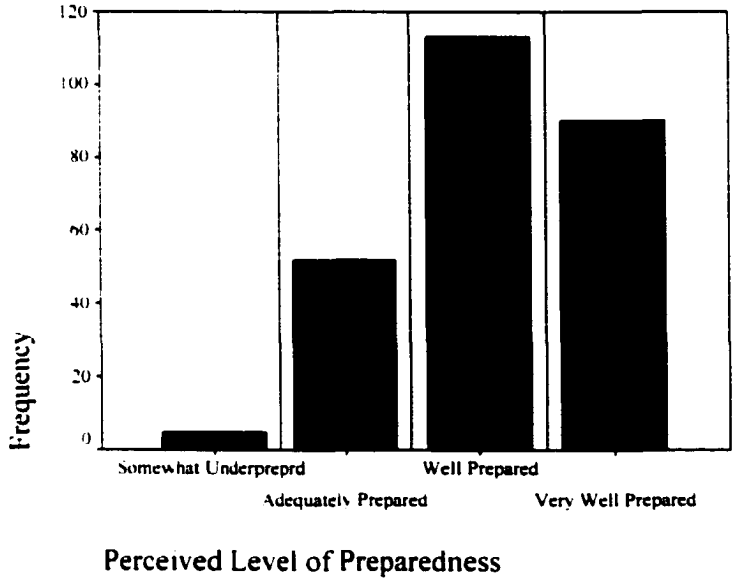

Figure 29. Frequency Distribution: Perceived Preparedness–Ability to Hire Staff

The distribution for the variable *knowledge of private contract management* consisted of 259 values, with one missing value, and a mode and median of three (adequately prepared). Two hundred-nine or 80.7% of the respondents viewed themselves as having been either adequately, well, or very well prepared with regard to their knowledge of private contract management.

The remaining respondents (50 or 19.2%) perceived themselves to have been either very or somewhat under prepared in this management area (see Table 33 and Figure 30).

Table 33

Frequency Distribution: Perceived Preparedness–Knowledge of Private Contract Management

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	6	2.3	2.3	2.3
Somewhat Under Prepared	44	16.9	17.0	19.3
Adequately Prepared	97	37.3	37.5	56.8
Well Prepared	76	29.2	29.3	86.1
Very Well Prepared	36	13.8	13.9	100.0
Total	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

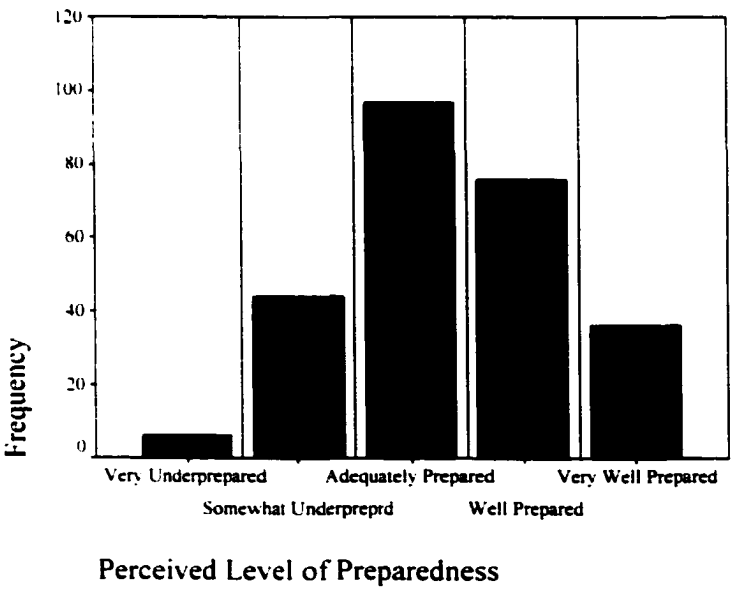

Figure 30. Frequency Distribution: Perceived Preparedness–Knowledge of Private Contract Management

All but one of the 260 subjects responded to the variable *knowledge of risk management practices*, which resulted in a mode and median of three (adequately prepared). One hundred sixty-seven or 64.2% of the respondents perceived themselves to have been either adequately, well, or very well prepared with regard to their knowledge of risk management practices (see Table 34 and Figure 31).

Table 34

Frequency Distribution: Perceived Preparedness–Knowledge of Risk Management Practices

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	10	3.8	3.9	3.9
Somewhat Under Prepared	82	31.5	31.7	35.5
Adequately Prepared	89	34.2	34.4	69.9
Well Prepared	57	21.9	22.0	91.9
Very Well Prepared	21	8.1	8.1	100.0
Total	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

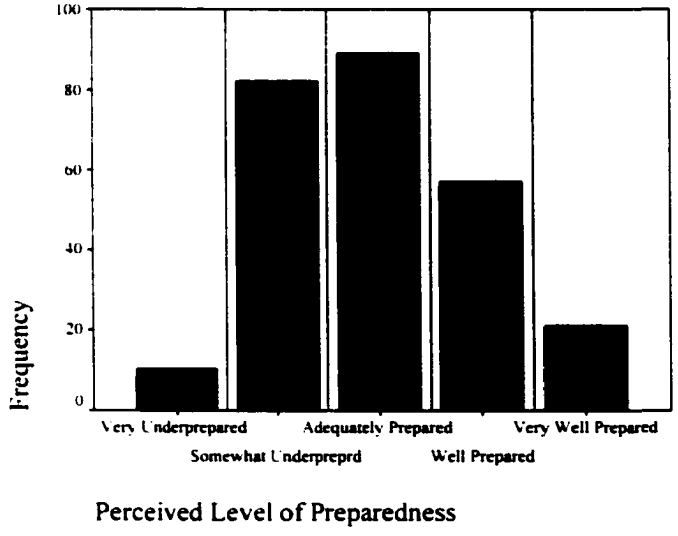

Figure 31. Frequency Distribution: Perceived Preparedness–Knowledge of Risk Management Practices

Just over two-thirds of the respondents (176 or 67.7%) indicated that they were either adequately, well, or very well prepared with respect to their *knowledge of public safety issues* (see Table 35 and Figure 32).

Table 35

Frequency Distribution: Perceived Preparedness–Knowledge of Public Safety Issues

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	7	2.7	2.7	2.7
Somewhat Under Prepared	76	29.2	29.3	32.0
Adequately Prepared	98	37.7	37.8	69.9
Well Prepared	55	21.2	21.2	91.1
Very Well Prepared	23	8.8	8.9	100.0
Total	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

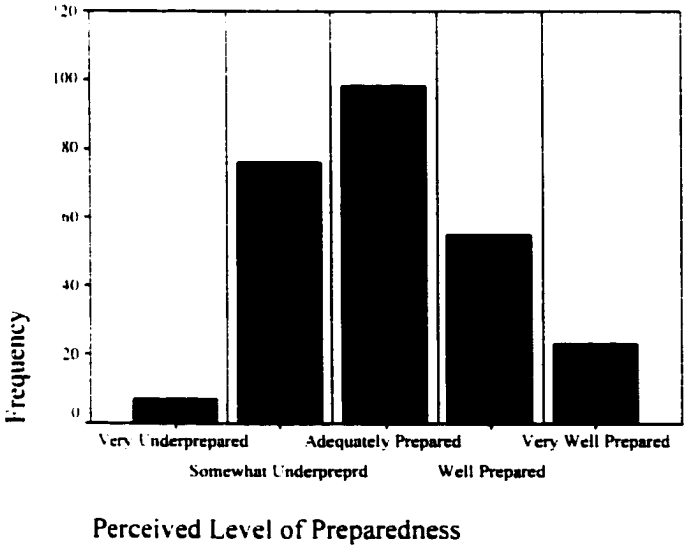

Figure 32. Frequency Distribution: Perceived Preparedness–Knowledge of Public Safety Issues

The remaining nearly one third of the respondents (83 or 31.9%) perceived themselves to have been either somewhat or very under prepared on this subject. However, 82% or 31.5% saw themselves as being somewhat under prepared on their level of knowledge of public safety issues, and another 10 individuals (3.8%) indicated that they were very under prepared. The distribution for the variable was comprised of 259 values, and had one missing value and a mode and median of three (adequately prepared).

The variable *ability to manage crises* was responded to by all 260 subjects, and had a mode and median of four (well prepared). A full 92.3% (240 respondents) perceived themselves as having been either adequately, well, or very well prepared to manage crises at the time they were hired into their first public university CBO role (see Table 36 and Figure 33). Only 20 CBOs (7.7%) indicated that they were somewhat under prepared to manage crises.

Table 36

Frequency Distribution: Perceived Preparedness–Ability to Manage Crises

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	20	7.7	7.7	7.7
Adequately Prepared	66	25.4	25.4	33.1
Well Prepared	98	37.7	37.7	70.8
Very Well Prepared	76	29.2	29.2	100.0
Total	260	100.0	100.0	

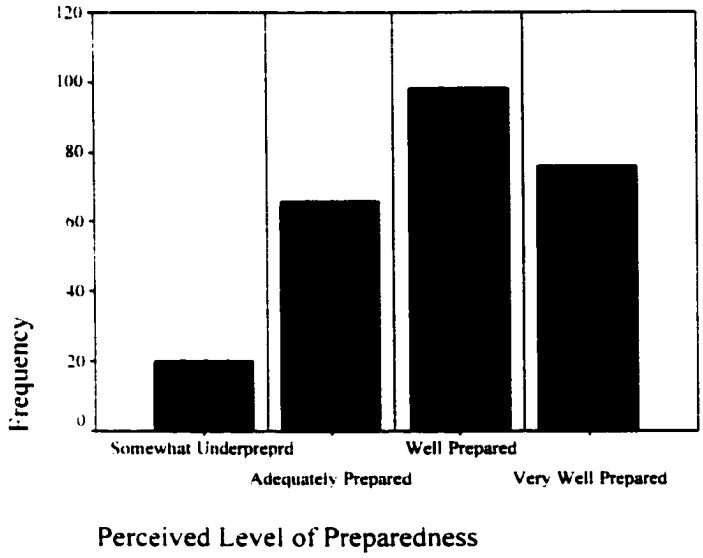

Figure 33. Frequency Distribution: Perceived Preparedness–Ability to Manage Crises

The distribution of the variable *ability to solve problems* reflects the respondents' confidence in their problem-solving abilities. All 260 subjects responded to the item, with all but one indicating that they were either adequately, well, or very well prepared in their ability to solve problems (see Table 37 and Figure 34). The mode and median for this distribution was five (very well prepared).

Table 37

Frequency Distribution: Perceived Preparedness–Ability to Solve Problems

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	1	.4	.4	.4
Adequately Prepared	24	9.2	9.2	9.6
Well Prepared	103	39.6	39.6	49.2
Very Well Prepared	132	50.8	50.8	100.0
Total	260	100.0	100.0	

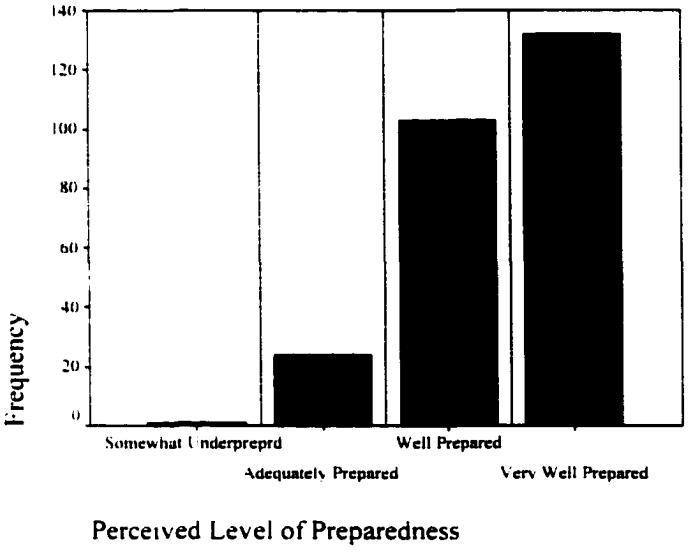

Figure 34. Frequency Distribution: Perceived Preparedness–Ability to Solve Problems

The distribution for the variable *ability to make timely decisions on critical issues* resulted in a mode and median of five (very well prepared), and with all respondents reporting, all but two viewed themselves as either being adequately, well, or very well prepared in their ability to make quick decisions on issues of importance (see Table 38 and Figure 35).

Table 38

Frequency Distribution: Perceived Preparedness–Ability to Make Timely Decisions on Critical Issues

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	2	.8	.8	.8
Adequately Prepared	29	11.2	11.2	11.9
Well Prepared	98	37.7	37.7	49.6
Very Well Prepared	131	50.4	50.4	100.0
Total	260	100.0	100.0	

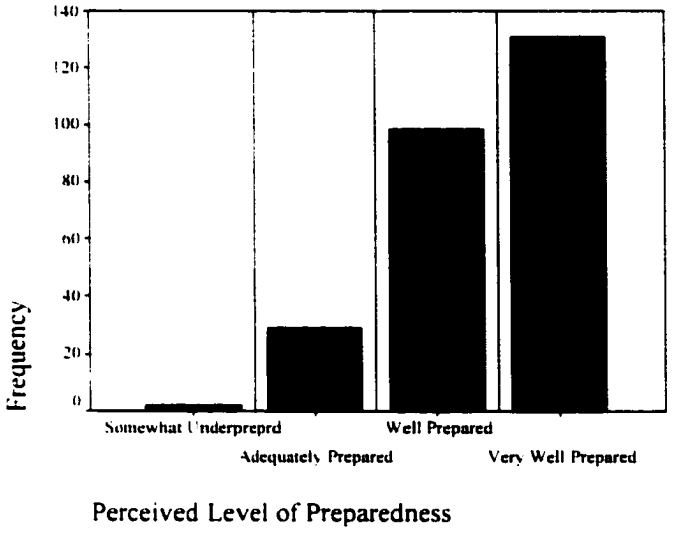

Figure 35. Frequency Distribution: Perceived Preparedness–Ability to Make Timely Decisions on Critical Issues

The variable *ability to effectively delegate tasks* was comprised of all 260 values and generated a mode and median of four (well prepared). The great majority of respondents (243 or 93.4%) perceived themselves to have been either adequately, well, or very well prepared with respect to their ability to effectively delegate tasks (see Table 39 and Figure 36).

Table 39

Frequency Distribution: Perceived Preparedness–Ability to Effectively Delegate Tasks

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	17	6.5	6.5	6.5
Adequately Prepared	56	21.5	21.5	28.1
Well Prepared	96	36.9	36.9	65.0
Very Well Prepared	91	35.0	35.0	100.0
Total	260	100.0	100.0	

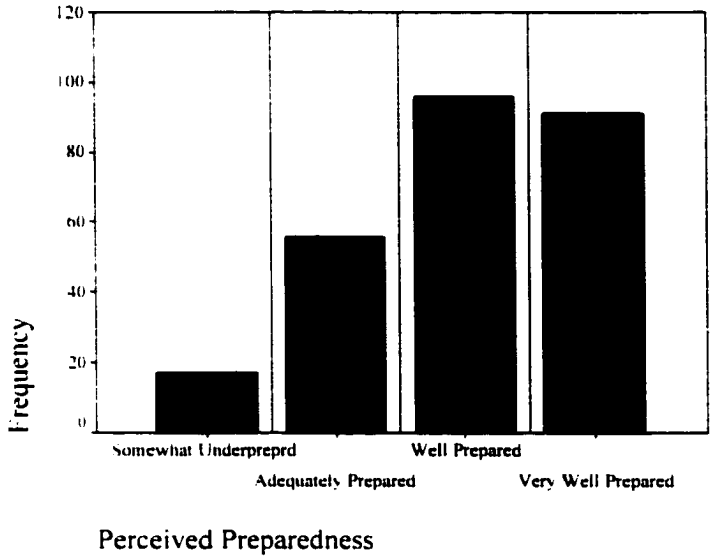

Figure 36. Frequency Distribution: Perceived Preparedness–Ability to Effectively Delegate Tasks

The variable *ability to facilitate meetings effectively* also resulted in a full distribution of 260 and a mode and median of four (well prepared). Two hundred forty-eight (95.4%) of the respondents viewed themselves to be either adequately, well, or very well prepared in their ability to facilitate meetings effectively at they time they started their first public university CBO position (see Table 40 and Figure 37). A small number of respondents (12 or 4.6%) indicated that they were somewhat under prepared in their ability to facilitate meetings effectively.

All 260 subjects responded to the item *ability to manage change and foster innovation*. The mode and median for this variable was four (well prepared). An overwhelming majority of CBOs (245 or 94.3%) demonstrated confidence in their change management abilities by indicating that they perceived themselves to have

Table 40

Frequency Distribution: Perceived Preparedness–Ability to Facilitate Meetings Effectively

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	12	4.6	4.6	4.6
Adequately Prepared	53	20.4	20.4	25.0
Well Prepared	114	43.8	43.8	68.8
Very Well Prepared	81	31.2	31.2	100.0
Total	260	100.0	100.0	

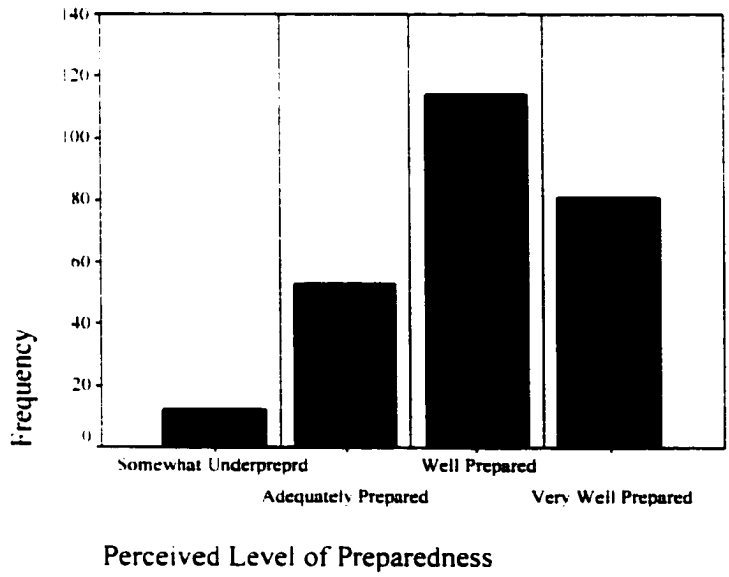

Figure 37. Frequency Distribution: Perceived Preparedness–Ability to Facilitate Meetings Effectively

been either adequately, well, or very well prepared regarding their ability to manage change and foster innovation at the time they started their first public university CBO position (see Table 41 and Figure 38). Just 15 individuals (5.8%) indicated that they were somewhat under prepared in this management competency.

Table 41

Frequency Distribution: Perceived Preparedness–Ability to Manage Change and Foster Innovation

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	15	5.8	5.8	5.8
Adequately Prepared	53	20.4	20.4	26.2
Well Prepared	111	42.7	42.7	68.8
Very Well Prepared	81	31.2	31.2	100.0
Total	260	100.0	100.0	

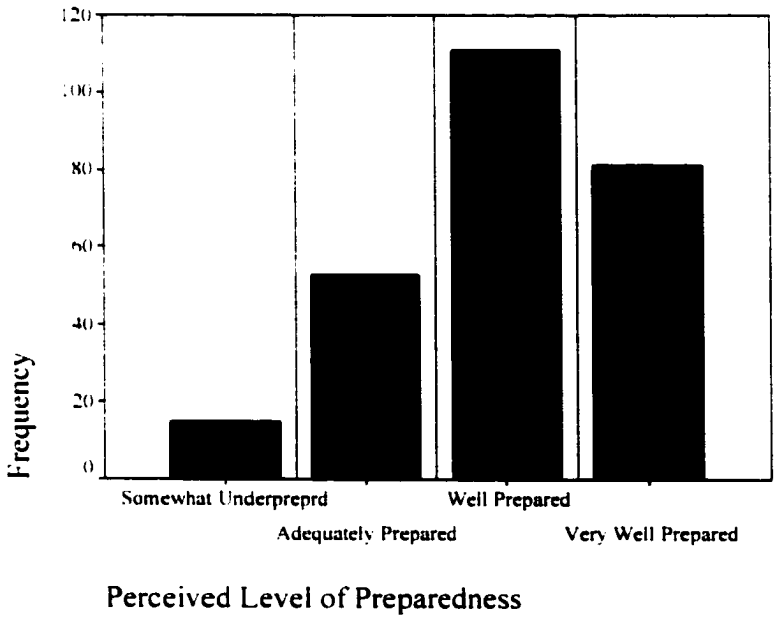

Figure 38. Frequency Distribution: Perceived Preparedness–Ability to Manage Change and Foster Innovation

The distribution for the variable *knowledge of contemporary issues in higher education* was 260, which had no missing values, and a mode and median of four (well prepared). Nearly nine out of 10 respondents perceived themselves to have been adequately, well, or very well prepared with respect to their knowledge of

contemporary issues in higher education at the time they started their first public university CBO role (see Table 42 and Figure 39). Twenty-eight (10.8%) of the responding CBOs perceived themselves to have been somewhat under prepared, while just three individuals (1.2%) saw themselves as being very under prepared in their knowledge of contemporary higher education issues.

Table 42

Frequency Distribution: Perceived Preparedness–Knowledge of Contemporary Issues in Higher Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	3	1.2	1.2	1.2
Somewhat Under Prepared	28	10.8	10.8	11.9
Adequately Prepared	59	22.7	22.7	34.6
Well Prepared	116	44.6	44.6	79.2
Very Well Prepared	54	20.8	20.8	100.0
Total	260	100.0	100.0	

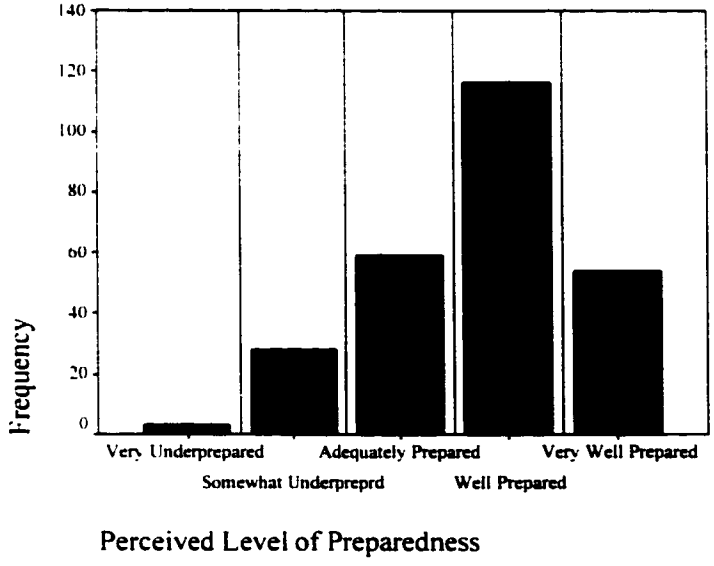

Figure 39. Frequency Distribution: Perceived Preparedness–Knowledge of Contemporary Issues in Higher Education

The CBOs participating in the study were collectively quite confident in their *overall administrative and management abilities* at the outset of their first CBO roles in the context of the public university setting, with 99.2% indicating that they were adequately, well, or very well prepared in this respect (see Table 43 and Figure 40).

Table 43

Frequency Distribution: Perceived Preparedness–Overall Administrative Management Capabilities

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	2	.8	.8	.8
Adequately Prepared	47	18.1	18.1	18.8
Well Prepared	152	58.5	58.5	77.3
Very Well Prepared	59	22.7	22.7	100.0
Total	260	100.0	100.0	

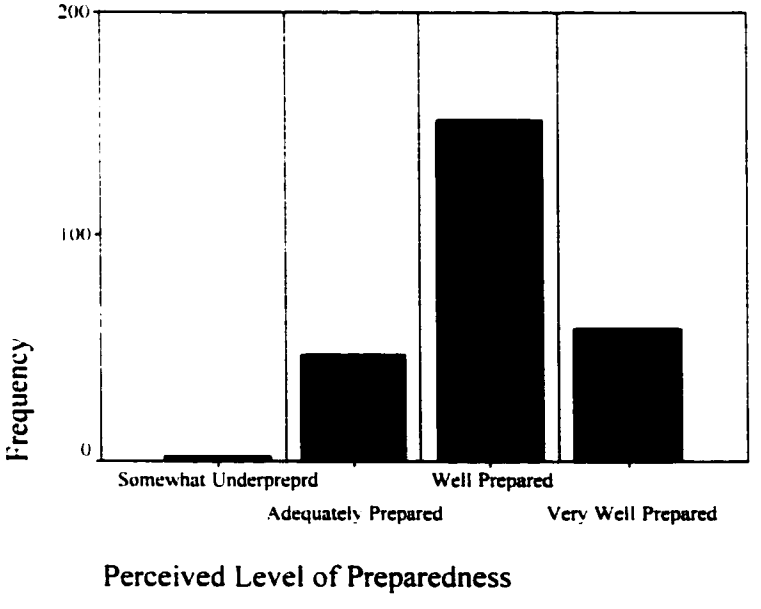

Figure 40. Frequency Distribution: Perceived Preparedness–Overall Administrative Management Capabilities

All 260 subjects responded to this variable that measured self-perceived overall administrative management capabilities. The variable generated a mode and median of four (well prepared).

The second of three categories contained in the survey instrument that sought to assess CBOs' perceived preparedness at the time they started their first position as public university CBOs was *relationship management*. This category contained 10 variables that measured the subjects' abilities to effectively interact with various institutional stakeholders.

The first variable in the relationship management category was *ability to supervise staff*. The distribution for this item was 260, which had no missing values, and a mode and median of four (see Table 44 and Figure 41).

Table 44

Frequency Distribution: Perceived Preparedness–Ability to Supervise Staff

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	5	1.9	1.9	1.9
Adequately Prepared	52	20.0	20.0	21.9
Well Prepared	108	41.5	41.5	63.5
Very Well Prepared	95	36.5	36.5	100.0
Total	260	100.0	100.0	

A resounding 255 of the 260 (98.1%) respondents indicated that they were adequately, well, or very well prepared in their ability to supervise staff. Five CBOs reported being somewhat under prepared in their staff supervision abilities.

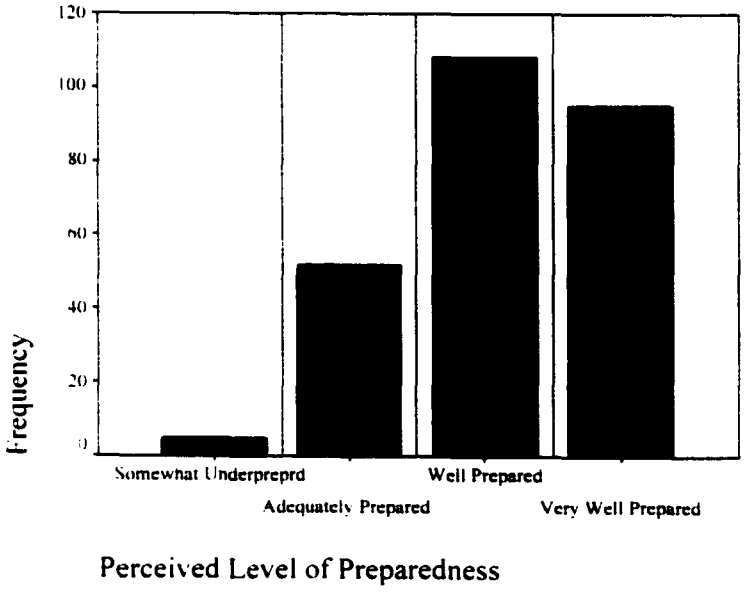

Figure 41. Frequency Distribution: Perceived Preparedness–Ability to Supervise Staff

The distribution for the next variable, *ability to resolve interpersonal conflicts*, consisted of all 260 values (see Table 45 and Figure 42). The mode and median for the variable was four.

Table 45

Frequency Distribution: Perceived Preparedness–Ability to Resolve Interpersonal Conflicts

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	16	6.2	6.2	6.2
Adequately Prepared	62	23.8	23.8	30.0
Well Prepared	115	44.2	44.2	74.2
Very Well Prepared	67	25.8	25.8	100.0
Total	260	100.0	100.0	

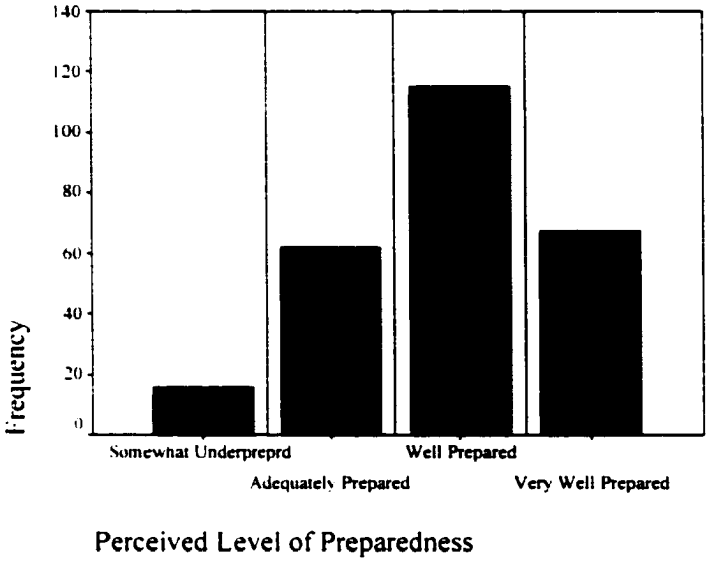

Figure 42. Frequency Distribution: Perceived Preparedness–Ability to Resolve Interpersonal Conflicts

Only 16 or 6.2% of the responding CBOs indicated that they were somewhat under prepared in their ability to resolve interpersonal conflicts at the time they started their first public university CBO position. Seven out of 10 CBOs indicated that they were well or very well prepared in their interpersonal conflict resolution abilities.

The distribution for the variable *ability to provide discipline to staff members* was 259, which had one missing value and a mode and median of four (see Table 46 and Figure 43). Two hundred thirty-nine or 92.2% of the respondents perceived themselves to have been either adequately, well, or very well prepared in their ability to provide discipline measures to their staff members, while the remaining 8% viewed themselves as being somewhat under prepared in this area.

Table 46

Frequency Distribution: Perceived Preparedness–Ability to Provide Discipline to Staff Members

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	20	7.7	7.7	7.7
Adequately Prepared	70	26.9	27.0	34.7
Well Prepared	112	43.1	43.2	78.0
Very Well Prepared	57	21.9	22.0	100.0
Total	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

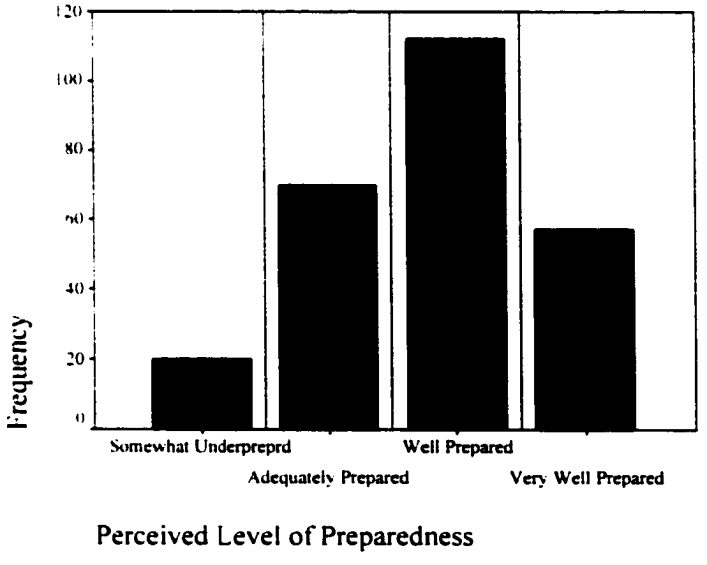

Figure 43. Frequency Distribution: Perceived Preparedness–Ability to Provide Discipline to Staff Members

The variable *ability to make effective public presentations* consisted of a distribution of all 260 participating subjects, and had a mode and median of four. Two hundred twenty-six respondents (86.9%) viewed themselves to have been either adequately, well, or very well prepared in their ability to make effective public

presentations (see Table 47 and Figure 44). Just over 13% thought that their public presentation skills were inadequate.

Table 47

Frequency Distribution: Perceived Preparedness–Ability to Make Effective Public Presentations

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	2	.8	.8	.8
Somewhat Under Prepared	32	12.3	12.3	13.1
Adequately Prepared	62	23.8	23.8	36.9
Well Prepared	98	37.7	37.7	74.6
Very Well Prepared	66	25.4	25.4	100.0
Total	260	100.0	100.0	

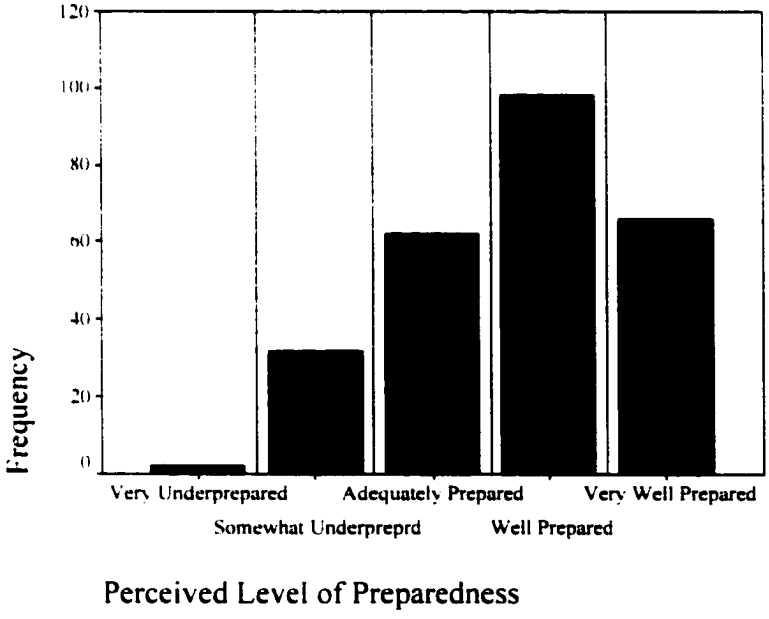

Figure 44. Frequency Distribution: Perceived Preparedness–Ability to Make Effective Public Presentations

All 260 subjects responded to the next variable, *ability to work with the institution's president*. The distribution contained a mode of five and a median of four. The great majority of respondents (254 or 97.7%) viewed themselves as either adequately, well, or very well prepared in their ability to work effectively with the president of the institution in which the were first employed as public university CBOs (see Table 48 and Figure 45).

Table 48

Frequency Distribution: Perceived Preparedness–Ability to Work Effectively with the Institution's President

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	6	2.3	2.3	2.3
Adequately Prepared	48	18.5	18.5	20.8
Well Prepared	96	36.9	36.9	57.7
Very Well Prepared	110	42.3	42.3	100.0
Total	260	100.0	100.0	

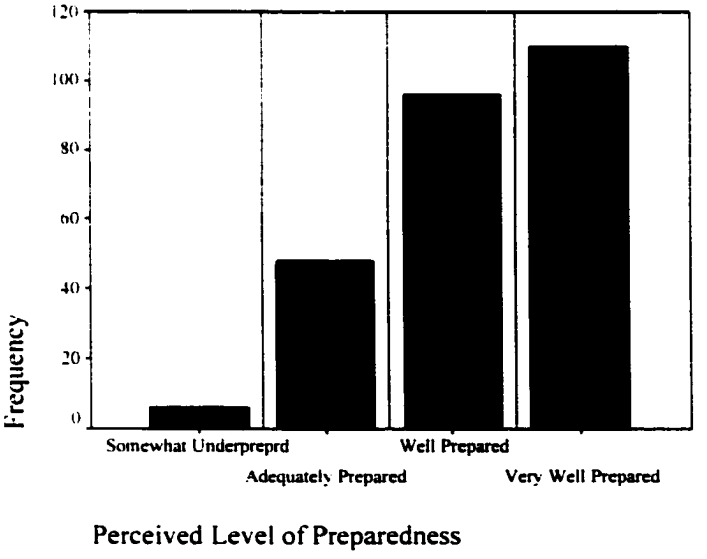

Figure 45. Perceived Preparedness: Ability to Work Effectively with the Institution's President

The next variable, *ability to work effectively with members of the president's cabinet*, had a full distribution of 260 values, and a mode and median of four. The distribution was similar to the item above in that only six individuals (2.3%) viewed themselves as being somewhat under prepared in their ability to work effectively, this time, with members of the president's cabinet (see Table 49 and Figure 46).

Table 49

Frequency Distribution: Perceived Preparedness–Ability to Work Effectively with Members of the President's Cabinet

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	6	2.3	2.3	2.3
Adequately Prepared	42	16.2	16.2	18.5
Well Prepared	115	44.2	44.2	62.7
Very Well Prepared	97	37.3	37.3	100.0
Total	260	100.0	100.0	

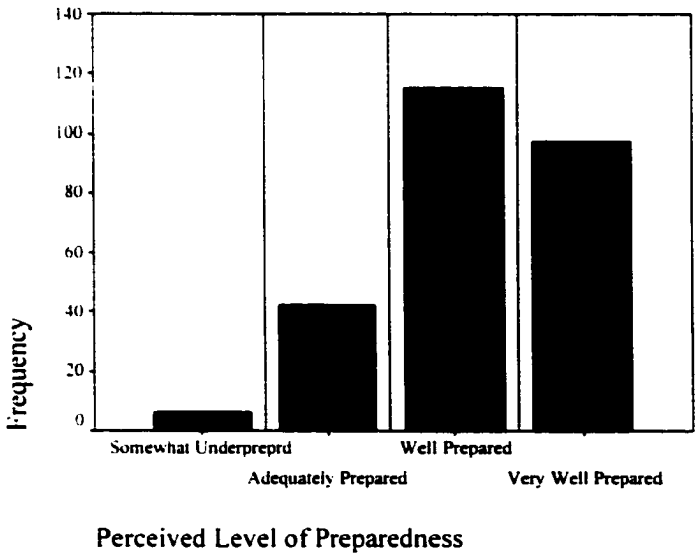

Figure 46. Frequency Distribution: Perceived Preparedness–Ability to Work Effectively with Members of the President's Cabinet

All but two of subjects responded to the variable, *ability to work effectively with members of the state budget office*, which produced a mode and median of four. Ten percent of the respondents indicated that they were either very or somewhat under prepared in their ability to work with staff members from the state's budget office (see Table 50 and Figure 47).

Table 50

Frequency Distribution: Perceived Preparedness–Ability to Work Effectively with Members of the State Budget Office

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	2	.8	.8	.8
Somewhat Under Prepared	24	9.2	9.3	10.1
Adequately Prepared	61	23.5	23.6	33.7
Well Prepared	89	34.2	34.5	68.2
Very Well Prepared	82	31.5	31.8	100.0
Total	258	99.2	100.0	
Missing	2	.8		
Total	260	100.0		

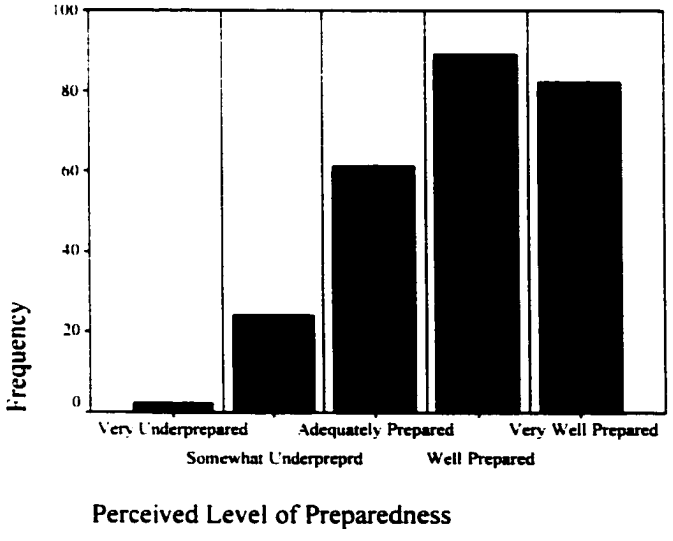

Figure 47. Frequency Distribution: Perceived Preparedness–Ability to Work Effectively with Members of the State Budget Office

Turning to the variable of the CBOs' *ability to work effectively with members of their respective state legislatures*, the total distribution of responses was 258, with two missing values, a mode of four and median of three (see Table 51 and Figure 48).

Table 51

Frequency Distribution: Perceived Preparedness–Ability to Work Effectively with Members of the State Legislature

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	14	5.4	5.4	5.4
Somewhat Under Prepared	53	20.4	20.5	26.0
Adequately Prepared	72	27.7	27.9	53.9
Well Prepared	75	28.8	29.1	82.9
Very Well Prepared	44	16.9	17.1	100.0
Total	258	99.2	100.0	
Missing	2	.8		
Total	260	100.0		

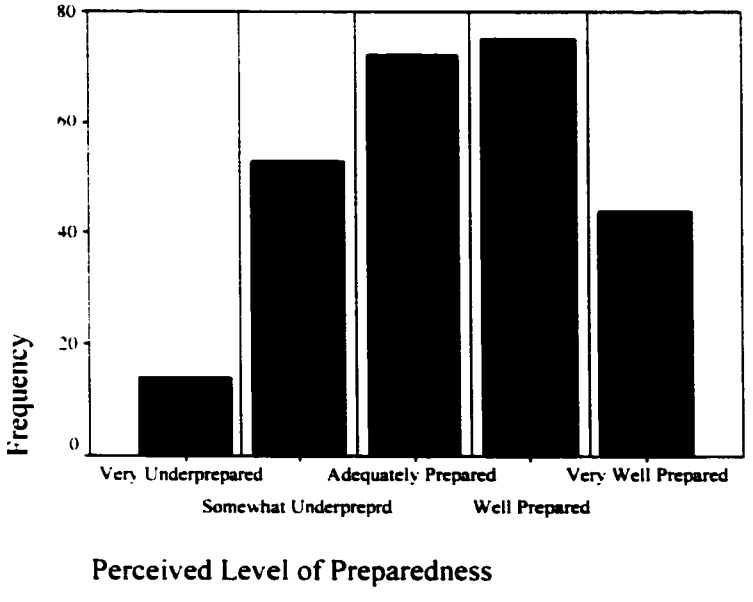

Figure 48. Frequency Distribution: Perceived Preparedness–Ability to Work Effectively with Members of the State Legislature

Just over one quarter of the respondents (67 or 25.8%) perceived themselves to be either very or somewhat under prepared in their ability to work effectively with members of their state legislature at the time they the assumed their first public university CBO position.

The distribution for the variable *ability to work effectively with the institution's board of trustees* consisted of 258 values, with two missing values, and a mode and median of four. Twenty-eight (10.8%) of the respondents perceived themselves as being either very or somewhat under prepared in this category, while the remaining nearly 90% percent felt either adequately, well, or very well prepared in their working relationships with board members (see Table 52 and Figure 49).

Table 52

Frequency Distribution: Perceived Preparedness–Ability to Work Effectively with the Institution's Board of Trustees

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	2	.8	.8	.8
Somewhat Under Prepared	26	10.0	10.1	10.9
Adequately Prepared	62	23.8	24.0	34.9
Well Prepared	109	41.9	42.2	77.1
Very Well Prepared	59	22.7	22.9	100.0
Total	258	99.2	100.0	
Missing	2	.8		
Total	260	100.0		

The last of the ten variables measured under the relationship management category was *overall human relations skills*. This distribution reflected a 100% response rate and a mode and median of four.

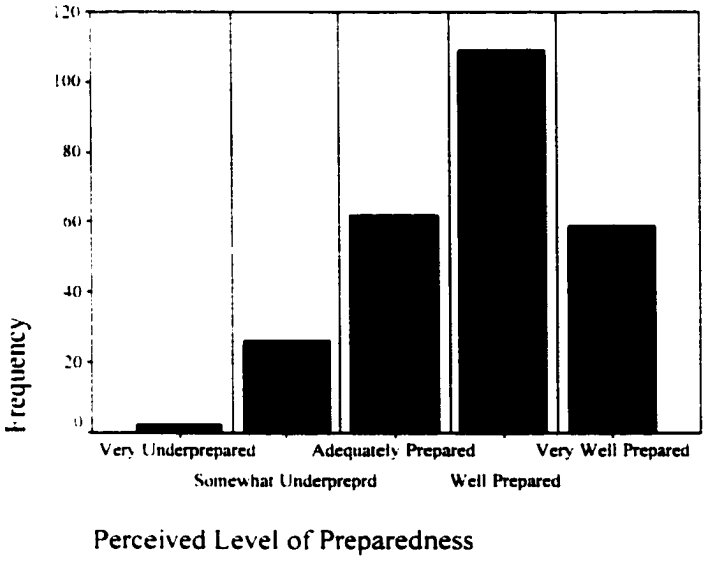

Figure 49. Frequency Distribution: Perceived Preparedness–Ability to Work Effectively with the Institution's Board of Trustees

An overall confidence in the CBOs' overall human relations skills is apparent in that 98.5% (256 respondents) perceived themselves as being either adequately, well, or very well prepared with respect to their overall perceived relation management abilities (see Table 53 and Figure 50).

Table 53

Frequency Distribution: Perceived Preparedness–Overall Human Relations Skills

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	0	0	0	0
Somewhat Under Prepared	4	1.5	1.5	1.5
Adequately Prepared	45	17.3	17.3	18.8
Well Prepared	144	55.4	55.4	74.2
Very Well Prepared	67	25.8	25.8	100.0
Total	260	100.0	100.0	

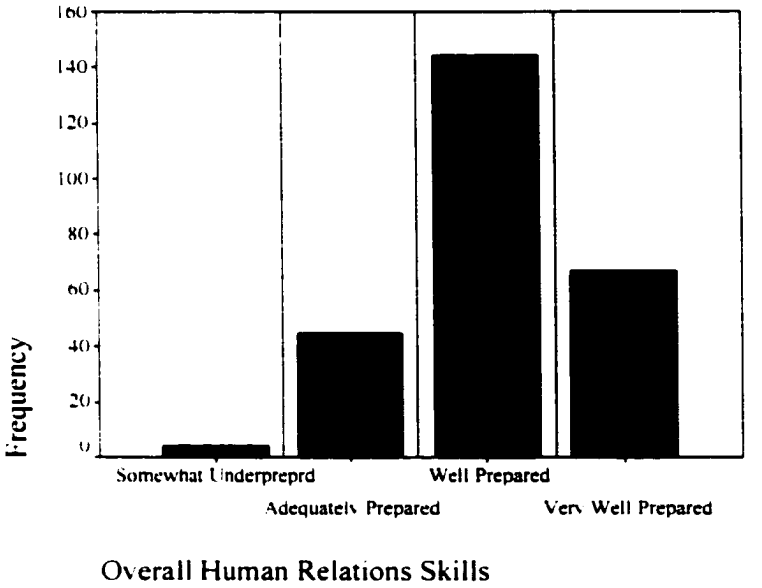

Figure 50. Frequency Distribution: Perceived Preparedness–Overall Human Relations Skills

The last of three categories of variables aimed at assessing CBOs' leadership preparedness contained 11 items pertaining to the extent the subjects were familiar with different aspects of their institutions.

The first variable in this category was CBOs' *knowledge of their institution's policies*. The distribution for this variable was 259, which had one missing value and a mode and median of four. One in five respondents (54 or 20.9%) indicated they were either very or somewhat under prepared regarding their knowledge of the policies of the public university in which they were employed as a CBO (see Table 54 and Figure 51). Nearly one third (32.4%) of the respondents viewed themselves as being well prepared with respect to their knowledge of institutional policy, while one quarter (25.5%) indicated they were very well prepared.

Table 54

Frequency Distribution: Perceived Preparedness–Knowledge of the Institution's Policies

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	9	3.5	3.5	3.5
Somewhat Under Prepared	45	17.3	17.4	20.8
Adequately Prepared	55	21.2	21.2	42.1
Well Prepared	84	32.3	32.4	74.5
Very Well Prepared	66	25.4	25.5	100.0
Total	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

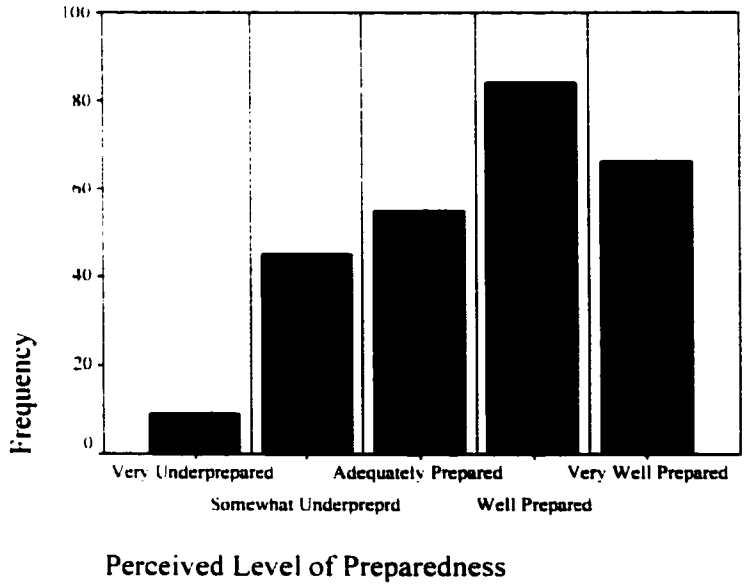

Figure 51. Frequency Distribution: Perceived Preparedness–Knowledge of the Institution's Policies

The distribution for the variable *knowledge of the institution's labor contract processes* had 30 missing values, indicating that a significant number of the subjects either did not work at institutions that utilized collective bargaining agreements or, if

they did. they were not directly involved in the labor contract processes involved in the agreements. The mode and median for the item was three. Nearly one in three indicated they were very or somewhat under prepared regarding their knowledge of the labor contract processes utilized by their institutions (see Table 55 and Figure 52).

Table 55

Frequency Distribution: Perceived Preparedness–Knowledge of the Institution's Labor Contract Processes

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	10	3.8	4.3	4.3
Somewhat Under Prepared	61	23.5	26.5	30.9
Adequately Prepared	77	29.6	33.5	64.3
Well Prepared	53	20.4	23.0	87.4
Very Well Prepared	29	11.2	12.6	100.0
Total	230	88.5	100.0	
Missing	30	11.5		
Total	260	100.0		

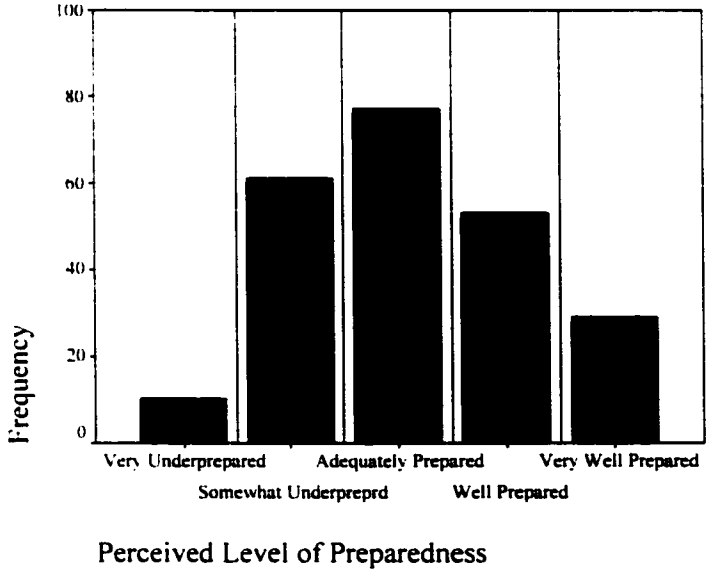

Figure 52. Frequency Distribution: Perceived Preparedness–Knowledge of the Institution's Labor Contract Processes

All but two subjects responded to the item *knowledge of the institution's facility maintenance processes*, which resulted in a mode and median of three. Nearly one third of the respondents (31.8%) viewed themselves as being somewhat or very under prepared in their knowledge on this subject (see Table 56 and Figure 53).

Table 56

Frequency Distribution: Perceived Preparedness–Knowledge of the Institution's Facility Maintenance Processes

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	10	3.8	3.9	3.9
Somewhat Under Prepared	72	27.7	27.9	31.8
Adequately Prepared	97	37.3	37.6	69.4
Well Prepared	52	20.0	20.2	89.5
Very Well Prepared	27	10.4	10.5	100.0
Total	258	99.2	100.0	
Missing	2	.8		
Total	260	100.0		

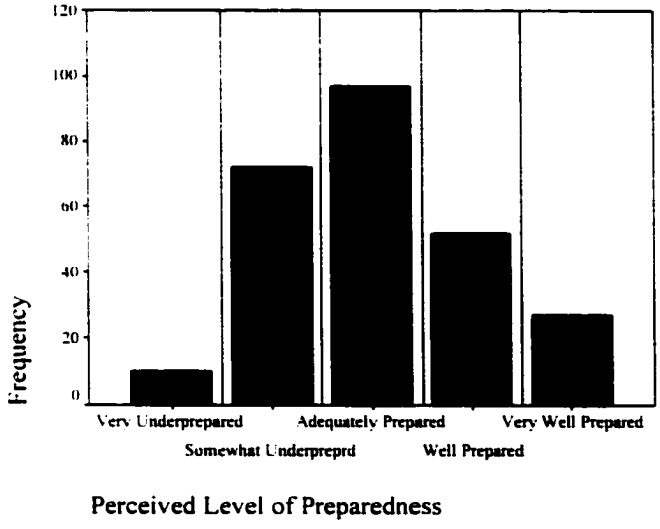

Figure 53. Frequency Distribution: Perceived Preparedness–Knowledge of the Institution's Facility Maintenance Processes

The distribution for the variable *knowledge of the institution's planning processes* was comprised of 259 values, which therefore had one missing value. The distribution consisted of a mode and median of three. Nearly four in 10 (39.4%) of the respondents perceived themselves to have been adequately prepared regarding their knowledge of their institution's planning processes, while close to three in 10 (28.6%) viewed themselves as being well prepared (see Table 57 and Figure 54). Forty-two or 16.2% had an opposing self-perception in that they felt somewhat under prepared on this subject, and another four individuals (1.5%) felt very under prepared.

Table 57

Frequency Distribution: Perceived Preparedness–Knowledge of the Institution's Planning Processes

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	4	1.5	1.5	1.5
Somewhat Under Prepared	42	16.2	16.2	17.8
Adequately Prepared	102	39.2	39.4	57.1
Well Prepared	74	28.5	28.6	85.7
Very Well Prepared	37	14.2	14.3	100.0
Total	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

The next variable, *knowledge of the institution's budgeting processes*, had a response of 259, with one missing value, a mode of five and a median of four. Nearly three in 10 respondents (76 or 29.3%) perceived themselves to have been well prepared in their knowledge of their institution's budgeting processes and over one third (93 or 35.9%) viewed themselves as being very well prepared. On the other end

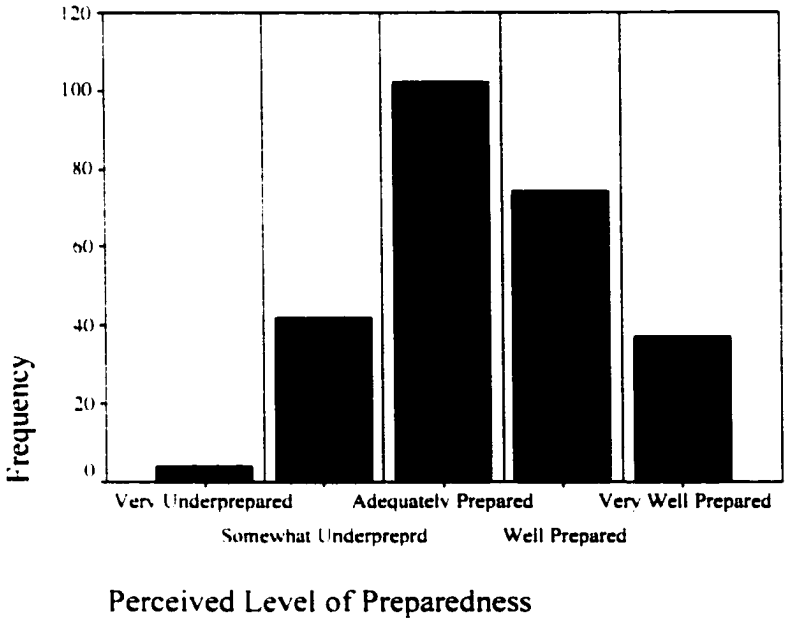

Figure 54. Frequency Distribution: Perceived Preparedness–Knowledge of the Institution's Planning Processes

of the scale. 36 individuals (13.9%) indicated that they were somewhat under prepared regarding their knowledge of this subject while another two respondents (.8%) indicated that they were very under prepared (see Table 58 and Figure 55).

Table 58

Frequency Distribution: Perceived Preparedness–Knowledge of the Institution's Budgeting Processes

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	2	.8	.8	.8
Somewhat Under Prepared	36	13.8	13.9	14.7
Adequately Prepared	52	20.0	20.1	34.7
Well Prepared	76	29.2	29.3	64.1
Very Well Prepared	93	35.8	35.9	100.0
Total	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

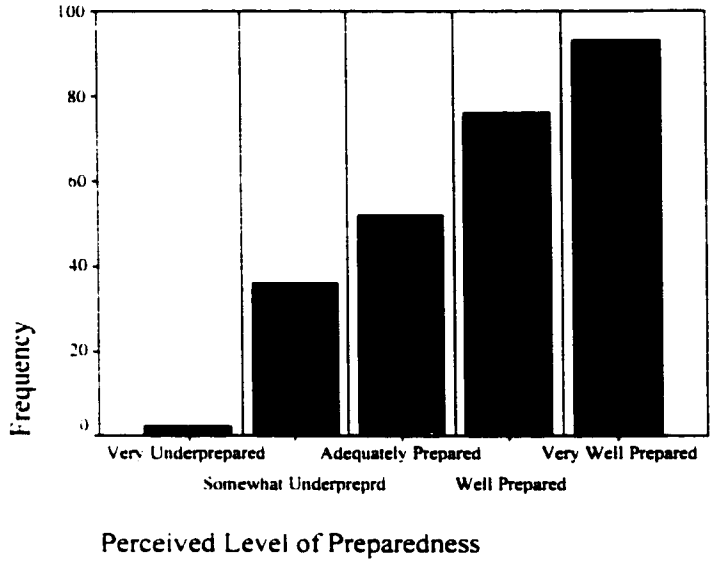

Figure 55. Frequency Distribution: Perceived Preparedness–Knowledge of the Institution's Budgeting Processes

Two hundred fifty-nine of the 260 subjects responded to the item that assessed their perceived *knowledge of their institution's capital outlay process*. The mode and median for this variable was three (see Table 59 and Figure 56).

Table 59

Frequency Distribution: Perceived Preparedness–Knowledge of the Institution's Capital Outlay Process

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	9	3.5	3.5	3.5
Somewhat Under Prepared	48	18.5	18.5	22.0
Adequately Prepared	75	28.8	29.0	51.0
Well Prepared	74	28.5	28.6	79.5
Very Well Prepared	53	20.4	20.5	100.0
Total	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

Over one in five of the responding CBOs (57 or 22%) perceived themselves as being either very or somewhat under prepared in their knowledge of their institution's capital outlay process. Close to three in 10 respondents felt as though they were adequately prepared (75 or 29%) or well prepared (74 or 28.6%) on this topic.

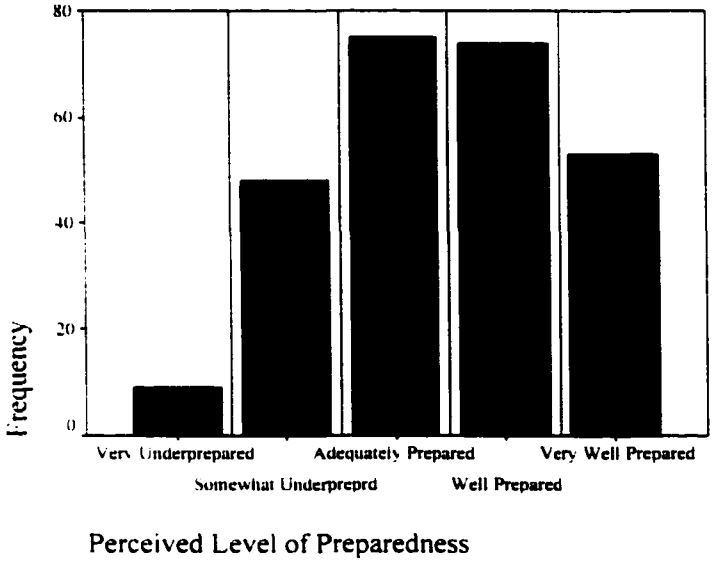

Figure 56. Frequency Distribution: Perceived Preparedness–Knowledge of the Institution's Capital Outlay Process

The distribution for the variable *knowledge of the state's public university funding processes* was comprised of 258 values, which had two values missing. The variable had a mode of five and a median of four. Seventy-seven respondents (29.8%) viewed themselves as being well prepared with regard to their level of knowledge of the state's public university funding processes, while 94 individuals (36.4%) viewed themselves as being very well prepared (see Table 60 and Figure 57).

Forty-six (17.8%) of the responding CBOs viewed their level of knowledge on this topic as either somewhat or very under prepared.

Table 60

Frequency Distribution: Perceived Preparedness–Knowledge of the State's Public University Funding Processes

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	8	3.1	3.1	3.1
Somewhat Under Prepared	38	14.6	14.7	17.8
Adequately Prepared	41	15.8	15.9	33.7
Well Prepared	77	29.6	29.8	63.6
Very Well Prepared	94	36.2	36.4	100.0
Total	258	99.2	100.0	
Missing	2	.8		
Total	260	100.0		

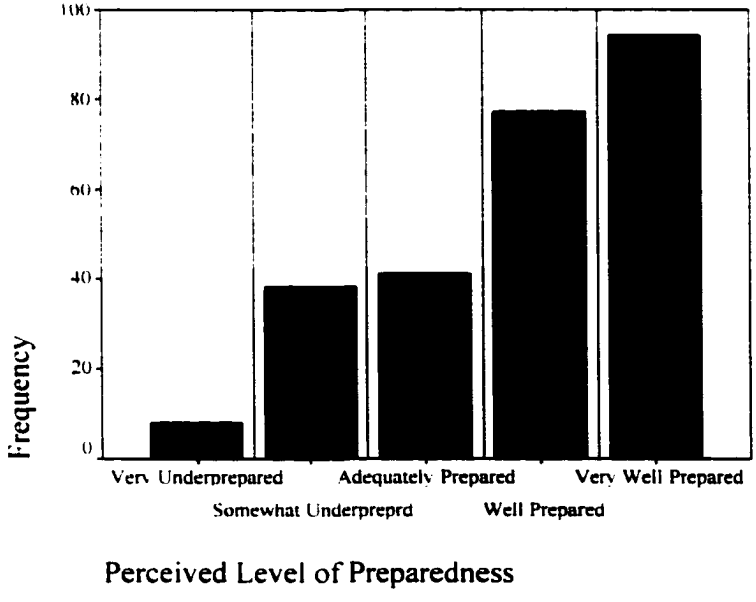

Figure 57. Frequency Distribution: Perceived Preparedness–Knowledge of the State's Public University Funding Processes

All but one of the subjects responded to the item that assessed their perception of their *knowledge of institutional board governance policies* (see Table 61 and Figure 58). The distribution resulted in a mode and median of four.

Table 61

Frequency Distribution: Perceived Preparedness–Knowledge of Institutional Board Governance Policies

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	9	3.5	3.5	3.5
Somewhat Under Prepared	35	13.5	13.5	17.0
Adequately Prepared	71	27.3	27.4	44.4
Well Prepared	82	31.5	31.7	76.1
Very Well Prepared	62	23.8	23.9	100.0
Total	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

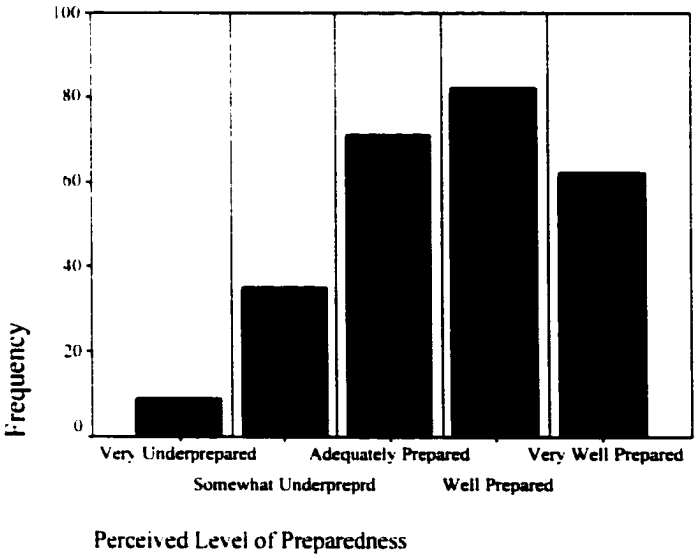

Figure 58. Frequency Distribution: Perceived Preparedness–Knowledge of Institutional Board Governance Policies

Two hundred fifteen or 83% of the respondents perceived themselves as being either adequately, well, or very well prepared with regard to their knowledge of their institution's board governance policies. To the contrary, 44 individuals (17%) viewed themselves as being either somewhat or very under prepared in this regard.

The distribution for the next variable, *knowledge of the institutional board governance procedures*, had similar results as the item above pertaining to board governance policy. Two hundred fifty-nine of the 260 subjects responded to the item, leaving just one missing value. The mode and median for the variable was four. One in five (53 or 20.5%) of the CBOs viewed themselves as being either somewhat or very under prepared regarding their knowledge of institutional board governance procedures (see Table 62 and Figure 59). The majority of respondents (206 or 79.5%), however, perceived themselves as having been either adequately, well, or very well prepared with respect to their knowledge of this topic.

Table 62

Frequency Distribution: Perceived Preparedness–Knowledge of Institutional Board Governance Procedures

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	8	3.1	3.1	3.1
Somewhat Under Prepared	45	17.3	17.4	20.5
Adequately Prepared	70	26.9	27.0	47.5
Well Prepared	79	30.4	30.5	78.0
Very Well Prepared	57	21.9	22.0	100.0
Total	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

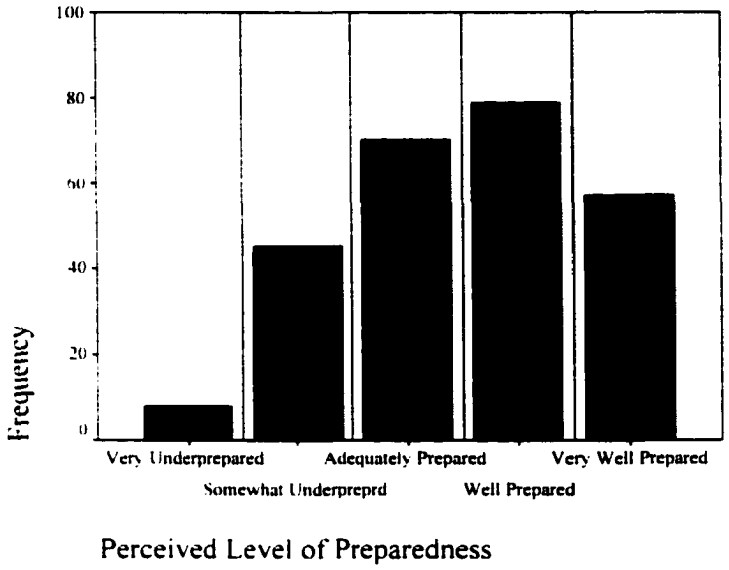

Figure 59. Frequency Distribution: Perceived Preparedness–Knowledge of Institutional Board Governance Procedures

The distribution for the variable of *CBOs' understanding of their institution's role in the state's overall higher education system* was 258, which had two missing values and a mode and median of four. The distribution revealed the respondents' confidence in their familiarity with their respective institution's roles within the context of the broader state system (see Table 63 and Figure 60). Over nine in 10 (234 or 90.7%) perceived themselves to have been either adequately, well, or very well prepared in this area. Just 23 individuals (8.9%) thought that they were somewhat under prepared with respect to their knowledge of their institution's role in the state's overall higher education system, while just one individual had a self-perception of being very under prepared.

Table 63

Frequency Distribution: Perceived Preparedness–Understanding of the Institution's Role in the State's Overall Higher Education System

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	1	.4	.4	.4
Somewhat Under Prepared	23	8.8	8.9	9.3
Adequately Prepared	55	21.2	21.3	30.6
Well Prepared	90	34.6	34.9	65.5
Very Well Prepared	89	34.2	34.5	100.0
Total	258	99.2	100.0	
Missing	2	.8		
Total	260	100.0		

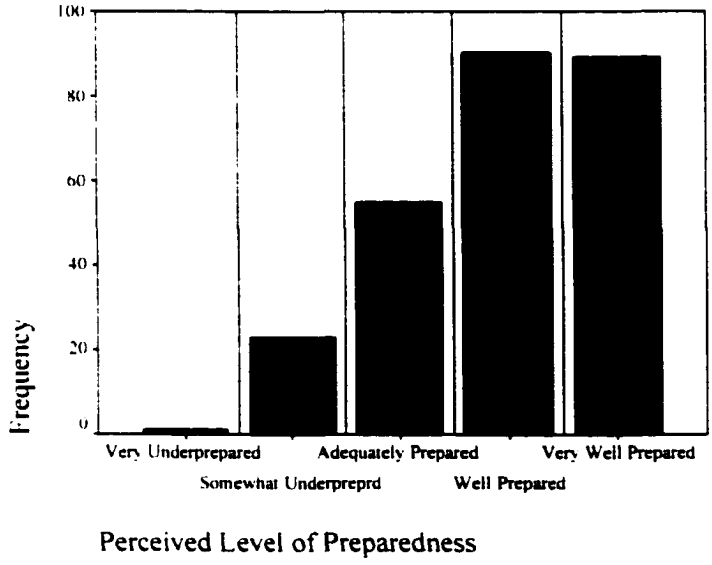

Figure 60. Frequency Distribution: Perceived Preparedness–Understanding of the Institution's Role in the State's Overall Higher Education System

The last variable in this category measured CBOs' *overall familiarity with their institutions*. All but one survey participant responded to the item. The variable had a mode of five and a median of four. Over two-thirds of the respondents (174 or

67.2%) indicated that they were either well or very well prepared in their overall familiarity with their institutions (see Table 64 and Figure 61). Still, one in 10 of the participating CBOs (28 or 10.8%) perceived themselves to have been somewhat under prepared regarding their overall familiarity with their institutions.

Table 64

Frequency Distribution: Perceived Preparedness–Overall Familiarity with the Institution

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Under Prepared	4	1.5	1.5	1.5
Somewhat Under Prepared	28	10.8	10.8	12.4
Adequately Prepared	53	20.4	20.5	32.8
Well Prepared	86	33.1	33.2	66.0
Very Well Prepared	88	33.8	34.0	100.0
Total	259	99.6	100.0	
Missing	1	.4		
Total	260	100.0		

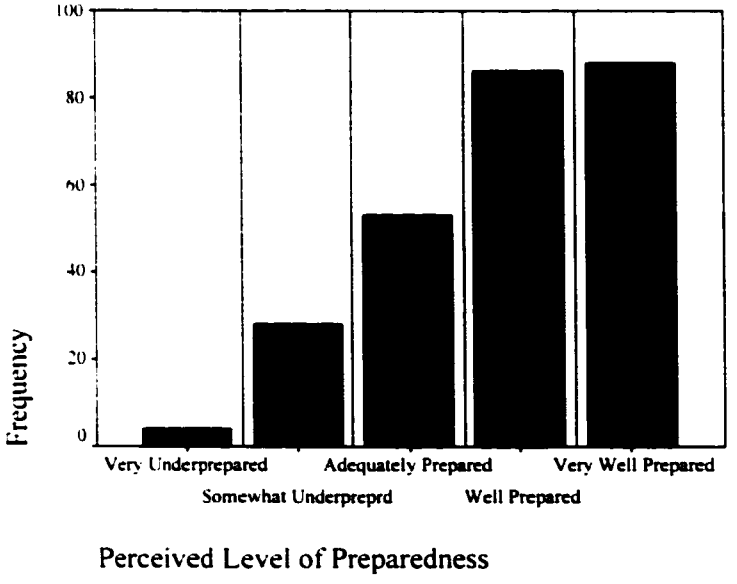

Figure 61. Frequency Distribution: Perceived Preparedness–Overall Familiarity with the Institution

Frequency Distributions – Interval Level Data

The frequency distributions provided below represent the seven remaining independent variables, which were measured using interval data. The first variable in this last category assessed the *total number of years the survey respondents had been employed as public university CBOs*. The distribution for this item consisted of all 260 subjects. The variable's distribution consisted of a mode of one, a median of nine, a mean of 10.3, and a range of 40. The distribution for the variable included a variance of 56.06, a standard deviation of 7.49, and a standard error of the mean of .46.

The next variable measured using interval data was the *total number of public university CBO positions the respondents had held*. The total distribution for this item was 260, which had no missing values. The distribution consisted of a mode and median of one, a mean of 1.34, and a range of three. Included in the distribution was a variance of .42, a standard deviation of .65, and a standard error of the mean of .04.

The number of subjects reporting the *total number of years in public university administrations positions prior to their first public university CBO role* was 192, with 68 respondents reporting not having been employed in such positions prior to their first public university CBO role. The distribution for this variable consisted of a mode of 20, a median of 13, a mean of 13.33, and a range of 32. The distribution consisted of a variance of 51.76, a standard deviation of 7.19, and a standard error of the mean of .52.

Thirty of the 260 subjects (11.5%) responded to the item measuring the *total number of years in community college administration positions prior to their employment at a four-year university*. The distribution of responses to this variable included a mode of three, a median of six, a mean of 7.60, and a range of 19. The distribution included a variance of 25.56, a standard deviation of 5.06, and a standard error of the mean of .92.

Sixty-nine of the 260 subjects (26.5%) responded to the item that assessed the *total number of years in private sector administrative-management related positions prior to assuming their first public university CBO role*. The distribution of responses to this item resulted in a mode of two, a median of five, a mean of 7.36, and a range of 29. The distribution further included a variance of 49.94, a standard deviation of 7.07, and a standard error of the mean of .85.

Rounding out the descriptive analyses of variables measured using interval data were the *respondents' current age* and *their age at the time they first became employed as public university CBOs*. Two hundred fifty-eight of the 260 subjects indicated their current age. The distribution for this variable included the following data: a mode of 59, median of 54, mean of 53.89, range of 39, variance of 40.55, standard deviation of 6.37, and a standard error of the mean of .40.

The distribution for the variable that measured the respondents' age when they first became employed as public university CBOs consisted of 258 values, with two missing. The distribution was comprised of a mode of 40, median of 44, mean of

43.59, and a range of 37. Also comprised in the distribution was a variance of 49.88, a standard deviation of 7.06, and a standard error of the mean of .44.

Analytical Test Results

The second section of this chapter consists of a summary of the findings from a series of statistical analyses used to test the study's hypotheses. The test results provided below are presented by level of data, starting first with nominal, then ordinal, and finishing with interval data.

The chi-square goodness of fit test was used to test for significance of a relationship between independent variables measured at the nominal level, and the dependent variable, which was measured at the ordinal level. The study's dependent variable, which measured the subjects' overall self-perceived preparedness, was used in all statistical calculations. A two-tailed test was used for all significance calculations. The decision criterion for determining if a significant relationship exists is .05, which is the social science standard for this test.

The first variable tested against the dependent variable was the item that measured whether the participants had been employed in public university administration positions prior to assuming their first role as a public university CBO. The chi-square test statistic was 5.85, with three degrees of freedom. The statistic had a significance of .119, indicating that there is no significant relationship between the subjects' prior public university administration experience and their overall

perceived level of preparedness at the time they started their first position as a public university CBO.

The next item tested was the variable that measured the existence of prior community college administration experience. The chi-square test statistic was .904, with three degrees of freedom. The statistic had a significance of .825, indicating that there is no significant relationship between the subjects' prior community college administration experience and their overall perceived level of preparedness at the time they started their first position as a public university CBO.

The next chi-square test was employed to determine if there is a significant relationship between the existence of prior administrative-management experience and the dependent variable. The chi-square statistic for this test was 2.784, with three degrees of freedom. The statistic had a significance of .426, indicating that a significant relationship does not exist between prior private sector administrative-management experience and the subjects' overall perceived level of preparedness at the outset of assuming their first CBO positions.

The chi-square test used to identify if a significant relationship exists between the subjects' prior college teaching experience and their overall perceived level of preparedness revealed a statistic of 2.469, with three degrees of freedom. The statistic has a significance of .481, indicating that a relationship between these two variables does not exist.

The next variable tested was the item that determined whether the respondents had earned a doctorate degree. The chi-square statistic for this test was 7.815, with

three degrees of freedom. The chi-square statistic had a significance of .050, indicating that there is a significant relationship between the earning of a doctorate degree and the subjects' overall perceived level of preparedness at the time they started their first public university CBO position.

For the next test, we turn to the variable that consisted of the *field* in which the respective CBOs had earned their doctorate degrees. The fields were categorized into the following four: business and management, education, law, and the arts and sciences. Because we are comparing more than two populations in testing for a relationship between this variable and the dependent variable, the Kolmogorov-Smirnoff test was utilized. This test specifically sought to determine if a significant difference exists among the populations and establishes if all of the populations are homogeneous in relationship to these two variables. The most extreme differences in the positive and negative values were .475 and .291. The *z* score for the field in which the doctorate was earned was 7.652, and for overall preparedness, 4.679. The statistic had a significance of .000, indicating that the field in which the subjects had earned their doctorate degree has a significant affect on their perceived level of preparedness.

Tested next for a significant relationship was the variable that assessed whether the subjects had earned a master's degree. The chi-square statistic for this test was 4.483, with three degrees of freedom. The statistic had a significance of .214, indicating that a significant relationship does not exist between the earning of a master's degree and the subjects' overall perceived level of preparedness.

Using the Kolmogorov-Smirnoff test to determine if a significant relationship exists between the field in which a master's degree was earned and the subjects' overall preparedness, we find that the most extreme differences in the positive and negative values were .338 and .291. The six categories used to group the fields in which master's degrees were earned in consisted of business and management, education, public administration, the arts and sciences, and engineering and technology. The *z* score for the field in which the master's degree was earned was 5.447, and for overall preparedness, 4.679. The statistic has significance of .000, indicating that the field in which the subjects had earned their master's degree in does have an influence on their overall perceived level of preparedness.

All two hundred fifty-eight of the participants who answered whether they had earned a bachelor's degree indicated that they had, which makes this variable a constant value, and which therefore cannot be used in the analysis.

The Kolmogorov-Smirnoff test, used to determine if a significant relationship exists between the field in which the CBOs had earned their bachelor's degree and their overall perceived level of preparedness, revealed extreme differences in the positive and negative values of .291 and .228. The *z* scores for the field in which the bachelor's degree was earned in and overall preparedness were 6.087 and 4.679, respectively. The *z* statistic had a significance of .000, indicating that the field in which the CBOs had earned their bachelor's degree in does have a significant affect on their overall perceived level of preparedness.

Results of the chi-square test that was performed to determine if a significant relationship exists between the earning of the Certified Public Accountant certification and overall preparedness revealed a test statistic of 5.85, with three degrees of freedom. The statistic had a significance of .229, indicating that there is no significant relationship between the earning of this professional credential and overall preparedness.

The chi-square test statistic that was generated from a comparison of the populations who had, and who had not, earned the Certified Financial Analyst certification, was .570, with three degrees of freedom, and a two-tailed significance of .903. It therefore can be determined that a relationship does not exist between the earning of the CFA certification and overall preparedness. It should be reiterated here that only two respondents indicated that they had earned the certification.

In an investigation as to whether a significant relationship exists between the variable, *type of institution the subjects were first employed at as public university CBOs*, and overall preparedness, the Kolmogorov-Smirnoff test was used. The most extreme differences in the positive and negative values were .291 and .274. The *z* score for institutional type (according to the Carnegie Classification System) was 4.425, and for overall preparedness was 4.679. The *z* statistic had a two-tailed significance of .000, indicating that the type of institution the respondents were first employed at as public university CBOs does affect their overall perceived level of preparedness.

In our analysis of whether a significant relationship exists between the subjects' participation in significantly beneficial professional development programs *prior to assuming their first public university CBO roles* and their overall perceived level of preparedness, we find a chi-square statistic of 1.104, with three degrees of freedom. The statistic had a two-tailed significance of .776, indicating that a relationship does not exist between these two variables.

A similar analysis of professional development program participation, this time examining if a significant relationship exists between the subjects' participation in such programs *since being hired into their first public university CBO roles*, and their overall perceived level of preparedness, generated a chi-square test statistic of 7.154, with three degrees of freedom. The statistic had a two-tailed significance of .067, indicating that a significant relationship between these two variables does not exist.

The Kolmogorov-Smirnoff test was used to identify whether a significant relationship exists between the subjects' ethnicity and their perceived level of preparedness at the time they started their first public university CBO position. The most extreme differences between the positive and negative values were .291 and .502. The *z* score for ethnicity was 8.102, which compares to a score of 4.679 for the dependent variable of overall preparedness. The *z* statistic had a significance of .000, indicating that there is a significant difference in the relationship between the subjects' ethnicity and their perceived level of overall preparedness in their first public university CBO roles.

The last statistical test used to examine a variable measured using nominal data involved an examination aimed at determining if a significant relationship exists between the subjects' gender and overall preparedness. The chi-square test statistic was 2.457, with three degrees of freedom. The statistic had a two-tailed statistic of .483 indicating that a significant relationship does not exist between gender and overall perceived preparedness.

We now turn to an examination of the existence, significance, strength, and direction of relationships involving independent variables measured using ordinal data and the dependent variable of overall preparedness, which was also assessed using an ordinal scale. A total of 31 independent variables were measured using an ordinal scale: 20 pertaining to the subjects' perceived preparedness with regard to various management functions and competencies, 10 relating to their ability to manage relationships, and 11 aimed at assessing their familiarity with their institutions. The Spearman's rank order coefficient (Rho) was used in the following bivariate analyses. Significance of a relationship for the Spearman's Rho was determined at the .05 level. Also important in the statistic's interpretation is the correlation coefficient, which measured the strength of the relationship between the independent and dependent variable. For the purposes of this study, the coefficient will be determined of interest to merit further analysis if it was greater than .65 or -.65.

The first category of variables representing 20 relevant management functions and competencies commonly associated with the CBO role produced Spearman's Rho correlation coefficients ranging from .288 to .540 (see Table 65).

Table 65

Spearman's Rho Results for Management Functions and Competencies Variables

Variable	Spearman's Rho Correlation Coefficient	Two-Tailed Significance
Knowledge of financial planning	.502	.000
Knowledge of financial reporting	.315	.000
Knowledge of information technology issues	.342	.000
Knowledge of management information systems	.377	.000
Knowledge of facilities management	.379	.000
Knowledge of capital (construction) planning	.367	.000
Knowledge of campus master planning	.388	.000
Knowledge of human resource law	.288	.000
Ability to hire staff	.327	.000
Knowledge of private contract management	.344	.000
Knowledge of risk management practices	.305	.000
Knowledge of public safety issues	.322	.000
Ability to manage crises	.402	.000
Ability to solve problems	.393	.000
Ability to make timely decisions on critical issues	.435	.000
Ability to effectively delegate tasks	.265	.000
Ability to facilitate meetings effectively	.353	.000
Ability to manage change and foster innovation	.423	.000
Knowledge of contemporary issues in higher education	.353	.000
Overall administrative management capabilities	.540	.000

Each variable in this category generated a significance of .000, indicating that these management functions and competencies do share a statistically significant relationship with the dependent variable of overall preparedness, however, the correlation coefficients generated in all the cases are too low to warrant further data analysis.

The second of the three categories that involved the measurement of variables using ordinal data consisted of 10 variables pertaining to the subjects' ability to effectively interact with a variety of stakeholders commonly associated with the public university CBO position. The resulting statistical test resulted in Spearman's Rho correlation coefficients ranging from .299 to .438 (see Table 66).

Table 66

Spearman's Rho Results for Relationship Management Variables

Variable	Spearman's Rho Correlation Coefficient	Two-Tailed Significance
Ability to supervise staff	.358	.000
Ability to resolve interpersonal conflicts	.338	.000
Ability to provide discipline to staff Members	.390	.000
Ability to make effective public presentations	.397	.000
Ability to work effectively with the institution's president	.389	.000
Ability to work effectively with members of the president's cabinet	.438	.000
Ability to work effectively with members of the state budget office	.299	.000
Ability to work effectively with members of the state legislature	.297	.000
Ability to work effectively with the institution's board of trustees/directors	.443	.000
Overall human relations skills	.426	.000

In every case, the test generated a significance of .000, which indicates that each variable does share a statistically significant relationship with the dependent variable of overall leadership preparedness, however the correlation coefficients are too low to be of interest for further data analysis.

The last of the three categories of variables measured at the ordinal level pertained to the familiarity the subjects had with the public institutions that employed them in their first CBO role. Tests generated Spearman's Rho correlation coefficients ranging from .315 to .477 and significance of .000 in all cases (see Table 67).

Table 67

Spearman's Rho Results for Institutional Familiarity Variables

Variable	Spearman's Rho Correlation Coefficient	Two-Tailed Significance
Knowledge of the institution's policies	.315	.000
Knowledge of the institution's labor contract processes	.388	.000
Knowledge of the institution's facility maintenance processes	.434	.000
Knowledge of the institution's planning processes	.469	.000
Knowledge of the institution's budgeting processes	.459	.000
Knowledge of the institution's capital outlay process	.439	.000
Knowledge of the state's public university funding processes	.425	.000
Knowledge of institutional board governance policies	.473	.000
Knowledge of institutional board governance procedures	.478	.000
Understanding of the institution's role in the state's overall higher education system	.477	.000
Overall familiarity with the institution	.459	.000

Here again, while the relationship between these independent variables and the dependent variable of overall preparedness tested positive for statistical significance, the results lack the amount of strength that warrants a further analysis of the data.

The remaining seven variables tested for a significant relationship with the dependent variable were items measured using interval data. Since the dependent variable contained data that were accumulated using an ordinal measure, the appropriate statistical test is the Spearman's rank order coefficient (Rho).

The Spearman's Rho correlation coefficients for these seven variables ranged from -.155 to .203, with significance ranging from .005 to .775 (see Table 68).

Table 68

Spearman's Rho Results for Variables Measured at the Interval Level

Variable	Spearman's Rho Correlation Coefficient	Two-Tailed Significance
Total years employed as public university CBOs	-.155	.013
Total public university CBO positions held	.043	.494
Total years in public university administration positions prior to first CBO position	.203	.005
Total years in community college administration positions prior to first CBO position	.057	.769
Total years in private-sector administrative-management positions prior to first CBO position	.041	.775
Subjects' current age	-.118	.775
Subjects' age when first employed as a public university CBO	.144	.021

The test results revealed that three of the seven variables quantified at the interval level had a significant relationship with the dependent variable. However, the correlation coefficients for these three variables, which include the total number of years the subjects were employed as public university CBOs, the total number of years they were employed in public administration positions prior to assuming their first CBO roles, and their age when they first became employed as public university CBOs, were too low to merit further data analysis.

An additional Spearman's Rho test was conducted to test for a significant relationship between the subjects' current age and their age when assuming their first CBO role. The results produced a Rho of .369 with significance at the .000 level. While the relationship between these two variables is significant, the strength of the relationship is too weak to necessitate further analysis.

A series of multiple regression tests were the final set of statistical procedures performed in order to justify acceptance or rejection of the study's hypotheses. The tests were conducted on the three categories of variables measured using ordinal data. This was done in order to correlate the subjects' perceived level of preparedness for each variable within the respective categories with the dependent variable in order to determine what variables, if any, tested positive for a significant relationship and therefore which could be regarded as being indicative of CBO leadership preparedness. A multiple regression test of the first category of independent variables pertaining to management functions and competencies generated a coefficient of .695. Significance for the 20 variables ranged from .000 to .980 (see Table 69).

Table 69

Multiple Regression Results: Management Functions and Competencies Variables

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.433	.287		1.510	.133
K-Financial Planning	.196	.048	.256	4.092	.000*
K-Financial Reporting	5.325E-02	.044	.075	1.219	.224
K-Information Technology	-1.648E-03	.069	-.002	-.024	.981
K-Mgt. Information Systems	5.098E-02	.074	.067	.694	.489
K-Facilities Management	5.441E-02	.062	.079	.874	.383
K-Capital/Construction Planning	2.194E-02	.059	.034	.373	.709
K-Campus Master Planning	-1.531E-03	.062	-.002	-.025	.980
K-Human Resource Law	3.336E-02	.047	.043	.705	.481
A-Hire Staff	-1.744E-02	.068	-.018	-.258	.797
K-Private Contract Mgt.	4.554E-02	.055	.059	.835	.405
K-Risk Management	-4.138E-02	.057	-.054	-.730	.466
K-Public Safety	3.951E-02	.052	.050	.755	.451
A-Manage Crises	.127	.060	.151	2.101	.037*
A-Solve Problems	-8.728E-02	.100	-.076	-.874	.383
A-Timely Decisions	8.830E-02	.094	.081	.935	.351
A-Delegate Tasks	-.142	.064	-.168	-2.239	.026*
A-Facilitate Meetings	-2.678E-02	.069	-.029	-.386	.700
A-Manage Change	8.939E-02	.065	.100	1.386	.167
K-Contemporary Issues in Higher Education	.125	.045	.152	2.772	.006*
Overall Administrative – Management Capabilities	.255	.091	.219	2.816	.005*

Dependent Variable: Overall Leadership Preparedness
K = Knowledge A = Ability * Significance at the .05 level

Five of the independent variables tested positive for a significant relationship with the dependent variable. These variables included (a) knowledge of financial planning, (b) the ability to manage crises, (c) the ability to delegate tasks, (d) knowledge of contemporary issues in higher education, and (e) the subjects' overall

administrative-management capabilities. Because the coefficient for this multiple regression test was greater than .65, these variables can be considered to be significantly associated with perceived CBO leadership preparedness.

A multiple regression test of the second category of variables, these pertaining to relationship management, generated a coefficient of .581 with significance between the independent variables and the dependent variable ranging from .001 to .885. Two variables produced significance at the .05 level: the ability to provide discipline to staff (.012) and the ability to work effectively with the institution's board of trustees (.001). However, the coefficient statistic of .581 revealed a relationship between these variables and the dependent variable too weak to consider them to be significant indicators of CBO leadership preparedness.

The third category of variables pertaining to the subjects' familiarity with the public universities that first employed them as CBOs generated a regression coefficient of .646. Five of the 11 variables in this category tested positive for a significant relationship with the dependent variable (see Table 70). These five variables included (a) the CBOs' knowledge of institutional policies, (b) knowledge of their institution's facility maintenance processes, (c) knowledge of the institution's budgeting processes, (d) knowledge of the university's board governance procedures, and (e) the subjects' understanding of their institution's role in the state's overall higher education system. Since the coefficient for this multiple regression test meets the minimum threshold of .65, these variables may be deemed as being indicators CBO leadership preparedness.

Table 70

Multiple Regression Results: Institutional Familiarity Variables

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.466	.190		7.703	.000
K-Policies	-.186	.065	-.279	-2.855	.005*
K-Labor Contract Processes	3.156E-02	.057	.044	.549	.583
K-Facilities Maintenance Processes	.195	.060	.263	3.256	.001*
K-Planning Processes	6.545E-02	.068	.082	.958	.339
K-Budgeting Processes	.211	.068	.302	3.097	.002*
K-Capital Outlay Process	-2.470E-02	.062	-.036	-.397	.692
K-State Public University Funding Processes	-6.578E-02	.071	-.100	-.921	.358
K-Board Governance Policies	-.200	.131	-.287	-1.528	.128
K-Board Governance Procedures	.287	.126	.410	2.273	.024*
U-Institution's Role in State Higher Education System	.251	.067	.317	3.763	.000*
Overall Familiarity with the Institution	3.874E-02	.078	.053	.496	.621

Dependent Variable: Overall Leadership Preparedness
K = Knowledge U = Understanding * Significance at the .05 level

One final multiple regression test was conducted, which involved a new category of variables consisting of the 10 items that tested positive for a significant relationship with the dependent variable. Five of the variables were from the category that measured the subjects' perceived abilities in relevant CBO management functions and competency areas. The other five variables represented the category of variables that measured the subjects' familiarity with different aspects of their institutions. The multiple regression test that was conducted on this grouping of 10 variables identified, categorically, the strength of their relationship with the

dependent variable and, individually, the significance of the respective relationships for each variable.

The regression coefficient resulted in a test statistic of .770, with eight of the ten variables producing significance at the .05 level (see Table 71). The regression coefficient of .770 reaffirms that the strength of the relationship these ten variables have with the dependent variable is strong enough consider them to be appropriate indicators of CBO leadership preparedness.

Table 71

Multiple Regression Results: Variables with Statistical Significance from Prior Regression Tests

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	-.118	.229		-.514	.608
K-Financial Planning	.200	.037	.261	5.388	.000*
A-Manage Crises	.122	.046	.145	2.679	.008*
A-Delegate Tasks	-7.761E-02	.045	-.091	-1.711	.088
K-Contemporary Issues in Higher Education	2.819E-02	.040	.035	.705	.481
Overall Administrative – Management Capabilities	.317	.070	.272	4.548	.000*
K-Institution's Policies	-4.760E-02	.042	-.071	-1.129	.260
K-Institution's Facilities Maintenance Processes	.120	.039	.159	3.056	.002*
K-Institution's Budgeting Processes	.120	.045	.168	2.682	.008*
K-Institutional Board Governance Procedures	7.343E-02	.047	.106	1.554	.121
U-Institution's Role in State Higher Education System	.131	.048	.166	2.763	.006*

Dependent Variable: Overall Leadership Preparedness
K = Knowledge A = Ability U = Understanding * Significance at the .05 level

Qualitative Analysis

The survey instrument used in this study primarily involved the collection of quantitative data, however, the inclusion of one open-ended question generated some additional interesting findings. The survey item solicited feedback regarding advice the subjects indicated they would have like to have received when assuming their first CBO roles.

One hundred sixty-three, or 62.7%, of the subjects responded to the open-ended question. Their responses were transcribed, coded, and analyzed using Ethnograph™ software (v 5.0, see Seidel, 1998). An analysis of the textual data revealed two thematic categories in which the responses could be grouped. The first category was comprised of consistently cited leadership qualities imperative for success in the CBO position. The second category was comprised of role specific management competencies. These competencies pertained to specific subject area knowledge CBOs should have command of, as well as certain abilities they should be able to demonstrate. A more in-depth discussion of these two themes, which include the integration of some actual subject responses, is provided below. All selected quotations provided by the subjects are provided anonymously.

Leadership Qualities

Many of the respondents used the open-ended survey question to provide advice as to what leadership qualities are particularly important for the newly appointed CBO to foster. A content analysis of the textual data revealed a total of 10

qualities of effective leadership. These leadership qualities are presented in Table 72 in rank order according to the number of times they were cited by respondents.

Table 72

Leadership Qualities Identified from Content Analysis of Advice-Seeking Survey Question

Leadership Quality (Number of responses shown in parentheses)	Description
Ability to Build Mutually Beneficial Relationships (37)	Ability to effectively create and maintain relationships with a variety of institutional stakeholders
Understanding of the Workload of the CBO Position (12)	Awareness of the immense workload of the CBO position and ability to balance professional responsibilities with personal priorities
Ability to Focus on the "Big Picture" (11)	Ability to not remain overly focused on detail and to understand the division's role within the institution and the institution's role within the community and society
Patience (10)	Ability to demonstrate patience in facilitating policy and projects through to fruition
Listening Skills (9)	Ability to listen to others in a genuine manner and to incorporate feedback into decision-making
Understanding of the Political Nature of the CBO Position (9)	Understanding of the role politics plays in the institutional setting, and the individual enhancement of political persuasiveness
Proactive Approach to Lifelong Learning (8)	Belief in, and participation in, continual professional development
Decision-Making Skills (5)	Ability to make good decisions, incorporating all input, utilizing sound analytical judgment, in a timely manner
Consensus-Building Skills (3)	Ability to build consensus among various stakeholders
Flexibility (3)	Ability to remain flexible, fluid, and adaptable to change mid-stream

These qualities revolve around the ability to (1) develop strong relationships, (2) understand the workload requirements of the CBO position, (3) focus on the "big picture," (4) exercise patience, (5) listen effectively (6) understand the political nature of the CBO role, (7) exude a passion for lifelong learning and professional development, (8) demonstrate good decision-making skills, (9) build consensus, and (10) exhibit flexibility to change.

Cultivating Mutually Beneficial Relationships

The open-ended question generated many responses that affirmed the significance of developing and maintaining strong relationships with key stakeholder groups. In addition to several general comments on the importance of building and maintaining mutually collaborative relationships with individuals, the responses could be categorized to reflect human relations with five stakeholder groups: (1) superiors, (2) subordinates, (3) peers, (4) faculty, and (5) individuals and groups external to the institution.

Among the general themes reflected in the comments pertaining to professional relationships was the importance of finding a mentor early on in one's CBO career. A number of respondents noted that mentors can be especially helpful in providing insight into the institution's culture and the campus climate. Mentors were also deemed as good teachers when it comes to demonstrating good "people skills."

Networking and building strong relationships with their peers in the academic division of the institution was a widely held piece of advice shared by the respondents. Noting the strong relationship that should exist between academics and finance and administration, many of the respondents advocated for CBOs to build strong alliances between the two divisions.

A third general theme generated from the comments pertaining to managing relationships was to demonstrate civility among one's interactions. "Don't mistreat anyone," "Choose your battles carefully," and "Don't fight the collective bargaining groups – compromise," reflect a few of the respondents' suggestions for building strong relationships and avoiding difficult relationships.

It was also acknowledged that the CBO must make some unpopular decisions at times and must enforce those decisions, which may in turn affect his or her popularity in the work environment. Being disliked by a minority of staff or colleagues at any given time is seen as part of the job, as summed up in the following comment by one respondent:

> You can't expect to be well liked in this position – you must do too many things that make people unhappy, such as putting constraints on what they can do. But if you stick to what is important, strive to do the right thing, and focus on helping the institution move forward, you can gain respect and credibility – greatly needed to get the job done.

Lastly, getting to know the operations that report to the CBO, and the individual people that work in each operation, was deemed as particularly

important. The involvement of staff and other institutional colleagues in problem solving and decision-making was identified as being integral to good relationship management. "You cannot solve all the problems yourself" wrote one respondent, adding, "Involve others and solicit their help in solving problems."

Relationships with Superiors. The respondents shared advice on the value of establishing good working relationships with their superiors, most notably, the institution's president/CEO and members of the governing board. "Establish an open, trusting, and respectful relationship with your chief academic officer/provost and with your president/chancellor" wrote one respondent. "Get to know and understand key members of the governing board and the importance of consulting with them before making an important decision" advised another respondent who had served in his current capacity for over two decades.

A few comments were provided that emphasized the importance of the president-CBO reporting structure, as reflected in the following admonition: "Don't accept the position unless you report directly to the president of the University!" Understanding that the priorities of the institution's president should come before those of the CBO was another recommendation shared by a few of the subjects.

Relationships with Peers. An analysis of the transcription from the open-ended survey question portrayed a commonly held view that creating and maintaining collaborative relationships with peers was a worthwhile activity. The CBO's institutional vice presidential counterparts, especially the chief academic officer, as

well as CBOs from other institutions, were identified as key stakeholders that can provide assistance with university issues.

Peers were also perceived as a source for facilitating both personal and professional development. Providing assistance with decision-making on critical issues, acting as a liaison to other institutional stakeholders, and serving simply as a sounding board are a few of the ways in which peers can build the leadership capacity of their CBO colleagues. "Asking for advice and counsel from peers is not seen as a weakness, but a strength" commented one respondent.

Relationships with Subordinates. An adage repeated several times was the importance of hiring competent and trustworthy employees. This underscores a commonly held belief that a CBO's reliance on his or her staff is integral to the leadership capability that he or she can achieve. Asking staff members many questions on all matters and intently listening to their responses was advised. "Don't come into the position as a 'know-it-all.' Depend on your staff heavily the first year. Discover your weaknesses early and work to strengthen them," advised one respondent.

Also underscored in the CBO-staff relationship was the importance of establishing mutually accepted goals, fostering teamwork, and the necessity of being firm with employees who may tend to take advantage of the trust and patience provided to them by their CBO's.

Relationships with Faculty. An obvious theme that appeared as a result of the content analysis from the open-ended, advice-soliciting survey question pertained to

the CBO-faculty relationship. It appears that a common desire among the subjects was to have had a better understanding early on about how to work with faculty members. Underscored were the different approaches that business officers and faculty have toward their work. The former group focuses on fiscal management and operational efficiencies in their approach, whereas the latter group focuses on teaching, learning, and research. The work focus, vernacular, and occupational culture of business offers and faculty are quite different, and therefore can lead to an inhibited ability for representatives of the two groups to communicate and work effectively together.

The advice shared by the respondents to bridge the aforementioned gap reflected an attitudinal approach that varied from benevolent to cynical. "Be cognizant of faculty sentiments and opinions. Build bridges and open lines of communication to faculty leaders" wrote one respondent. Another subject commented, "The faculty must be approached with appropriate reverence, prudence and understanding." A contrary approach to understanding the business officer-faculty relationship was echoed in the following advice offered by another respondent: "Don't expect faculty to really understand what you are saying."

Many of the respondents reported that they would liked to have had an enhanced ability to engage faculty in administration and business issues impacting the university. This desire is aptly stated in the following comment from one respondent who had been in his position less than two years: "I was surprised by the faculty's lack of interest and antipathy toward good business practices. I have learned to 'sell'

my proposals using very different terminology. It would therefore have been helpful to have been warned in advance of this cultural divide."

Relationships with External Stakeholders. "Do not underestimate the significance of external/community relations as they relate to campus operations" was advice offered by one respondent and echoed by several others. The CBO is invariably engaged in activities that require him or her to work with local, regional, and state representatives on a wide variety of issues. Establishing collaborative relationships with government and civic leaders was among the sound advice offered to newly incumbent CBOs.

Understanding the Workload of the CBO Position

The last theme generated from an analysis of the advice shared by the respondents dealt with the workload demanded of the CBO role. Comments pertaining to the workload of the CBO, aimed at prospective and newly incumbent CBOs, shared two comment sub-themes. The first was the need to set realistic expectations of the occupation's demands. The physical and mental stamina required to successfully carry out the CBO responsibilities are extremely demanding, noted several of the respondents. The work hours of the CBO can be very long. "Be prepared for a crushing workload" wrote one respondent. Time management and prioritization skills, therefore, were two competencies cited as important.

The second sub-theme revolved around the need for CBOs to set aside personal time for themselves and their families, and to not become overly obsessive

about staying on top of every detail involved in their work. One respondent aptly portrayed the need for striking a balance:

> You will find a never-ending array of subjects, controversies and requests to occupy your time. You will never be caught up. You will never be finished. Be sure to take time to take care of yourself and your family. Even though it is possible to have enough work to occupy you 24 hours a day, don't let the work consume you.

Additional counsel provided was to not take the CBO job too seriously, and to keep things in perspective. Comments shared in support of this advice included, "Listen, study, and put in the hours. Everything *will* work out" and "Be patient and pace yourself. Today's crisis is tomorrow's afterthought."

Ability to Focus on the Big Picture

Several of the respondents shared their experience of having had to back away from the day-to-day, detail-oriented nature of their prior work as mid-management business officers and focus on the broader institutional policy and planning issues of their respective universities. It was noted that focusing on a few major goals, not getting caught up in the details of the job, and focusing on institutional priorities are essential leadership abilities required of the CBO. One respondent wrote of his transition to the CBO position: "It was time to leave details behind somewhat and focus on policy and the major issues. The demands of the CFO are such that you cannot allow yourself to get bogged down in details."

Patience

Demonstrating patience in working in the public university setting was also identified as an important leadership quality. Many comments provided by respondents who had made the transition from the private sector to the public university setting reflected a sense of frustration at the administrative minutiae and political sensitivities inherent in moving policy decisions and projects forward. CBOs, it was cited, must balance their task-focused, entrepreneurial, and business orientation by understanding that the pace of policy implementation and project facilitation can be inhibited in the academy setting. Comments received by the subjects indicated an acknowledgement that patience is a learnable leadership quality. Several respondents recommended that individuals lacking tolerance of the sometimes-bureaucratic nature of university business administration should work to become skilled in exhibiting fortitude in dealing with a high level of bureaucracy.

Listening Skills

The complex nature of the activities engaged in by CBOs, combined with the tremendous diversity of the stakeholders he or she works with, demands that proactive attention be given to others in the form of effective listening. Some of the respondents indicated that the ability to exhibit good listening skills was integral to both good decision-making and refined interpersonal relations. Listening attentively to staff input, and taking the time to just "hear them out" is seen as an especially important leadership quality.

Political Nature of the CBO Role

A prominent theme among the advice shared by the respondents was the need for a thorough understanding of the role politics plays in the institutional setting. Becoming aware of both campus politics and the politics of the broader state higher education governance system was deemed as particularly important early on in a CBO's incumbency, as demonstrated in the following comment by one respondent: "Get to know the lay of the land and the politics of the institution before you go into the deep end of the pool. At the beginning, do more listening than talking."

An observation made by several subjects was the often-conflicted nature of decision-making when decisions are impacted by institutional politics. One respondent noted that the inclusion of politics in determining actions and creating policy often leads to decisions that are contrary to common sense and contrary to analytical decision-making. "Recognize that there will be some decisions made on the basis of political concerns rather than sound business practice" commented one respondent. Another respondent warned of the pervasive influence of politics in decision-making: "Remember, we are not talking about making sense, we are talking about making policy."

The role of politics in the university setting and in the CBO position was not always cast in a negative light. Indeed, some respondents advised that new CBOs receive training on the astute use of political influence to affect change. Done appropriately and ethically, the use of political overtures to steer behavior and influence decision-making was considered to be a suitable leadership skill.

Proactive Approach to Lifelong Learning

Another of the leadership qualities that served as a prominent theme in the advice shared by the respondents was an orientation toward perpetual lifelong learning. The propensity to attend workshops, training programs, and professional development conferences throughout one's CBO career was seen by many as a key element of leadership preparedness and continual leadership enhancement. Participation in training and extensive reading on CBO-specific topical areas was seen as important, but equally as imperative was the perceived need to learn about the larger role of higher education and the broader social, economic, and other environmental impacts faced by postsecondary education providers.

Decision-Making Skills

Another key leadership quality cited often was that of effective decision-making. The ability to proactively solicit input from subject area experts and all vested individuals and groups, and analyze all the information received using a systematic, analytical approach while simultaneously weighing the political ramifications of each decision alternative, was identified as a valuable leadership asset. Also noted as part of the essence of good decision-making was the capacity to make decisions in a timely manner. "You need to engage the broader university community in decision-making" wrote one respondent, adding, "The complexity and length of time involved in decision-making takes 'working of the political process.'"

Consensus Building Skills

Many of the responding CBOs indicated that the ability to build consensus was a particularly valuable leadership quality. The tremendous array of initiatives and policy issues the CBO contends with requires he or she to demonstrate his or her ability to strike compromises between disagreeing parties and build consensus toward common objectives.

Flexibility

The nature of the CBO's work, combined with the tremendous array of issues and stakeholders he or she deals with, requires that the newly appointed CBO approach his or her work in a manner that allows for flexibility. Both internal and external constraints and opportunities may appear at any given moment, which requires that the CBO be fluid and highly adaptable to change. Flexibility, it was noted, also requires the CBO to remain focused on the long-term objective of any initiative while simultaneously reacting to late changes and incorporating them into the facilitation process.

Management Competencies

Much of the advice shared by the subjects could be categorized broadly as management competencies; knowledge, skills, or abilities in specific management functions that are of great value in allowing the CBO to effectively lead his or her division and play a key role in the institution's success. The comments generated

under the umbrella of management were quite diverse, however, a closer analysis revealed five thematic categories. These management competencies are presented in Table 73 in rank order according to the number of times they were cited by respondents.

Table 73

Role-Specific Management Competencies Identified from Content Analysis of Advice-Seeking Survey Question

Management Competency (Number of responses shown in parentheses)	Description
Ability to Manage Resources (13)	Aptitude in administering the institution's fiscal, physical, and human resources
Ability to Hire Talented Employees (9)	Understanding of the importance early on that all employees in the division, especially direct reports, are integral to the CBO's leadership effectiveness
Knowledge of Auditing and Financial Reporting (5)	Keen understanding of audit procedures and requirements, and the reporting of audit findings and other financial reports
Ability to Manage Physical Plant Needs (4)	Ability to plan for and manage minor and major capital outlay projects and facility deferred maintenance projects
Knowledge of Planning (3)	Knowledge of, and ability to lead, both short-term operational and long-term strategic planning efforts

Managing Resources

As the chief financial officers of their respective institutions or branch campuses, the subjects were quick to espouse the importance of being knowledgeable at the outset about issues involving the institution's financial resources. The

importance of having a keen knowledge of financial planning and of the institution's budgeting processes – two items identified as significant in the previous section on statistical analysis – was affirmed by nearly a many respondents.

A common theme was the importance of understanding where the institution's president stands with regard to the university's funding priorities, the funding allocation decision-making process he or she utilizes (if one is utilized at all), and the management structure that is used to distribute fiscal resources. Advice one respondent wished to have received was to "understand the president's fiscal approach, priorities, and sensitivities " adding, "He/she is the one you must satisfy first and foremost." The importance of balancing the desires of the institution's president with sound fiscal management was also advocated, as stated by another subject: "It's OK to tell the president 'no' when he wants to spend the same money twice."

Another theme regarding resource allocation was the value of knowing the real condition of the institution's various budgets at the outset. A candid presentation of the true financial and administrative status of the university would be most helpful in preparing any given CBO, suggested one respondent. Knowledge of this information prior to accepting a CBO position would be very useful in the job acceptance decision-making process, stated another individual.

Another piece of advice a number of the subjects would liked to have received was the importance of understanding the institution's various auxiliary accounts and their relationship with the total university function. Athletic budgets, in particular,

warrant close study and a firm understanding by CBOs. Closely related to the relationship among budget accounts is the need to understand the institution's financial information system, and to know that it is working correctly.

Finally, acknowledging and being at peace with the fact that fiscal resources are limited was advice shared by many respondents. Cautioned one respondent: "There isn't enough money, there never was enough money, and there never will be enough money." The ability to convey, succinctly and firmly, that the institution's monies are limited, is a worthy attribute. Communicating to faculty the never-ending demand for additional fiscal resources and the cyclical nature of public university funding was acknowledged as a particularly important aptitude.

Hiring Talented Staff

A significant theme underlying the advice shared by the respondents was the importance of hiring highly competent staff. Reliance on capable staff was deemed as integral to the success of the CBO. "You are only as effective as the staff you hire. No matter how pressed you are for time, if you shorten the hiring process, you will pay dearly!" wrote one respondent. The importance of hiring talented staff is underscored in this comment shared by another subject: "The people you hire will make or break you. Always hire people with good education and good experience. Your staff means everything!" A further indication of the value of hiring competent individuals is stressed in the following statement: "The appointment of the best people as direct reports is the most important part of the job."

Knowledge of Auditing and Financial Reporting

A third key management skill deemed important was the need to understand all aspects of the institution's auditing and financial reporting procedures and requirements. Following established procedures and insuring that auditing and reporting requirements are met were considered by many respondents to be particularly important management competencies required of the CBO. "Question audit findings so that you understand the institution's weaknesses and don't accept the audit findings unless your operating managers agree with them" advised one respondent. Several respondents remarked on the importance of understanding the specific accounting, financial, and reporting requirements that public higher education institutions must abide by. The ability to contract out for auditing services, while assuring that the services rendered will be thorough, honest and adequate, was also seen a vitally important. It is interesting to note that the emphasis placed on the importance of accurate auditing and reporting was made prior to the many corporate auditing and financial reporting scandals that received much attention in 2002.

Ability to Manage Physical Plant Needs

Another key management competency identified in the analysis of the advice shared by the respondents was the ability to effectively manage the institution's physical plant needs. The aging physical plants that exist on many of the country's public university campuses are compounding the funding and planning requirements

necessary to maintain high quality facilities. Obtaining a candid and accurate review of the institution's facilities early on in one's tenure as CBO was deemed as important. Implementing a thorough and systematic process for deferred maintenance and capital construction projects, and acknowledging the long lead times involved in such projects, was emphasized. "Capital construction projects will cause more problems than personnel ever will" admonished one respondent, adding "dig in and learn the business quickly."

Knowledge of Planning

Knowledge of both short term operational and long term strategic planning was also identified as an essential management skill. Planning for projects and other one-time physical or technological improvements was identified as a key competency required of the CBO. It was advised that planning for the implementation of policy decisions involves extensive coordination and communication and must be done correctly if a given policy is to have its intended affect. Having an aptitude for strategic planning was underscored by several of the respondents. Scanning the institution's internal and external environment, conceptualizing challenges and opportunities facing the institution, forecasting trends, and developing strategic planning objectives aimed at moving the university forward were seen by many respondents as key management skills.

CHAPTER V

DISCUSSION, SUMMARY, AND CONCLUSIONS

This chapter begins with responses to the study's primary research questions. This is followed by a presentation of the outcomes of the study's main hypotheses. Following this is a discussion of the major conclusions drawn from this study. Based on the findings and conclusions stemming from the research, a model for the leadership preparedness of CBOs is presented. Integrating the prior review of leadership theory, the contemporary higher education environment, the changing nature of the CBO role, and the findings from this study, the model illustrates the evolution of the role and how key dimensions integral to the position have transformed the leadership approach required of the contemporary public university CBO. The chapter concludes with suggestions on how the findings from this research can be of use to various stakeholders, and recommendations for further research aimed at identifying additional methods for enhancing the preparedness of the nation's public university CBOs.

Responses to the Research Questions

The response to the first of the study's two primary research questions, which sought to determine if a set of variables could be identified that would serve as indicators of perceived preparedness among CBOs, can be answered in the

affirmative. An analysis of the survey data as presented in chapter four indicates that a pattern in the self-perceived leadership preparedness among U.S. public university CBOs does indeed exist.

A list of the independent variables that tested positive for a statistically significant relationship with the dependent variable of overall perceived leadership preparedness is presented in Table 74. The table is divided into two categories. The first category includes the sixteen independent variables that were identified through statistical analyses. The second category, which contains ten leadership qualities and five role specific management competencies identified as integral to leadership preparedness, were based upon the content analysis of the open-ended survey question. Altogether, these quantitatively derived variables and qualitatively derived leadership qualities and management competencies serve as indicators of self-perceived leadership preparedness among U.S. public university CBOs.

The second primary research question, which sought to determine if public university CBOs in the U.S. perceived themselves to have been adequately prepared at the time they assumed their first role in the position, can also be answered in the affirmative. Greater than nine in ten (91.9%) of the nation's public university CBOs perceived themselves as having been either adequately prepared (31.8%), well prepared (50.4%), or very well prepared (9.7%). These results reflect confidence among CBOs regarding their overall self-perceived preparedness for their roles. This is good news for all those stakeholders who are dependent on the ability of public university CBOs to lead effectively. When considering the important role higher

Table 74

Indicators of CBO Leadership Preparedness: Variables that Comprise a Pattern of Self-Perceived Leadership Preparedness

Variables Identified Based Upon Quantitative Analysis*	
Earning of a doctorate degree and field it was earned in	
Earning of a master's degree and field it was earned in**	
Earning of a bachelor's degree and field it was earned in**	
Knowledge of financial planning	
Ability to manage crises	
Ability to delegate tasks	
Knowledge of contemporary issues in higher education	
Overall administrative management capabilities	
Knowledge of the institution's policies	
Knowledge of the institution's facility maintenance processes	
Knowledge of the institution's budgeting processes	
Knowledge of the institution's board governance procedures	
Knowledge of the institution's role in the state's overall higher education system	
Variables Identified Based Upon Qualitative Analysis	
Leadership Qualities	Ability to cultivate mutually beneficial relationships
	Understanding the workload of the CBO position
	Ability to focus on the "big picture"
	Patience
	Listening skills
	Understanding the political nature of the CBO position
	Proactive approach to lifelong learning
	Decision-making skills
	Consensus-building skills
	Flexibility
Management Competencies	Ability to manage resources
	Ability to hire talented employees
	Knowledge of auditing and financial reporting
	Ability to manage physical plant needs
	Knowledge of planning

* The variables of *ethnicity* and *institution type* tested positive for a statistically significant relationship with perceived preparedness. As such, these factors should be addressed, but they should not be viewed as *indicators of leadership preparedness*.

** Analytical tests determined that the earning of a bachelor's or master's degree is *not* significantly related to overall perceived preparedness, however, the field in which the two types of degrees were earned *did test positive*, therefore necessitating the earning of the two types of degrees.

education plays in the U.S. it becomes clear that all higher education stakeholders in our society should find comfort in knowing that the CBOs of American public universities are generally confident in their ability to lead at the outset of their CBO careers.

Table 74 also serves as a reference for answering all of the study's remaining research questions. The study's other research questions were aimed at determining if a significant relationship exists between a number of independent variables and the dependent variable of public university CBOs' overall self-perceived leadership preparedness at the time they assumed their first CBO role. The variables listed in the top half of the table were identified as having a consistent influence on self-perceived CBO leadership preparedness, and therefore reflect an affirmative response to the research questions that they addressed. Conversely, variables not shown in the top half of the table did not test positive for a statistically significant relationship with the dependent variable and therefore do not appear to affect perceived leadership preparedness. Appendix A includes a summary of all research questions and their responses based on analysis of the survey data.

Verification of the Research Hypotheses

Based upon the decision criteria used in the statistical analysis of the survey data, the study's primary null hypothesis (H_0), stating that there is *not* a consistent pattern of leadership preparedness among U.S. public university CBOs, is rejected. Table 74 again serves as a comprehensive reference for this hypothesis, and all of the

study's other hypotheses. The variables listed in the top half of the table represent the factors that comprise a pattern of perceived leadership preparedness. Through statistical analysis, it was determined that these variables had a consistent influence on CBOs' perceived preparedness. The null hypotheses directly associated with the variables listed in the top half of the table, are therefore also rejected, because these variables *were* determined to affect CBOs' perceived leadership preparedness.

The null hypotheses for all variables not listed in the top half of Table 74 are therefore accepted, because the variables with which they were associated did not test positive for a statistically significant correlation with overall perceived preparedness. Appendix A provides a complete summary of acceptance and rejection of all of the study's hypotheses.

Summary of Conclusions

Many findings from this study can be used to benefit several groups that have a stake in the leadership capability of CBOs. Most notable among the beneficiaries are current CBOs, aspiring CBOs, university business officers in general, and of course, the public institutions of higher education that employ each of these groups. Implications of these research findings as they affect various stakeholder groups are discussed later in this chapter. What follows here are four over-arching conclusions drawn from the study.

The first conclusion is an acknowledgement that the majority of CBOs perceive themselves to have been prepared for their roles. Determining if this was the

case was a principal goal of this study. Nevertheless, the data does suggest some cause for concern. The eight percent of the study's participants who indicated that they were somewhat under prepared for their roles implies a need for improved management and leadership capability among a minority of CBOs. This perceived shortfall in preparedness may hinder the full potential of these CBOs and perhaps more importantly, may negatively impact the quality of administrative leadership at their respective institutions. In using the indicators of CBO leadership preparedness as a reference, and by understanding how the CBO position has evolved (as presented shortly in a model of preparedness), the nation's current and future CBOs may work to reduce a self-perception of being under prepared for their roles. Attention given to these specific indicators and a broader model of leadership preparedness may subsequently result in better managed, and better-led public institutions of higher education.

A second broad conclusion is that many factors play a part in preparing business officers to serve their institutions effectively. Leadership qualities exhibited by business officers come in a variety of forms; they can be defined in terms of behaviors, management competencies, and subject area knowledge, to name just a few. Although many of the variables measured in this assessment of CBO leadership preparedness did not test positive for a statistically significant correlation with overall perceived preparedness, it would be hard to dispute their respective overall importance in the development of CBO preparedness.

The statistically analyzed variables that did test positive for a correlation with overall CBO perceived leadership preparedness, as well as those leadership qualities and management competencies identified in the content analysis of the advice shared by survey participants, should merely complement business officer leadership development strategy; they should not be viewed as a rigidly prescribed formula for becoming an effective CBO.

The third broad conclusion of this study draws a relationship between what has been learned from the review of literature and the findings from the survey of public university CBOs. In combining what has been learned about the role responsibilities of the contemporary CBO, the call for improved leadership in higher education, and the findings from the survey data – especially with regard to the advice shared by respondents – much support can be given to many principles and concepts underlying the theories of leadership discussed previously in this study. What follows are some illustrations of concepts supported by the study that appear to support CBO leadership development.

First, among the concepts supported is that leadership is a process and an activity, rather than a latent product. CBOs are both assigned and emergent leaders: they are assigned as leaders by the power and authority granted to them by means of their role responsibilities and their place in the organizational hierarchy; but their leadership capacity remains fundamentally emergent in that it largely evolves through the application of leadership behavior over time.

Another principle given support in this study is that leadership to a great extent involves the mutual development of both leaders and followers. The data generated via the survey lends support to concepts underlying Maslow's, McGregor's, and Greenleaf's altruistic approaches to developing and demonstrating exemplary leadership. Conversely, the data disavows already outdated principles such as those espoused in Taylor's theory of scientific management. The survey results make it clear that today's CBOs understand the importance of nurturing employees and assisting them in fulfilling personal and professional goals.

Information drawn from the literature on the role responsibilities of the CBO, in combination with data from the survey, suggests that business officer leadership requires emotional intelligence. A keen sense of self-awareness, and an understanding of the factors and contingencies in play in different contexts within which leadership is demonstrated, are important. The survey participants' acknowledgement of the political environment within which the CBO operates and his or her ability to use political judgment in exercising leadership lends support to the notion that emotional intelligence is required of the CBO.

The concept that leadership is both teachable and learnable was amply supported by this study. This underscores the view that while some individuals may have some inherent predisposition to demonstrating exemplary leadership, a majority opinion holds that leadership is garnered through a process of learning and application. Much of the advice shared by CBOs via the survey suggests that they believe leadership can be and should be developed. Evidence of this viewpoint is

affirmed by the subjects' belief in the importance of possessing a conscientious approach to lifelong learning, and their advocacy for the continuous acquisition of knowledge and participation in professional development activities.

A fourth and final observation is that although all the variables identified as affecting CBO leadership preparedness in this study can be viewed as indicators representative of a pattern of preparedness that may be helpful in enhancing overall CBO effectiveness, they are merely elements that comprise a broader framework for understanding the approach that should be taken in preparing to serve in the CBO role. This framework can be conceptualized in a model of contemporary CBO leadership preparedness.

Model of Chief Business Officer Leadership Preparedness

The findings from this study have made evident the changing nature of the public university CBO role. Based upon the findings from the review of literature and the data derived from the national survey conducted for this study, it is evident that several dimensions of the role have evolved. One prevailing dimension that has transformed the character of the CBO role pertains to several aspects of knowledge: its pervasiveness, acquisition, utilization, and transmission.

The evolution of three other dimensions of the role has also taken place, which, through articulation of a conceptual model, may influence the practices of current CBOs as they strive to improve their leadership capabilities and aspiring CBOs as they work to enhance their leadership preparedness for the position. These

three other dimensions, which underlie the profound impact knowledge has had as it pertains to the role, include the CBO's perspective, approach to work, and method of dealing with change. Each of the four dimensions are interrelated with one another, and therefore influences the extent to which each one plays a role in the preparedness of CBOs. Viewed holistically, the changes that have occurred in these four dimensions suggest that the role of the CBO has evolved from serving as a *manager* to that of a *manager* and *leader*. A model illustrating the evolution of the CBO role and the four dimensions that have fundamentally transformed the CBO from manager to leader is shown in Figure 62.

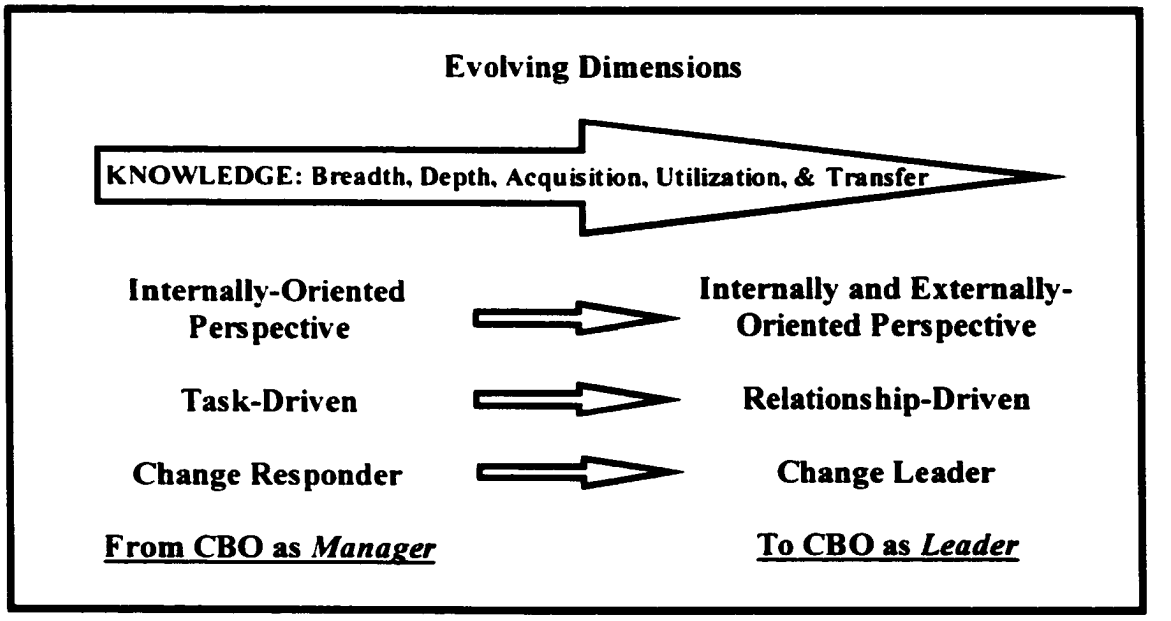

Figure 62. Evolution of the Public University CBO Role: A Contemporary Model of CBO Leadership Preparedness

The Pervasive Impact of Knowledge

An overarching dimension of the model of CBO leadership preparedness represents the most profound change in the evolution of the role. Within this dimension are four premises that pertain to the breadth and depth of knowledge now required of CBOs, and how they acquire, use, and communicate knowledge. More specifically, evidence from this study indicates that (a) the knowledge base required of contemporary CBOs has become broader and deeper, (b) that the acquisition of knowledge has become much more proactive, (c) that the utilization of knowledge is much more assertive, and (d) that the extent to which knowledge is transmitted to others has become much more far-reaching.

The role of the public university CBO has always required a command of an assortment of subjects. Knowledge of accounting and finance, combined with some technical expertise on subjects ranging from facility operations to information technology, has long been a necessity of the CBO role. In sum, the role has always required a knowledge base that was *relatively* broad and *relatively* deep in scope.

However, today's CBO now requires knowledge that is *much broader* and *much deeper*. A myriad of external environmental pressures such as increasing market competition, evolving technologies, escalating government regulation, the ever intensifying search for scarce fiscal resources, and new threats to increased institutional risk are requiring the CBO to possess a greatly expanded repertoire of knowledge. The nature of the CBO role, and the many sub-roles within the occupation, was presented in chapter two. Financial advisor, business manager,

strategic planner, facilities planner, legal advisor, and crisis manager are just a few of the functions carried out by the CBO. Each one of these functions, as with most any given occupation, requires the individual to absorb a constantly expanding base of knowledge. Given the CBO position, this absorption of vast amounts of new knowledge is particularly daunting.

Indicators of CBO leadership preparedness generated from this research support the premise that subject area expertise is integral to perceived effectiveness. The participants in this study indicated that a correlation exists between perceived preparedness and their knowledge of contemporary issues impacting higher education institutions. Data analyses also confirmed that having a command of financial planning, and possessing a strong familiarity with the institution's policies, processes, and procedures, is connected with CBOs' perception of their ability to lead.

A second premise regarding CBOs' use of knowledge has to do with the acquisition of knowledge itself. The premise here is that the acquisition of knowledge required of the contemporary CBO has quickened in pace, and has gone from being a reactive to a proactive process. The CBO position has always required the individual serving in it to acquire knowledge at a steady pace. At one time, on-the-job training and professional advancement through the ranks provided the necessary means for acquiring the knowledge base required to serve as an effectual CBO. This is no longer the case. Today, CBOs are going about the process of acquiring knowledge in a much more proactive manner. Education and professional development were found to be important predictors of perceived preparedness among

those CBOs who participated in the survey. The importance of acquiring knowledge in a steadfast manner may account for the significance the participants attributed to the earning of undergraduate and graduate degrees, and their many comments on the value of demonstrating a lifelong approach to learning.

Related to the acquisition of knowledge is its utilization. Looking back to the mid to late twentieth century as a reference point, CBOs typically acquired knowledge on an as-needed basis. Knowledge was used by CBOs in their daily routine of managing the business affairs of their institutions. Knowledge was largely acquired to the extent to which it was needed to carry out the tasks at hand. Today, on the other hand, CBOs must increase their inventory of knowledge much more assertively in order to competently engage in complex decision-making and problem solving.

Another derivative of how CBOs utilize knowledge pertains to an orientation toward the future. The application of knowledge to perform issues at hand remains strong, but in addition, CBOs must use their knowledge in ways that are much more forward looking. Their knowledge is used to forecast, anticipate, plan, and to help mold a vision for the future. In sum, CBOs now use knowledge in a manner that is much more proactive and less reactive in its application.

Finally, the knowledge CBOs possess has evolved from being something that was primarily used in the context of task completion to being a resource that is transferred to others internal and external to the organization. CBOs were once primarily accountable for applying knowledge and expertise in performing tasks that

were based heavily on specific technical and subject area expertise. Their knowledge was essentially confined to the extent it was needed to carry out specific accounting, financial, and business related assignments.

Here again, a trend exists. Today's CBOs possess a much broader set of responsibilities. As institutional leaders, it is now necessary that they not only apply their subject area knowledge to the tasks at hand, but that they share, communicate, and foster the development of new knowledge inside and outside the boundaries of their respective institutions. Modern day CBOs continue to apply their special expertise to job related tasks, but they are also called upon to serve as conveyors of knowledge to a variety of institutional stakeholders. Employees of the university, community members, institutional business partners, and policy makers are just a few of the recipients of CBOs' shared knowledge.

An Expanded Institutional Perspective

The first of three other dimensions that has evolved in the CBO role and therefore which affects current and future CBO leadership preparedness pertains to *perspective*. History has shown that the CBO has grown from having a focus that was largely internal to the institution to a perspective that is now both internal and external.

In its early years, the CBO role largely required the individuals fulfilling it to become acutely familiar with the institution's operations. A clear understanding of the policies, processes, and procedures employed at a given college or university

served as a firm foundation for fulfilling the responsibilities of the CBO role. The need for CBOs to have an in-depth familiarity with the internal workings of their respective institutions remains strong, as can be seen from the data generated from the survey conducted for this study. Several of the indicators of CBO preparedness concern the participants' knowledge of their institution's operations. Knowledge of the institutional policies, budgeting processes, and facility maintenance processes are factors that were found to have a strong correlation with self-perceived leadership preparedness. Knowledge of auditing and financial reporting, and the ability for CBOs to effectively manage the physical plant needs at their institutions – themes generated from the open-ended, advice-seeking question on the survey instrument – further demonstrate the need for CBOs to have a firm understanding of operations internal to the college or university in which they are employed.

However, there is strong evidence to suggest that a two dimensional perspective is now required of today's CBOs. The increasing rate of change, competition from multiple sources, and the need to engage in innovative partnerships with external organizations are a few examples that signal the need for CBOs to possess an external, as well as internal, perspective in which to view their institutions. Numerous findings from this study affirm the need for the CBO to possess a two dimensional perspective. Knowledge of contemporary issues in higher education and of the institution's role in the state's overall higher education system are two factors proven to affect perceived leadership preparedness, as determined in the analysis of

the survey data. This shows that contemporary CBOs recognize the need to view their institutions from a much broader and holistic point of view.

The importance of having a perspective that is external to the institution is further underscored by data gathered from the advice shared by CBOs from the survey. One of the themes generated from the data was the importance for CBOs to possess the ability to focus on the "big picture," i.e., to understand a given situation in the larger context, apply systems thinking, and to understand the broader ramifications a given decision may have.

Finally, the evolution of a CBO role that once minimally required a uni-dimensional, internally oriented institutional perspective, to one that now requires both an internal and external perspective, can be encapsulated in the much espoused leadership quality of *vision*. The ability to work with others to articulate a mutually developed vision for the organization, and to serve as the lead change agent for realizing the desired end state as described by the vision, is perhaps the most widely promoted leadership quality in contemporary literature on leadership. It is evident that in order for a CBO to express a coherent and attainable vision, he or she must possess a strong external, as well as internal, perspective.

From Task-Driven to Relationship-Driven

The third dimension that has transformed the CBO role from one of manager to one that is now largely a leadership role has to do with how the CBO approaches his or her work. The tremendously diverse responsibilities assumed by CBOs,

compounded by the same environmental factors impacting the higher education environment noted above, now require the CBO to delegate more and work *through* others, rather than completing tasks or work assignment him- or herself. This marks a significant shift in the evolution of the CBO role.

This transition in how the CBO approaches his or her job has been illuminated quite well in Napier and Sanaghan's (1999) study on the changing nature of the CBO role. The authors note that traditional CBO leadership development has focused on the value of concrete, linear, task-driven thinking and action. The authors assert – and this study affirms – the need for contemporary CBOs to concentrate more on the social, relationship, and process dimensions of leadership. The role of the CBO has evolved from a transactional, quid pro quo leadership approach to a transformational, empowerment based leadership style.

As Napier and Sanaghan point out in their study, the road to becoming a CBO is one that commonly requires a task-oriented, compliance-oriented, and highly conformist orientation. The hierarchical management structure often utilized by large colleges and universities, combined with the nature of the financial and accounting work typically performed by business officers, fuels this task-orientation approach. Task oversight remains an important skill and management responsibility of CBOs as evidenced by the survey participants' emphasis on their overall administrative management capabilities, which was a variable with a significant correlation with overall perceived leadership preparedness.

The most notable evidence of the changing dimension of the CBO role from a task-orientation to relationship-based orientation was generated by the advice shared by the survey participants. As revealed in the previous chapter, much attention was given to the importance of cultivating mutually beneficial relationships with others. Empowering and developing the full potential of staff members, communicating key issues with faculty members, and developing productive relationships with other stakeholders was a strong theme evident in the advice shared by CBOs. The subjects' attention to developing effective listening skills and consensus building skills is further indication of a job-oriented focus that is based less on technical expertise and work as a product, and more on relationship building and work as a process.

From Change Responder to Change Leader

The fourth and final dimension of the model of CBO leadership preparedness pertains to an integral responsibility of the CBO: dealing with change. Responding to change has long been a core competency in the skill set of the capable CBO. However, as this study has pointed out, merely *responding* to change has become simply inadequate in today's higher education environment. Today's CBOs have modified their orientation with respect to how they must deal with change: they must now *lead change*, as opposed to *respond to it*. Out of necessity, they now must *proactively*, rather than *reactively*, address change. Morley and Edie (2001) assert that the capacity to lead change should be one of a higher education leader's highest professional priorities and a paramount responsibility. The authors note that leading

change is not done in a vacuum nor is it carried out in an incoherent, capricious manner. To the contrary, leading a change effort must be done in a cogent and methodical manner. State Morley and Edie, "Surviving, growing, and thriving – professionally and institutionally – in today's rapidly changing, always challenging, and frequently threatening world depends heavily on developing capacity to produce change rationally and systematically" (p. 56).

The sources driving the transformation in how CBOs address change are largely the same sets of environmental factors accountable for the evolution in the three other dimensions of CBO leadership preparedness discussed in this model. Shifting student demographics, changing market conditions, and incredible advances in information technology are just a few of the influences driving change.

The notion that CBOs' orientation toward dealing with change has evolved from a reactive to a proactive approach is supported by the survey research from this study. Data indicate that the population expressed the importance of possessing awareness of contemporary issues in higher education and of the institution's role in the state's overall higher education system. This external perspective signifies their desire to acquire a knowledge base that better prepares them to anticipate and proactively address changes that may impact the university. Possessing the ability to act as a change leader was particularly emphasized through the comments shared by the subjects. A theme underlying the many comments made on the importance for CBOs to obtain a macro perspective of their institutions, and higher education in

general, was that in so doing, they would be better equipped to proactively address change.

In summary, based on a myriad of environmental factors impacting higher education, which has resulted in a significant transformation of the CBO role, four dimensions have evolved which can be structured conceptually into a model of contemporary CBO leadership preparedness. Current and aspiring CBOs must: (1) obtain a broader and deeper occupationally relevant knowledge base, strive to acquire knowledge more proactively, utilize it more assertively, and share and communicate it more vigorously; (2) possess an inward-looking as well as an outward-looking perspective of their institutions; (3) focus more on leading through the work of others rather than managing through a task-oriented approach and; (4) must become equipped to *lead* change, rather than merely respond to it.

Implications of the Research

A number of suggestions can be drawn from this research that can be used to benefit several groups whom have a vested interest in the ability of the nation's public university CBOs to demonstrate effective leadership. The value of this research is largely proportional to the extent it is applied by different stakeholders in their effort to improve the leadership preparedness of CBOs. Although not entirely exhaustive, what follows is a synopsis of ways in which different stakeholders can use these research findings.

Current and Aspiring Business Officers

First, it should be noted that both public and private sector higher education CBOs can use many of the findings from this research. It was acknowledged earlier that the role responsibilities between public university CBOs and their private, for-profit sector counterparts are dissimilar in several respects. A primary difference between the two is the funding sources that support their institutions. Whereas public colleges and universities rely heavily on state appropriations, student tuition, and income from auxiliary operations; private, for-profit institutions of higher education are much more reliant on tuition and private fundraising due to the absence of state funding.

In reviewing both the quantitatively derived and qualitatively derived indicators of leadership preparedness presented earlier, it is apparent that knowledge of institutional financial management and funding do correlate with overall perceived preparedness. However, issues specifically pertaining to state funding, or the interaction between CBOs and representatives of state funding sources, were not identified as being significantly indicative of leadership preparedness. In fact, the great majority of both the quantitatively and qualitatively derived indicators of CBO preparedness are factors dealt with extensively by both public and private university CBOs. It is therefore suggested that the great majority of the findings from this research can be used by both public and private sector college and university CBOs and their business officer colleagues.

It will behoove current and aspiring CBOs to pay particular attention to the indicators of CBO leadership preparedness presented earlier in this chapter. Consideration should be made of the different areas of expertise that were identified as having a significant relationship with overall perceived preparedness. The study's findings affirm that many of the traditional subjects dealt with by the CBO remain strong. Knowledge of accounting, financial planning, auditing, financial reporting, and management of the institution's fiscal, physical, and human resources remain integral to the role.

It can be advocated that current and aspiring CBOs should strive to become very familiar with the institutions at which they are currently employed, or at which they desire to be employed. Having knowledge of an institution's assorted policies, processes, and procedures was proven in this research to have a relationship with perceived preparedness for the CBO role. On the other hand, having a broader understanding of the institution's role in the community and in the state, as well as the environmental factors impacting the institution, were also notable indicators of perceived leadership preparedness and therefore should be taken into account.

Business officers should note the correlation between the earning of post secondary education degrees, and in particular, the discipline in which they were earned. The earning of bachelor's and master's degrees in the fields of business and management, and doctoral degrees in the field of higher education administration were discovered to correlate with CBOs' self-perceived leadership capabilities.

Business officers should consider paying particular attention to the themes drawn from the advice shared by the study's participants. Listening and consensus building skills, decision-making skills, and the ability to demonstrate patience and flexibility were deemed important. Possessing a positive attitude toward continued professional development and having a good understanding of both the political nature and workload inherent in the CBO position were considered by many of the participants to be key to success.

College and university business officers can improve their leadership capabilities by improving their knowledge, skills, and abilities that are tangential to the indicators of leadership preparedness identified in this research. Beyond these specific indicators however, business officers should strive to understand how the CBO position has evolved and the new dimensions within which the CBO must now operate in order to realize his or her full leadership potential. By comprehending the evolution that has occurred in the four dimensions that comprise the framework for the model of CBO leadership preparedness presented earlier, business officers can engage in activities and undertake an overall approach to personal and professional development that will facilitate their leadership potential and longer-range capability as highly competent CBOs. These four dimensions include (1) possessing an understanding of the new premises that underlie the impact knowledge has had on the role, (2) comprehending the importance of having an internally and externally-oriented perspective of the institution, (3) cultivating a relationship-driven, rather than a task-orientation approach to work, and (4) leading change efforts at the institution,

rather than merely responding to change. A significant implication for this new model of CBO leadership preparedness is that contemporary business officers need to possess a broader set of leadership qualities and management competencies, which therefore may draw candidates into the CBO position from a broader variety of occupational fields.

Some additional findings derived from this research present additional implications for college and university business officers, especially those who seek to advance into senior business officer positions. One finding pertains to the fact that a greater preponderance of CBOs participating in the study who were first employed at master's and doctorate granting (level I or II) institutions had a stronger likelihood of feeling prepared in their first public university CBO position. One explanation for this may be that these larger institutions might have served as the training grounds for business officers who eventually advanced through the ranks to the CBO position and that these same institutions provided more opportunities and resources for business officer management and leadership development. Determining if this assertion is accurate and to identify other factors at play in the discrepancy in the perceived preparedness of business officers first employed at larger institutions is a topic for further study. Nonetheless, business officers employed at baccalaureate-granting institutions should acknowledge this disparity and consider ways in which to expand the professional development opportunities available to them.

An additional finding pertaining to the representation of women and minorities in the CBO position presents implications for aspiring women and ethnic

minority business officers. Although the demographic variable of ethnicity tested positive for a statistically significant correlation with overall perceived preparedness among the study's subjects, the number of minorities included in the sample was too low to attribute minority ethnicity as a factor in a broader pattern of variables indicative of CBO preparedness. Nevertheless, descriptive data from this research indicate that minorities represented less than 10% of the public university CBOs participating in the study. Of equal concern is the fact that less that 15% of the respondents were females. Identifying barriers that may impede the efforts of women and minorities to advance to the top business administration positions at public institutions of higher education is a topic worthy of further research. In the meantime, like their business officer colleagues at baccalaureate-granting institutions, female and minority business officers aspiring to advance professionally will benefit by being extra proactive in identifying opportunities for personal and professional development and by paying particular attention to the indicators of leadership preparedness identified from this research.

Higher Education Institutions

From an institutional perspective, much can be gained from utilizing this research to improve the leadership potential and capacity of business officers. Two implications for colleges and universities are especially prominent.

First, institutions should facilitate business officers' acquisition of knowledge. Several of the variables identified in this study as influencing perceived CBO

leadership preparedness pertain to having adequate knowledge in business-related subject areas such as financial planning, and sufficient knowledge of institutionally-focused matters such as the broader planning, budgeting, and governance policies employed by the university. As the model of CBO leadership preparedness illustrates, business officers must now possess a broader and deeper knowledge base, which in turn necessitates the proactive acquisition, utilization, and transfer of knowledge. Providing ample opportunity for all business officers to expand their repertoire of occupationally relevant knowledge and to become intimately acquainted with the internal operations of the university and its broader external role is good advice for institutions in their effort to foster improved business officer leadership.

Second, based on both the lessons learned from the review of literature conducted for this study and the findings from the survey data, it is evident that leadership is fostered in an environment that embraces open communication and the empowerment of all employees. It is appropriate to restate here Craig Bazzani's observation as noted earlier in this study. The 2001-2002 chair of the board of NACUBO proclaimed that leadership is characterized at both the individual and organizational level. From an organizational perspective, asserts Bazzani, leadership is facilitated when the institutional culture effectively utilizes shared governance, shared goals, communication, and cooperation (Romano, 2001).

By vigorously instilling the principles that foster an empowered workforce, institutions will facilitate business officers', and in effect, all employees' ability to accomplish work-related objectives in a relationship-driven rather than merely a task-

driven manner. Those institutions that indoctrinate principles that support leadership development as a process and as a teachable and learnable concept may make great strides in creating a culture that embraces an overall approach to work that embodies the four evolving dimensions of the model of CBO leadership preparedness. It is advised that an institution's highest-ranking executives should place an emphasis on cross-divisional and cross-occupational (i.e., business officers and faculty) collaboration in order to foster teamwork, improve communications, and to more successfully respond to change.

As noted above, the survey data revealed that CBOs from smaller, baccalaureate-granting public universities were more apt to have a self-perception of being under prepared in their first role in the position. This should compel smaller institutions to consider working with business officers proactively to craft professional development strategies that might help to better prepare them for more advanced roles. Providing business officers with increased training and professional networking opportunities, and exposure to the operations at larger, more complex institutions may help to bolster the leadership preparedness of CBOs at smaller universities.

Finally, from an institutional perspective, it should be reiterated that it is incumbent upon the most senior college and university leaders to identify barriers that may hinder the efforts put forth by women and minorities to achieve their full business officer leadership potential. Providing training and networking opportunities to these two groups, with particular attention given to the indicators of leadership

preparedness as identified in this research, may prepare more women and minority business officers to assume senior leadership roles.

Professional Associations

The findings from this research help to confirm that the efforts put forth by associations serving the professional development needs of business officers are adding significant value in preparing them for their leadership roles. NACUBO, the premier professional association for college and university business officers, has an exemplary track record of providing professional development programming and preparing publications aimed at enhancing business officer competency. NACUBO and other associations and societies that seek to contribute to the managerial and leadership enhancement of business officers may refer to the indicators of CBO leadership preparedness as a guide for identifying pertinent training topics.

The data indicate that a need exists to provide training on a number of traditional topics pertaining to business and finance. However, NACUBO and other relevant professional associations should also give attention to the leadership qualities and management competencies listed in Table 74. By offering learning opportunities on topics that reflect subject area knowledge, skills, and abilities this study's participants would have liked to have received when they assumed their first CBO roles, associations can work proactively to better prepare current and aspiring CBOs.

Academic Program Curriculum Planners

Those charged with academic programming can take comfort in knowing that the nation's public university CBOs recognize the value of their undergraduate and graduate education. Analysis of the data determined that baccalaureate and master's degrees in business and management related fields and doctoral degrees in higher education administration were associated with an enhanced sense of perceived preparedness.

Using the indicators of CBO leadership preparedness as a reference, academic program planners can enhance curriculum that is aimed at preparing business officers for their professional roles. Programs that largely cater to business officers should continue providing subject specific training on topics such as financial planning. However, this research also underscores the importance of providing a context for learning aimed at facilitating a broader understanding of the role of public universities in their respective communities and society in general. In addition, these programs should help students better comprehend the broader issues affecting the higher education environment.

Higher education curriculum planners can infuse learning opportunities aimed at enhancing those leadership qualities and management competencies identified as important by the subjects participating in this study. While a business officer oriented curriculum should continue providing training relevant to pertinent job functions, it would be beneficial to provide skill-building opportunities in areas such as consensus-building and decision-making. Finally, advice shared by this study's

survey participants indicates that much can be learned from the advice shared by currently employed CBOs. Graduate level higher education administration curriculum should include required readings and guest speakers that will help convey some of the nuances of the CBO position. Understanding the political nature of the CBO role and the workload involved with filling the position are important items that should be discussed with aspirants of the CBO position and students enrolled in higher education business administration programs.

Search Firms

The fifth and final primary beneficiary of this research consists of organizations that serve the executive recruitment needs of higher education institutions and conversely, who serve individuals seeking employment in senior business affairs roles in the university setting. It is obvious that executive search firms specializing in higher education would prefer to identify and recruit candidates who at least perceive themselves to be prepared for a given role. These firms may therefore use the indicators of CBO leadership preparedness in their efforts to assess the qualifications of prospective CBO candidates. The findings stemming from this research may assist search firms by articulating several factors indicative of success in the CBO role, which will in turn aid them in better matching the needs of hiring institutions with the skill sets possessed by CBO candidates.

Recommendation for Further Research

It can be ascertained that this study has shed some important insights on the ability of the nation's public university CBOs to effectively lead in their roles, and specifically, factors that are integral to success in the position. It is hoped that the implications of this research as described above will be utilized by current and aspiring CBOs and by the various stakeholder groups that comprise the CBO's sphere of influence. Inherent in conducting social science research is the identification of additional opportunities for research. Hence, some suggestions for further research on CBO leadership preparedness are provided here.

First, in acknowledging that the research findings and conclusions generated from the survey data were based on the self-evaluative abilities of CBOs themselves, it can be maintained that an assessment of CBOs' leadership abilities from the perspective of someone other than the CBOs themselves may garner different results. Therefore, conducting an assessment of CBO leadership competency using an alternative population's perceptions as a reference point may provide additional findings that can be used to enhance the effectiveness of CBOs. Examples of this include having university presidents, vice presidents, and staff members who report to the CBO, assess their leadership abilities.

The focus of this study has been on the leadership preparedness of U.S. public university CBOs. Much can be learned from an assessment of their counterparts who work at private, for-profit universities. Still further, an examination of the leadership preparedness of CBOs at community colleges in the U.S. and public and private post-

secondary institutions in Canada and Europe would add to the existing body of knowledge on this important topic.

As noted earlier in this chapter, a disproportionately low number of women and minorities occupy the CBO position within America's public universities. It is therefore advocated that additional research be conducted in order to identify opportunities for facilitating the advancement of women and minorities into the CBO role and other senior business affairs positions within the nation's institutions of higher education.

Another recommendation for further research is to use a standardized leadership assessment instrument repeatedly to measure the perceptions of CBOs' leadership preparedness. In doing so, a longitudinal perspective of many aspects pertaining to leadership and the CBO position would be acquired.

A final suggestion for additional study on public university CBO leadership preparedness would be to compare the self-perceptions of CBOs regarding their leadership abilities, and/or other's perceptions of their leadership abilities, against several measures pertaining to the fiscal integrity of the institutions in which they are employed. By quantifying fiscal and other key indicators of institutional success that are impacted by the role of the CBO, and then comparing these measures to CBOs' leadership abilities, further insights may be realized that could provide a more accurate appraisal of the factors that are key to effective leadership in the role.

Appendix A

Summary of Corresponding Research Questions, Hypotheses, Variables Measured, and Resultant Outcomes

Summary of Corresponding Research Questions, Hypotheses, Variables Measured, Surveys Questions and Resultant Outcomes

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Is there a pattern of consistency in the level of perceived leadership preparedness among U.S. public university chief business officers? ***Yes***	A pattern of consistency in the level of perceived leadership preparedness among U.S. public university chief business officers does not exist. ***Null Hypothesis Rejected***	All variables listed below	2-29
Does a significant relationship exist between the time public university CBOs had served in their roles and their current perception of how well they were prepared to lead in their first public university CBO role? ***No***	The length of time U.S. public university CBOs have served in the role does not affect their current perception of how well they were prepared to lead when assuming their first role in this position. ***Null Hypothesis Accepted***	Total number of years subjects were employed as public university CBOs	2
Does a significant relationship exist between the number of public university CBO positions held affect CBOs' current perception of how well overall they were prepared to lead in their first public university CBO role? ***No***	The number of public university CBO positions held by individuals in this position does not affect their current perception of how well they were prepared to lead when assuming their first position in the role. ***Null Hypothesis Accepted***	Total number of public university CBO positions subjects had held	3

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Does a significant relationship exist between the prior work experiences in public university administration positions public university CBOs have had and their current perception of how well they were prepared to lead in their first public university CBO roles? ***No***	Work experience in public university administration positions prior to the first public university CBO appointment does not affect public university CBOs' perception of their preparedness at the time they started their first position in the role. ***Null Hypothesis Accepted***	Employment in public university administration positions prior to subjects' first role as public university CBOs, and; Total number of years in public university administrative positions prior to subjects' first public university CBO appointment	4, 5
Does a significant relationship exist between the prior work experiences in community college administration positions public university CBOs have had and their current perception of how well they were prepared to lead in their first public university CBO roles? ***No***	Work experience in community college administration positions prior to the first appointment does not affect public university CBOs' perception of their preparedness at the time they started their first position in this role. ***Null Hypothesis Accepted***	Employment in community college administration positions prior to subjects' first role as public university CBOs, and; Total number of years in community college administrative positions prior to subjects' first public university CBO appointment	6, 7

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Does a significant relationship exist between the prior work experiences in private, for-profit sector administration positions public university CBOs have had and their current perception of how well they were prepared to lead in their first public university CBO roles? ***No***	Work experience in private, for-profit sector administration positions prior to the first CBO appointment does not affect public university CBOs' perception of their preparedness at the time they started their first position in the role. ***Null Hypothesis Accepted***	Employment in private, for-profit administration positions prior to subjects' first role as public university CBOs, and; Total number of years in private sector administrative positions prior to subjects' first public university CBO appointment	8, 9
Does a relationship exist between public university CBOs' college level teaching experience and their current perception of how well they were prepared to lead in their first public university CBO roles? ***No***	A relationship between public university CBOs' college level teaching experience and their current perception of how well they were prepared to lead in their first public university CBO roles does not exist. ***Null Hypothesis Accepted***	College level teaching experience prior to subjects' first public university CBO appointment	10

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Does the acquisition of a bachelor's, master's, or doctorate degree significantly affect public university CBOs' current perception of their preparedness at the time they assumed their first public university CBO position? ***Yes***	The acquisition of bachelor's, master's, or doctorate degrees does not significantly affect public university CBOs' current perception of their preparedness at the time they assumed their first position in the role. ***Null Hypothesis rejected***	Subjects' acquisition of bachelor's, master's, or doctorate degrees	11, 13, 15
Does the field in which a bachelor's, master's, or doctorate degree was earned in significantly affect public university CBOs' current perception of their preparedness at the time they assumed their first public university CBO position? ***Yes***	The field in which a bachelor's, master's, or doctorate degree was earned in does not significantly affect public university CBOs' current perception of their preparedness at the time they assumed their first position in the role. ***Null Hypothesis rejected***	Field in which subjects had earned a bachelor's, master's, or doctorate degree	12, 14, 16

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Do the acquisition of the Certified Public Accountant (CPA) or Certified Financial Analyst (CFA) certifications significantly affect CBOs' current perception of their preparedness at the time they assumed their first public university CBO position? ***No***	The acquisition of the Certified Public Accountant (CPA) or Certified Financial Analyst (CFA) certifications do not significantly affect public university CBOs' current perception of their preparedness at the time they assumed their position in the role. ***Null Hypothesis Accepted***	Subjects' acquisition of the Certified Public Accountant (CPA) or Certified Financial Analyst (CFA) certification	17, 18

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Is their a significant relationship between public university CBOs' perception of how well they were prepared to lead in their first public university CBO roles and their perceived preparedness in nineteen CBO management competency areas? ***Yes – items 19a, 19m, 19p, and 19s***	A significant relationship does not exist between public university CBOs' overall perception of how well they were prepared to lead in their first public university CBO roles and their perceived preparedness in nineteen CBO management competency areas. ***Null Hypothesis Rejected for Items 19a, 19m, 19p, and 19s***	Self-perceived:	
		Knowledge of financial planning	19a
		Knowledge of financial reporting	19b
		Knowledge of information technology issues	19c
		Knowledge of management information systems	19d
		Knowledge of facilities management	19e
		Knowledge of capital (construction) planning	19f
		Knowledge of campus master planning	19g
		Knowledge of human resource law	19h
		Ability to hire staff	19i
		Knowledge of private contract management	19j
		Knowledge of risk management practices	19k
		Knowledge of public safety issues	19l
		Ability to manage crises	19m
		Ability to solve problems	19n
		Ability to make decisions on critical issues	19o
		Ability to effectively delegate tasks	19p
		Ability to facilitate meetings effectively	19q
		Ability to manage change and foster innovation	19r
		Knowledge of contemporary issues in higher education	19s

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Is their a significant relationship between public university CBOs' perception of how well they were prepared to lead in their first public university CBO roles and their perceived overall administrative management capabilities? ***Yes***	A significant relationship does not exist between public university CBOs' overall perception of how well they were prepared at the time they started their first position in the role and their overall perception of their administrative management capabilities. ***Null Hypothesis Rejected***	Self-perceived overall administrative management capabilities	19t

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Is their a significant relationship between public university CBOs' perception of how well they were prepared to lead in their first public university CBO roles and nine relationship management competencies? ***No***	A significant relationship does not exist between public university CBOs' overall perception of how well they were prepared to lead in their first public university CBO roles and their perceived preparedness in nine CBO relationship management competencies ***Null Hypothesis Accepted***	Self-perceived:	
		Ability to supervise staff	20a
		Ability to resolve interpersonal conflicts	20b
		Ability to provide discipline to staff members	20c
		Ability to make effective public presentations	20d
		Ability to work effectively with the institution's president	20e
		Ability to work effectively with members of the president's cabinet	20f
		Ability to work effectively with members of the state budget office	20g
		Ability to work effectively with members of the state legislature	20h
		Ability to work effectively with the institution's board of trustees	20i

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Is their a significant relationship between public university CBOs' perception of how well they were prepared to lead in their first public university CBO roles and their perceived overall human relations skills? ***No***	A significant relationship does not exist between public university CBOs' overall perception of how well they were prepared at the time they started their first position in the role and their overall perception of their human relations skills. ***Null Hypothesis Accepted***	Self-perceived overall human relations skills	20j

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Is their a significant relationship between public university CBOs' perception of how well they were prepared to lead in their first public university CBO roles and ten variables pertaining to their familiarity with the institutions that first employed them in this role? ***Yes – items 21a, 21c, 21e, 21i, and 21j***	A significant relationship does not exist between public university CBOs' overall perception of how well they were prepared to lead in their first public university CBO roles and their familiarity with the institution in ten specific areas. ***Null Hypothesis Rejected for Items 21a, 21c, 21e, 21i, and 21j***	Self-perceived:	
		Knowledge of the institution's policies	21a
		Knowledge of the institution's labor contract processes	21b
		Knowledge of the institution's facility maintenance processes	21c
		Knowledge of the institution's planning processes	21d
		Knowledge of the institution's budgeting processes	21e
		Knowledge of the institution's capital outlay process	21f
		Knowledge of the state's public university funding processes	21g
		Knowledge of the institutional board governance policies	21h
		Knowledge of the institutional board governance procedures	21i
		Understanding of the institution's role in the state's overall higher education system	21j

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Is their a significant relationship between public university CBOs' perception of how well they were prepared to lead in their first public university CBO roles and their overall familiarity with the institutions that first employed them in this role? ***No***	A significant relationship does not exist between public university CBOs' overall perception of how well they were prepared to lead in their first public university CBO roles and their overall familiarity with the institution that employed them in this role. ***Null Hypothesis Accepted***	Self-perceived overall familiarity with the institution	21k
Do U.S. public university chief business officers perceive themselves to have been adequately prepared at the time they assumed their first public university CBO position? ***Yes***	U.S. public university chief business officers perceived themselves to have been under prepared at the time they assumed their first position in the role. ***Null Hypothesis Rejected***	Overall self-perceived level of preparedness at the time U.S. public university CBOs started their first position in this role	22
Does the type of institution public university CBOs were first employed at in the position affect his/her overall perceived level of preparedness at the time they assumed this role? ***Yes***	The type of institution public university CBOs were first employed at in the position does not affect their perceived level of overall preparedness at the time they assumed the role. ***Null Hypothesis Rejected***	Type of institution CBOs were first employed at as public university CBOs (doctorate, master's, or baccalaureate-granting according to the Carnegie Classification System)	23

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Does a significant relationship exist between CBOs' participation in professional development programs prior to their first appointment to a public university CBO position and their overall perceived level of leadership preparedness? ***No***	A significant relationship does not exist between public university CBOs' participation in professional development programs prior to their first position in the role and their current overall perception of how well they were prepared at the time. ***Null Hypothesis Accepted***	Participation in professional development programming prior to a CBO's first appointment to a public university CBO position.	24
Does a significant relationship exist between CBOs' participation in professional development programs since their first appointment to a public university CBO position and their overall perceived level of leadership preparedness? ***No***	A significant relationship does not exist between public university CBOs' participation in professional development programs since assuming their first position in the role and their current overall perception of how well they were prepared at that time. ***Null Hypothesis Accepted***	Participation in professional development programming after a CBO's first appointment to a public university CBO position.	25

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Does a significant relationship exist between CBOs' current age and their current perception of how well they were prepared to lead in their first public university CBO position? ***No***	A significant relationship does not exist between CBOs' current age and their current perception of how well they were prepared to lead in their first public university CBO position. ***Null Hypothesis Accepted***	Subjects' current age	26
Does a significant relationship exist between CBOs' age at the time they assumed their first public university CBO role and their current perception of how well they were prepared to lead in their first public university CBO position? ***No***	A significant relationship does not exist between public university CBOs' age at which time they received their first appointment to the role and their current perception of how well they were prepared to lead in the position. ***Null Hypothesis Accepted***	Subjects' age at the time they first became employed as public university CBOs	27
Is there a significant relationship between public university CBOs' ethnicity and their current perception of how well they were prepared to lead in their first public university CBO role? ***Yes***	Public university CBOs' ethnicity does not affect their current perception of how well they were prepared to lead in their first public university CBO position. ***Null Hypothesis Rejected***	Subjects' ethnicity	28

Appendix A—Continued

Research Question	Null Hypothesis (H_0)	Variable(s)	Survey Questionnaire Item Number
Is there a significant relationship between the gender of a public university CBO and the individual's current perception of how well overall he/she was prepared to lead in his/her first public university CBO role? ***No***	Public university CBOs' gender does not affect their current perception of how well they were prepared to lead in their first public university CBO position. ***Null Hypothesis Rejected***	Subjects' gender	29
Are there any common themes among the feedback received by current public university CBOs regarding advice they would have liked to have received when they started their first position as public university CBOs? ***Yes***	Common themes do not exist among the feedback received by current public university CBOs regarding advice they would have liked to have received when they started their first position as public university CBOs. ***Null Hypothesis Rejected***	Open-ended question soliciting advice the subjects would have like to have received at the time they started their first public university CBO position	30

Appendix B

Operational Definitions

Operational Definitions

Provided below is a list of terms used in this study. These operational definitions reflect concepts underlying the study's hypotheses and the many variables that were measured and underwent hypotheses testing.

Campus master planning: Planning that involves the development of a long-range strategy for addressing the enhancement and expansion of facilities and large infrastructure systems, such as roads and mechanical systems, on a university campus. Assessing current physical plant needs, forecasting future needs, and developing and scheduling an implementation and funding strategy are integral to the campus master planning process. CBOs often hire the consultative services of architects to aid in the development of campus master plans.

Capital (construction) planning: The major steps required in the preparation of plans for the construction of new buildings or the major remodeling of existing facilities. Some of the common components that are essential to this type of planning include the integration of the construction project into the campus master plan, preparing bidding documents for architectural/design and general contracting services, debt financing, and inclusion of stakeholders in the planning processing.

Consistent pattern: This term, used in the study's primary hypothesis, describes the uniform relationship that exists between selected independent variables and the study's dependent variable of overall perceived preparedness.

Contemporary issues in higher education: Topics representing a variety of subjects that impact the present day broader higher education arena.

Facilities management: A specific type of management that involves the coordination of the physical work place with the people and work of a given organization. Facilities management integrates the principles of business administration, architecture, and the behavioral and engineering sciences. Analyzing current facility use, planning for future buildings, and adhering to Occupational Health and Safety Administration (OSHA) standards are key management tasks. The diversity of university facilities are tremendous, and serve academic, administrative, housing, dining, and recreational needs.

Financial planning: Planning that entails the comprehensive preparation of a given institution's financial plan. Specific tasks include projecting general fund income as received in the form of state appropriations and tuition revenues, income from auxiliary enterprises such as bookstore operations and athletics, and income from foundation endowments and other investments. Financial planning requires close working relationships with other administrators in developing balanced annual operating budgets. It also requires knowledge of fiscal resource reallocation strategies when overall income to the institution has declined and/or if expenditures have exceeded expectations.

Financial reporting: A form of reporting that requires prescribed steps be taken in the collection, recording, preparation, and public presentation of an institution's assets, including all financial resources and physical property. Such reporting must abide by Financial Accounting Standards Board (FASB) principles. External auditors are typically hired to work with universities to examine and appraise the process by which financial reporting is taking place and to provide recommendations regarding discrepancies or unsatisfactory financial conditions.

Human resource law: Laws that impact issues of employee recruitment, retention, supervision, management, compensation, discipline, bargaining rights, contractual obligations of bargaining groups, and affirmative action.

Information technology: The identification and implementation of application solutions that involve computer hardware, peripheral equipment, software, networking, and data security designed to facilitate the delivery of administrative services and contribute to the advancement of information sharing and the expansion of knowledge.

Institutional board governance policies: The guiding principles a university must abide by as set forth by the institution's governing body. Examples of statements that govern university operations may include policies pertaining to student admissions, hiring of personnel, contracting, and ensuring equal employment opportunity.

Institutional board governance procedures: Specific steps that must be taken concerning issues or activities that involve board governance. Examples include the required steps that must be taken in order to facilitate board action on a given item, and the protocol for communicating with the governing board.

Institutional budgeting processes: The process or processes by which university administrators identify, plan for, and allocate, fiscal, physical, and human resources in the creation of an annual budget.

Institutional capital outlay process: The process by which planning occurs in the identification of campus facility needs and the procurement of fiscal resources and in-kind gifts, through either government, institutional, or private sector entities, to fund the construction or remodeling of a facility and sustain its long-term operational and deferred maintenance needs.

Institutional facility maintenance processes: The methods used in the management of facility preservation and repair. Facility auditing, minor capital outlay projects, and the utilization of plumbing, heating, air-conditioning, painting, electrical, and custodial services are among the components associated with facility maintenance.

Institutional familiarity: The extent to which a public university CBO is familiar with specific policies and processes unique to the institution he or she is employed at, as well as the institution's broader role in the state's higher education system.

Institutional labor contract processes: The processes utilized by an institution to negotiate collective bargaining agreements with various classified employment groups.

Institutional planning processes: The processes used to create both short-term operational plans and long-term strategic plans.

Institutional policies: The broader body of policy that encompasses an institution's board policies and includes policy set forth and enforced by a university's administration. Rules and procedures on administrative transactions and protocol are encompassed in the broader context of institutional policies.

Knowledge and ability: The term *knowledge*, as used in this study, specifically refers to the extent the survey respondents were familiar with, aware of, and understood a given topic relevant to the public university CBO role, at the time they first assumed the role, and according to their own perception. Knowledge consists of specific information acquired and retained through both study and experience. In comparison, the term *ability* connotes the quality of being able to do something that may extend beyond the mental or intellectual domain. The possession of specific skills, competencies, or aptitudes in carrying out a task relevant to the CBO position conveys an ability to demonstrate effective leadership in that particular area.

Leadership: Leadership is defined using Gardner's (1991) definition of the term and has been augmented by the researcher to reflect the role-specific nature in which

leadership is demonstrated. Leadership, for the purpose of this study, has been defined as the process of persuasion or example by which an individual induces a group to pursue objectives held by the leader or shared by the leader and his or her followers, and the effective demonstration and persuasive use of knowledge, skills, and abilities essential to a given occupation.

Leadership preparedness: This term represents the extent to which the U.S. public university chief business officers participating in this study perceived themselves to have been prepared to lead at the time they assumed their first position as public university CBOs. Due to the indices used on the survey instrument to measure the subjects' self-perceived preparedness on a variety of variables, the term is used in this study to equate the subjects' preparedness using the following five categories: very under prepared, somewhat under prepared, adequately prepared, well prepared, and very well prepared.

Management information systems: Often referred to by the acronym "MIS," a term that refers to the computer systems and applications utilized by an institution to supply information that supports business operations. A university's management information system is often a centrally coordinated system of computer application expertise and management. Management information systems are used in a number of contexts that include the management of databases, projects, and decision support systems.

Private contract management: The identification and selection of vendors external to an institution hired on a contractual basis to deliver a product or service, on either a one-time or extended period basis. Management of private contracts requires the utilization of requests for proposals (RFPs), used to solicit bids for a given project, service, or application. The awarding of contracts and the subsequent administration of the business agreements require the rigid application of institutional policies aimed at ensuring that the agreement is being delivered upon and that all conflicts of interest between the individuals at the institution and a given vender are avoided.

Public university chief business officer: Individuals typically employed at the vice presidential level at a four-year public higher education institution who assume primary oversight of the university's administrative, business, and financial operations. Common job titles associated with this role include vice president for administration and finance, vice president for business affairs, and chief financial officer.

Risk management: The process of analyzing exposure to risk and determining how to best handle such exposure. The avoidance of risk, risk assessment, risk control, and the financing of risks are integral to the overall management of threats, real or perceived, that may impact a university.

Relationship management: The ability of a public university CBO to demonstrate competence in creating and maintaining strong, positive, and mutually beneficial

interpersonal and group relationships among a variety of individual stakeholders and institutional stakeholder groups.

State public university funding process: The process by which a given state appropriates operating funds to its respective public universities. The appropriations process varies from state to state and depends upon the extent to which a given state's higher education system is centralized or autonomous in its coordination.

Appendix C

Protocol Clearance From the Human Subjects Institutional Review Board

WESTERN MICHIGAN UNIVERSITY
Human Subjects Institutional Review Board

Centennial
1903-2003 Celebration

Date: February 22, 2002

To: Barbara Liggett, Principal Investigator
Daniel Hurley, Student Investigator for dissertation

From: Mary Lagerwey, Chair Mary Lagerwey

Re: HSIRB Project Number 02-02-23

This letter will serve as confirmation that your research project entitled "A Study of the Leadership Preparedness of Public University Chief Business Officers" has been **approved** under the **exempt** category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may **only** conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: February 22, 2003

Walwood Hall, Kalamazoo MI 49008-5456
PHONE: (616) 387-8293 FAX: (616) 387-8276

Appendix D

Survey Questionnaire

NATIONAL STUDY

On the Leadership Preparedness of Public University Chief Business Officers

Respondent: Your participation in this national study will benefit aspiring and current business officers, institutions of higher education, associations and societies that work with business officers, as well as higher education administration program curriculum planners. ***Reminder: All information disclosed on this survey will remain confidential.***

Survey Results: A summary of the findings and conclusions drawn from this national study will be published in a future edition of *Business Officer magazine*, published by the National Association of College and University Business Officers.

Upon Completion: Please fold this survey and mail it in the enclosed self-addressed, stamped return envelope. If the envelope accompanying this survey has become separated, please mail this survey to: Business Officer Leadership Study, 1349 Cramer Circle, Bishop Hall 421, Big Rapids, MI 49307

Employment History

1.	Current position title:		
2.	Total number of years employed as a public university chief business officer.....		
3.	Total number of public university chief business officer positions you have held.....		
4.	Were you employed in public university administration positions prior to assuming your first role as a public university chief business officer? (*please circle*) **If *yes*, proceed to next question** **If *no*, proceed to question #6**	**Yes**	**No**
5.	Total number of years in public university administration positions prior to assuming your first role as a public university chief business officer.....		
6.	Were you employed in community college administration positions prior to your employment at a four-year university? **If *yes*, proceed to next question** **If *no*, proceed to question #8**	**Yes**	**No**
7.	Total number of years in community college administration positions prior to assuming your employment at a four-year university.....		
8.	Were you employed in administrative-management related positions in the private for-profit sector prior to becoming a public university chief business officer? **If *yes*, proceed to next question** **If *no*, proceed to question #10**	**Yes**	**No**
9.	Total number of years in private-sector administrative-management related positions prior to assuming your first role as a public university chief business officer.....		
10.	Did you teach a college level course prior to becoming a public university chief business officer?	**Yes**	**No**

Please Continue to the Next Page

Academic Preparation

11.	Have you received a Doctorate degree? If *yes*, proceed to next question If *no*, proceed to question #13	Yes	No
12.	Field in which Doctorate degree was earned _____		
13.	Have you received a Master's degree? If *yes*, proceed to next question If *no*, proceed to question #15	Yes	No
14.	Field in which Master's degree was earned _____		
15.	Have you received a Bachelor's degree If *yes*, proceed to next question If *no*, proceed to question #17	Yes	No
16.	Field in which Bachelor's degree was earned _____		
17.	Are you a Certified Public Accountant (CPA)?	Yes	No
18.	Are you a Certified Financial Analyst (CFA)?	Yes	No

***Directions*: Recall your experiences in your first position as a public university chief business officer. Please *Circle* the number that best represents your opinion for each statement below.**

	Your perceived level of preparedness at the time you started your first position as a public university chief business officer				
19. Management Functions and Competencies	Very Underprepared	Somewhat Underprepared	Adequately Prepared	Well Prepared	Very Well Prepared
a. Knowledge of financial planning	1	2	3	4	5
b. Knowledge of financial reporting	1	2	3	4	5
c. Knowledge of information technology issues	1	2	3	4	5
d. Knowledge of management information systems	1	2	3	4	5
e. Knowledge of facilities management	1	2	3	4	5
f. Knowledge of capital (construction) planning	1	2	3	4	5
g. Knowledge of campus master planning	1	2	3	4	5
h. Knowledge of human resource law	1	2	3	4	5
i. Ability to hire staff	1	2	3	4	5
j. Knowledge of private contract management	1	2	3	4	5
k. Knowledge of risk management practices	1	2	3	4	5
l. Knowledge of public safety issues	1	2	3	4	5
m. Ability to manage crises	1	2	3	4	5
n. Ability to solve problems	1	2	3	4	5
o. Ability to make timely decisions on critical issues	1	2	3	4	5
p. Ability to effectively delegate tasks	1	2	3	4	5
q. Ability to facilitate meetings effectively	1	2	3	4	5
r. Ability to manage change and foster innovation	1	2	3	4	5
s. Knowledge of contemporary issues in higher education	1	2	3	4	5
t. Overall administrative management capabilities	1	2	3	4	5

20. **Relationship Management**	Very Underprepared	Somewhat Underprepared	Adequately Prepared	Well Prepared	Very Well Prepared
a. Ability to supervise staff	1	2	3	4	5
b. Ability to resolve interpersonal conflicts	1	2	3	4	5
c. Ability to provide discipline to staff members	1	2	3	4	5
d. Ability to make effective public presentations	1	2	3	4	5
e. Ability to work effectively with the institution's president	1	2	3	4	5
f. Ability to work effectively with members of the president's cabinet	1	2	3	4	5
g. Ability to work effectively with members of the state budget office	1	2	3	4	5
h. Ability to work effectively with members of the state legislature	1	2	3	4	5
i. Ability to work effectively with institution's board of trustees/directors	1	2	3	4	5
j. Overall human relations skills	1	2	3	4	5

21. **Institutional Familiarity**	Very Underprepared	Somewhat Underprepared	Adequately Prepared	Well Prepared	Very Well Prepared
a. Knowledge of the institution's policies	1	2	3	4	5
b. Knowledge of the institution's labor contract processes	1	2	3	4	5
c. Knowledge of the institution's facility maintenance processes	1	2	3	4	5
d. Knowledge of the institution's planning processes	1	2	3	4	5
e. Knowledge of the institution's budgeting processes	1	2	3	4	5
f. Knowledge of the institution's capital outlay process	1	2	3	4	5
g. Knowledge of the state's public university funding processes	1	2	3	4	5
h. Knowledge of institutional board governance policies	1	2	3	4	5
i. Knowledge of institutional board governance procedures	1	2	3	4	5
j. Understanding of the institution's role in the State's overall higher education system	1	2	3	4	5
k. Overall familiarity with the institution	1	2	3	4	5

22. **Your OVERALL perceived level of preparedness at the time you started your <u>first position</u> as a public university chief business officer**	Very Underprepared	Somewhat Underprepared	Adequately Prepared	Well Prepared	Very Well Prepared
	1	2	3	4	5

Please Complete this Survey on the Following Page

23. The type of institution you were *first employed at* as a public university chief business officer was:
(Please place an "X" in the appropriate box)
☐ Doctorate-granting ☐ Master's-granting (Level I or II) ☐ Baccalaureate-granting

24. Did you participate in any professional development program *prior to your first appointment* as a public university CBO that you felt significantly contributed to preparing you for your leadership role as a public higher education senior administrator? Yes No **If *yes*, proceed to next question If *no*, proceed to question #25**

24b. Please indicate the topic of the professional development program and the organization that delivered the program.

Topic of professional development program: _____

Organization delivering the program: _____

25. Have you participated in any professional development program *since your first appointment* as a public university CBO that you feel significantly contributed to preparing you for your leadership role?
Yes No **If *yes*, proceed to next question If *no*, proceed to question #26**

25b. Please indicate the topic of the professional development program and the organization that delivered the program.

Topic of professional development program: _____

Organization delivering the program: _____

Demographic Data

26. Current age (in years): _____

27. Age at the time you first became employed as a public university Chief Business Officer: _____

28. Ethnicity:
(Please place an "X" in the appropriate box)
☐ African American ☐ Hispanic ☐ American Indian
☐ Asian American ☐ Caucasian ☐ Multi-Ethnic ☐ Other _____

29. Gender: ☐ Male ☐ Female

30. **Open-Ended Question**

In the space below please provide at least one piece of advice you would have liked to have received when you first started your first position as a public university chief business officer.

_____

_____

_____

_____

_____

_____

_____

Thank you for taking the time to complete this survey.
Please return in the self-addressed stamped envelope accompanying this survey.

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