

**THE EFFECTS OF RESOURCE DEPENDENCE, INSTITUTIONAL PRESSURE,
AND STRATEGIC CHOICE ON FINANCIAL PERFORMANCE OF
NONPROFIT COMMUNITY BEHAVIORAL HEALTHCARE
ORGANIZATIONS**

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Abstract

The research investigated factors that affect the sustainability of nonprofit community behavioral healthcare organizations (CBHOs) with annual revenues > \$10 million. The theoretical framework encompassed resource dependence, institutional, strategic choice, and organizational effectiveness theories and used a systems model to delimit variables of interest. Using survey methodology, the quantitative study examined relationships between variables of resource dependence, institutional pressure, strategic choice, and financial performance (effectiveness) across a population of 508 CBHOs within the United States. To accomplish this, measures previously introduced by Bielefeld (1992a, 1992b) and Tuckman and Chang (1991) were adapted to align with the influencing environment of CBHOs. The following correlations were statistically significant: resource dependence and a revenue-seeking strategy; institutional pressure and a revenue-seeking strategy; institutional pressure and a legitimation strategy; resource dependence and financial performance; and a revenue-seeking strategy and financial performance. The study examined the extent to which variables of resource dependence, institutional pressure, and strategic choice explained variation in financial performance. The equity financial model was significant ($R^2 = .13$, $F(5, 89) = 2.6$, $p < .05$). The revenue concentration financial model was also significant ($R^2 = .13$, $F(4, 90) = 3.16$, $p < .05$). The administrative expense financial model was not significant. Findings revealed the close linkage between the resource and institutional environment and a high level of dependence of the sector on government funding. Revenue-seeking strategy was significant in two of three financial models. The research holds promise for replication in other homogenous nonprofit sectors.

Dedication

I dedicate this dissertation to my parents, Robert and Saranne Dionne, and to my husband Douglas Folcarelli. My parents encouraged each of their children to live full and inspired lives, and to push through challenges. For more than a decade, my husband sacrificed so many things so that I could follow my dreams. I could not have completed this journey without these three exceptional people.

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CHAPTER 1. INTRODUCTION

Introduction to the Problem

The nonprofit sector is a vibrant part of the United States' economy. Studies on ways economic and institutional pressures enable or constrain nonprofit strategic action (Gronbjerg, 1991) continue to capture the imagination of scholars and practitioners who seek to understand the performance of nonprofit enterprise in society (Hansmann, 1987). The research expanded on prior studies related to nonprofit adaptation and survival by exploring relationships among relevant factors and their discrete and combined effects on nonprofit financial performance.

Researchers of nonprofit sustainability, including Bielefeld (1992b, 1994), Froelich, Knoepfle, and Pollak (2000), and Hager (2001) encouraged future investigation of factors related to nonprofit sustainability to occur among homogenous populations. Results from studies on homogenous populations would likely produce more specific conclusions about nonprofit organizational survival. Responding to this call, the research engaged a systems approach and incorporated two discrete analytic phases.

First, the study examined relationships between variables of resource dependence, institutional pressure, and strategic choice, across a homogenous population of large-sized, community behavioral healthcare organizations (CBHOs) within the United States. The research also explored relationships between these variables and four measures of financial performance: equity ratio (DEBT), operating margin (MARGIN), revenue concentration (CONCEN), and administrative expense (ADMIN). Figure 1 summarizes the relationships within the first analytic phase (i.e., Phase 1–Model 1).

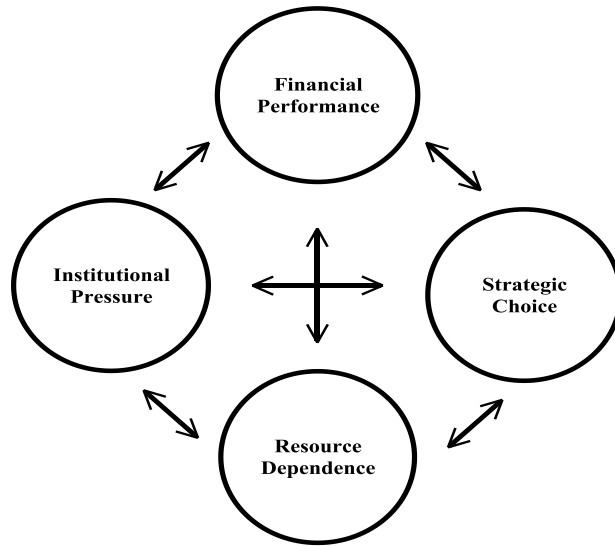


Figure 1. Variable relationships in first analytic phase.

Second, the study explored if, and to what extent, variables of resource dependence, institutional pressure, and strategic choice explained variation in financial performance of large-sized, nonprofit CBHOs. The research treated financial performance as the dependent variable and proxy for organizational effectiveness, and thus, for nonprofit sustainability and survival. Using a systems model with variables of resource dependence, institutional pressure, and strategic choice, the study specifically explored the effects of these variables on financial performance.

Studies by Bielefeld (1992a, 1992b, 1994) and Galaskiewicz and Bielefeld (1998) significantly informed the intention and design of the current study. Their longitudinal analysis of factors contributing to the sustainability or demise of a heterogeneous population of nonprofit organizations in the Minneapolis–St. Paul region of Minnesota generated several published studies (Bielefeld 1992, 1992b, 1994) and a book (Galaskiewicz & Bielefeld, 1998). With the author’s permission, the researcher adapted Bielefeld’s (1992a) measures of resource

dependence and institutional pressure to align with particularities associated with the homogenous sector of CBHOs. The researcher also adapted Bielefeld’s (1992b) strategic tactics list, so tactics would coincide with the strategic choices commonly available to CBHOs. To summarize, the study adapted Bielefeld’s (1992a, 1992b) methods and instrumentation, previously applied to a heterogeneous population of nonprofit organizations, to CBHOs in order to explore relationships among relevant variables, as well as their impact, if any, on organizational financial performance.

As mentioned previously, the study engaged two specific analytic phases. Phase 1 of the research investigated relationships among all variables (i.e., Phase 1–Model 1). Phase 2 explored two discrete multiple linear regression models: Phase 2–Model 1 replicated Bielefeld’s methodology, with adapted instrumentation; Phase 2–Model 2 expanded on the first model by exploring variables of resource dependence and strategy in greater detail. Table 1 summarizes how the two phases and models of the study integrated variables of interest to the study.

Table 1
Organization of Study: Phases and Models

Phase	Model Description
1	Correlational Model: Relationships Between Resource Dependence, Institutional Vulnerability, Strategic Choice, and Financial Performance Variables
2	Model 1 (Multiple Linear Regression Analysis): Adaptation of Bielefeld (1992a, 1992b) Variables to Community Behavioral Healthcare Sector
2	Model 2 (Multiple Linear Regression Analysis): Extension of Bielefeld’s (1992a, 1992b) Resource Dependence and Revenue Seeking Strategy Variables

A significant body of work supports the inclusion of the following key (correlational and independent) variables in the study: resource dependence, institutional pressure, and strategic choice. Resource dependence affects nonprofit organization structures and processes (Gronbjerg, 1991), strategic action (Foster & Bradach, 2005; Heimovics, Herman, & Jurkiewicz, 1993), and viability or effectiveness (Scheid & Greenley, 1997). For decades, researchers examined institutional effects on nonprofits and generated a comprehensive body of research on the nature of power and legitimacy within institutionalized environments (Bigelow & Middleton Stone, 1995; Deephouse & Suchman, 2008; Zimmerman & Zeitz, 2002). Much of the supporting research on institutionalism explains how institutional pressure diffuses among and shapes organizational fields (Balser & McClusky, 2005; DiMaggio & Powell, 1983; Meyer, 2008; Meyer & Rowan, 1977; Mizruchi & Fein, 1999); influences organizational processes, structures, and actions (Balser & McClusky, 2005; Herman & Renz, 2004); and endorses or legitimizes conforming organizations (Baum & Oliver, 1991; Meyer & Rowan, 1977; Powell & DiMaggio, 1991; Smith & Lipsky, 1993).

Among studies focused on the diverse ways organizations adapt to and manage resource dependencies and institutional pressure, some specifically explored the range of strategic actions used by organizations to survive (e.g., Baum & Oliver, 1991; Bielefeld, 1992b, 1994; Gronbjerg, 1991; Oliver, 1991). Such studies guided nonprofit strategy research in a new direction, emphasizing intentional actions (Oliver, 1991) used by organizations operating within structured fields. Among these studies, Oliver's (1991) work was particularly groundbreaking in the following ways.

First, Oliver (1991) summarized more than a decade of research related to the effects of resource dependence and institutionalism on organizational choice and survival. Second, the

study challenged views of original institutional theorists who articulated a passive organizational adaptive response to institutional demands, and instead called on scholars to examine the ways organizations actively shape their environment. Third and last, Oliver (1991) posited an elaborate typology of environmental antecedents and organizational strategic responses to be empirically tested using ten hypotheses. This work provided a framework for others to consider or follow.

Many studies following Baum and Oliver (1991), Bielefeld (1992a, 1992b, 1994), Gronbjerg (1991), and Oliver (1991) examined the strategic choices of nonprofit organizations by specifically attending to the ways organizations acted upon or influenced their environment. Research by Alexander (2000), Balser and McClusky (2005), Barman (2002), Crittenden (2000), Durkin et al. (2010), Galaskiewicz and Bielefeld (1998), Foster and Fine (2007), Garrow (2010), Golensky and Mulder (2006), Jones (2006), Sowa (2008), and Walker and McCarthy (2010) are relevant studies within this of this body of work.

Background of the Study

The research employed a systems model to evaluate financial performance of nonprofit organizations and accomplished this through a two-phased analytic approach. The first analytic phase explored relationships between all variables of resource dependence, institutional pressure, strategic choice, and financial performance. The second phase encompassed two explanatory models (Model 1 and Model 2) designed to explain if, and to what extent, independent variables affected financial performance. Model 1 and Model 2 included four dependent financial measures, debt ratio (DEBT), operating margin (MARGIN), revenue concentration (CONCEN), and administrative expense (ADMIN). Tuckman and Chang (1991) introduced these measures and several subsequent studies have applied them in varying ways (e.g., Greenlee & Trussel,

2000; Trussel, 2002; Trussel, Greenlee, & Brady, 2002). To summarize, the systems model investigated discrete and combined impact of key factors—resource dependence, institutional pressure, and strategic choice—on financial performance. This section provides an overview of research related to variables of resource dependence, institutional pressure, strategic choice, and financial performance, and provides a rationale to justify their inclusion within the systems model.

Resource Dependence and Institutional Pressure: Variables of Organization-Environment Interdependence

Resource dependence and institutional theories express differing yet complementary views of organization-environment interdependence (Gronbjerg, 1991); consequently, a considerable range of research related to nonprofit organization-environment interaction addresses these theories together (Pfeffer & Salancik, 2003). Garrow and Hasenfeld (2010) conveyed how a broader political economy theory subsumes resource dependence and institutional theories. Political economy theory describes two types of resources important to organizations with strong institutional ties.

Economic resources, such as government funding or private fees, support an organization's services over time; political resources, such as legitimacy and power, leverage an organization's status within a given field and pave new paths to additional resources (Garrow & Hasenfeld, 2010). Pursuing economic resources aligns well with resource dependence theory; whereas, cultivating resources to enhance power and legitimacy appears consistent with institutional theory (Oliver, 1991). Economic and legitimating resources differ but involve intersecting contextual factors; as a result, studies often address resource dependence and

institutional theories as complementary because of their enmeshed relationship to organizational adaptation and survival (Oliver, 1991).

Resource dependence theory explains how organizations with strong economic dependencies are susceptible to demands and controls imposed by the entities on which they depend (Pfeffer & Salancik, 2003; Saidel, 1991). Bielefeld (1992a) illustrated how organizations compete by obtaining necessary resources and acting strategically to facilitate continuity and growth of operations. Consistent with the resource dependence perspective, sustainable organizations are those equipped to establish and maintain consistent exchanges with the supporting environment, and through such exchanges, successfully build organizational power and legitimacy over time (Bielefeld, 1992a). Self-interest, power, financial, and human resources are among the resources to be achieved (Pfeffer & Salancik, 2003).

Institutional theory, as posited by Selznick (1949, 1957, 1996) and extended by DiMaggio and Powell (1983) and Meyer and Rowan (1977) among others, explains processes through which a social order emerges. This social order creates the sociopolitical context of an organizational field (Ruef & Scott, 1998), which involves normative, regulative, and cognitive rules (Meyer & Scott, 1983; Scott, 1995). Rules make their way through the organizational field through an elaborate system of institutional prescriptions (Dacin, 1997). Beliefs, standards, structures, and processes, created and/or endorsed by the institutional environment, comprise these institutional prescriptions for social order.

Institutional theory highlights processes through which organizations achieve normative, regulative, and cognitive legitimacy within the social order of a given field (DiMaggio & Powell, 1983; Oliver, 1991; Ruef & Scott, 1998). Thornton and Ocasio (1999, 2008) described this social order as *institutional logics*, a concept introduced by Alford and Friedland (1985).

DiMaggio and Powell (1983), and Meyer and Rowan (1977) further explained how institutional logics propel organizations to reflect their supporting environment, and one another, by adopting practices legitimated by the environment. Through normative, regulative, and cognitive mechanisms, organizations in institutionalized environments become increasingly *isomorphic* or similar to one another, in order to reflect legitimated norms and practices and compete for scarce resources (DiMaggio & Powell, 1983).

Institutional logics encompass supra-organizational patterns of activity rooted in material practices and symbolic systems (Alford & Friedland, 1985), with rules, premiums, and sanctions created and recreated by and within a particular social context (Jackall, 1988). Institutional logics provide meaning to a particular social context or reality (Thornton & Ocasio, 1999). Thornton and Ocasio (2008) posited how knowledge of broader institutional social and contextual factors is essential to understanding individual and organizational behavior, given that such factors regularize behavior while also providing opportunity for agency and change (p. 102).

Institutional theory also addresses the role of dominant stakeholders in promoting institutional logics of an organizational field and rewarding organizations able to conform to them. Currying favor with dominant and influencing stakeholders by taking action deemed acceptable by field standards contributes positively to organizational viability (Schneiberg & Clemens, 2006). Rodrigues and Child (2003) conveyed how a “highly institutionalized environment creates conditions of low selection and therefore constrains choice in different ways. It creates structural inertia, as information is restricted and selective in the sense of reinforcing the system isomorphism” (p. 2159).

Thus, institutional pressure poses a real challenge for nonprofit organizations managing concurrent and oftentimes competing institutional and strategic demands (Herman & Renz, 2004; Rodrigues & Child, 2003). Organizations faced with uncertain environments must decide on how to best proceed (Begun & Kaissi, 2004). Specifically, each organization must successfully determine how to differentiate its value, while concurrently sustaining isomorphic qualities that legitimate the organization among industry stakeholders. Organizations must ultimately determine whether a particular type of strategic approach makes more sense under conditions of strong or weak levels of resource dependence and/or institutional pressure. These issues require examination of organizational strategic choice and the effects of strategic choice under varying environmental conditions.

Strategic Choice: Variable of Organizational Response and Adaptation

The systems model of nonprofit financial performance includes resource dependence and institutional pressure as variables related to organization-environment interaction and strategic choice as a variable related to specific organizational actions taken to respond and adapt to the influencing environment. The conceptualization of strategic choice within organizational studies began with Child (1972), who contested prior notions of organization-environment adaptation occurring from purely rational processes, such as those espoused by Miles and Snow (1978). While Child (1972) recognized the effect of environmental challenges on the rational-efficient development of organizational structure and processes, he also emphasized the intentionality of top managers and their ability to shape the environmental context to support organizational strategy.

Child's (1972) assertions extended rational theories of organizational behavior, adding to them an emphasis on the intentional capacity of organizations. Aligned with similar

contributions from Galbraith (1973), Lawrence and Lorsch (1967), and Weick (1969), strategic choice theory highlights the strategic alignment or *fit* between organization and environment. Venkatraman and Camillus (1984) described the notion of fit as fundamental to strategic management (p. 513). Further, Burton, Lauridsen, and Obel (2002), Donaldson (2001), Ginsberg and Venkatraman (1985), and Ray (2004) called for systematic examination of strategy content on how organizations achieve fit with their environment.

A vast body of nonprofit sector research addressed particularities associated with how nonprofit organizations fit with their supporting environment. Three discrete streams of literature seem to emerge from broad range of studies on nonprofit organizational strategic adaptation. Each stream evolved over time and articulated greater specificity related to ways nonprofits adapt and thrive.

The first stream addressed general organizational adaptive responses to institutional pressures and encompassed works by Meyer and Rowan (1977), DiMaggio and Powell (1983), and Thompson (1967). The second stream encompassed specific strategic choices or tactics available to and used by nonprofit organizations (e.g., Alexander, 2000; Bielefeld, 1992a, 1992b, 1994; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006). The third and last stream involved nonprofit organizational adaptation to field-level change, with notable attention to how organizations adapted to specific changes occurring within their respective funding systems (e.g., Durkin et al., 2010; Jones, 2006; Twombly, 2003).

This study attempted to extend knowledge generated across these three streams by examining the strategic choices of behavioral healthcare organizations, a sector with known dependence on government funding (Foley et al., 2006; Mechanic & Rochefort, 1992; National Institute of Mental Health, 1999; Taube, Goldman, & Salkever, 1990) and a highly developed

institutional environment (Scheid & Greenley, 1997). The section below provides an overview to each of the three streams of literature on nonprofit strategic adaptation. The comprehensive review of the literature in Chapter 2 more fully addresses their elements.

General organizational strategic responses to institutional pressure.

General organizational adaptive responses to institutional pressure included bridging (DiMaggio & Powell, 1983; Fennel & Alexander, 1987; Meyer & Rowan, 1977), boundary-spanning (Alexander, 2000; Bielefeld, 1992a; Fennel & Alexander, 1987; Galaskiewicz, Bielefeld, & Dowell, 2006; Thompson, 1967), and buffering (Meyer & Rowan, 1977; Thompson, 1967). Bridging responses involved actions enabling the organization to become similar or isomorphic with its environment, such as incorporating rules and structures within the organization to produce visible evidence of organizational-environment alignment (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). Boundary-spanning responses encompassed actions designed to link the organization with its supporting environment and other external resources (Fennel & Alexander, 1987).

Linkages with the environment helped to reduce environmental uncertainty, provide critical resources, enable co-optation of emerging practices, and enhance agency legitimacy (Miller-Millesen, 2003). In contrast, buffering responses protected an organization's technical core or task environment from institutional pressures; consequently, buffering often involved decoupling technical from institutional processes within the organization (Scott, 2003).

Oliver (1991) and Bigelow and Stone (1995) extended earlier works on generalized organizational responses by conceptualizing broader types of approaches used by organizations to cope with institutional pressures. Oliver (1991) constructed a typology of organizational adaptation based on levels reflecting increased resistance to institutional pressure (i.e.,

acquiescence, compromise, avoidance, defiance, and manipulation). Bigelow and Stone (1995) conceptualized three categorical styles (i.e., complete compliance, symbolic compliance, and resistance).

Lawrence (1999) extended the manipulation response, previously introduced by Oliver (1991). Oliver (1991) defined the manipulation response as the “purposeful and opportunistic attempt to co-opt, influence, or control institutional pressures and evaluations” (p. 157).

Lawrence (1999) elaborated upon the manipulation response to include positive tactics used by organizations to innovate in ways that garner acceptance and endorsement by relevant stakeholders. Lawrence’s (1999) work addressed ways organizations design strategies to positively influence and shape the institutional environment. Lawrence suggested, “A central issue for management research has become the manner in which organizational environments are constituted, reproduced, and transformed through organizational action and relationships” (p. 161).

Strategic choice and tactics.

Studies on nonprofit strategic decision-making exposed how broader economic and institutional environmental factors affect specific choices of nonprofit organizations and the effectiveness of choices (Alexander, 2000; Gronbjerg, 1991; Sowa, 2008). Across studies of human and social service contexts, which often include behavioral healthcare or similar-type organizations, the influence of funders on organizational choices appeared to be of particular interest and concern. Gronbjerg (1991) clarified this preoccupation with funders, asserting that the process of gaining predictability in funding relationships is among the most important strategic imperatives facing nonprofit organizations. This is especially relevant under conditions where funders also shape institutional norms and practices, as often occurs when the government

purchases nonprofit services through contractual agreements (Lamothe & Lamothe, 2009; Savas, 2002; Sclar, 2000).

As an organization strives to meet institutional demands of funding sources that reimburse its services, conditions of organizational mission creep or erosion (Froelich, 1999; Frumkin & Kim, 2002), or displacement/distortion of goals (Alexander, 2000; Meyer & Rowan, 1977) may occur. Accordingly, research on nonprofit strategy involved specific attention to tactics executed in order to meet resource needs and adapt to institutional demands (Baum & Oliver, 1991; Bielefeld, 1992a, 1992b, 1994; Bigelow & Stone, 1995; Galaskiewicz & Bielefeld, 1998; Galaskiewicz et al., 2006). Studies on nonprofit strategic choice also distinguished effective and ineffective tactics under varied environmental conditions (e.g., Alexander, 2000; Balsler & McClusky, 2005; Bielefeld, 1992b; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006; Walker & McCarthy, 2010). Overall, these studies provided information related to how organizations managed their environment while also sustaining a differentiated sense of identity.

Specific tactics used by nonprofit organizations appeared to cluster among four core content areas: revenue enhancement, legitimation, retrenchment, and managerial professionalization. Nonprofit organizations seek to consistently expand their revenues, but must consider new opportunities in relation to organizational competence and/or capacity for growth (Alexander, 2000; Crittenden, 2000). Organizations considering new revenue sources must also consider their external resource dependencies (Alexander, 2000; Bielefeld, 1992a, 1992b, 1994; Foster & Fine, 2007; Galaskiewicz & Bielefeld, 1998; Gronbjerg, 1991) and institutional demands (Alexander, 2000; Bielefeld, 1992b; Jones, 2006).

Some studies on revenue enhancement explored revenue-seeking action from the perspective of formal organizational collaboration through acquisitions, mergers or partnerships. These works also noted that not all collaborations occur from pure financial motive (Golensky & DeRuiter, 2002; Guo & Acar, 2005; Sowa, 2008). Organizations may pursue mergers and partnerships to expand their mission or services (Golensky & DeRuiter, 2002) or to conform to institutional pressure from funders who encourage collaboration among nonprofits (Sowa, 2008).

Legitimation tactics target the sociopolitical environment and enhance the organization's status in its field, build the entity's reputation and prestige, and position the organization favorably for future resources (Alexander, 2000; Barman, 2002; Bielefeld, 1992b, 1994; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006; Ruef & Scott, 1998). Retrenchment tactics include internally focused strategies designed to increase efficiencies (Bielefeld, 1992b, 1994; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006). Similarly, managerial tactics also encompass internal organizational strategies, but involve more specific actions designed to enhance the organization's professionalism, such as training programs and long-term planning (Alexander, 2000; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006). Galaskiewicz and Bielefeld (1998) found strong correlation between managerial tactics and tactics in other categories.

This study investigated revenue-seeking, legitimation, and retrenchment tactics within its system model. Galaskiewicz and Bielefeld (1998) also included managerial tactics but found that managerial tactics did not uniquely differ from the other three types. To some extent, an assumption of the study was that large behavioral healthcare organizations would already have managerial practices, such as training programs and strategic plans in place. Institutional norms

and practices of the sector often require these practices as a condition for accreditation and/or licensing.

Sector-specific strategies.

The final of the three streams of research related to strategic choice and adaptation encompassed sector-specific studies on ways organizations responded to changes in their environment. Examples of this included studies by Jones (2006), Twombly (2003), and Durkin et al. (2010), who examined organizational responses to managed care, welfare reform, and Medicare, respectively. Interestingly, all three of these sector-specific studies focused on changes in resource relationships and associated institutional pressures. This focus highlights the relevance of this particular research area, not only to the target population of CBHOs of interest to the study, but also across other sectors, including child welfare (Jones, 2006), social welfare (Twombly, 2003), and inpatient rehabilitation facilities (Durkin et al., 2010).

Methodological Considerations: Correlational and Independent Variables

Given varied methodological approaches used within the above-mentioned studies on strategic adaptation, discontinuities across these works informed and influenced the systems model developed for the current study. First, diversity of size, purpose, and level of formality of organizations within the nonprofit sector restricts the ability to generalize findings from such studies (Froelich et al., 2000). Froelich and Knoepfle (as cited in Froelich et al., 2000, p. 233) called for mechanisms to organize the sector into homogenous groups to enable data comparisons among cross sectional studies. Bielefeld (1994) and Hager (2001) similarly encouraged future examination of nonprofit strategic action among homogenous populations.

Second, much of the related literature on nonprofit adaptive strategy investigated a broad range of organizational forms, such as donative and commercial, small and large, and volunteer

and professional organizations, as exemplified by Bielefeld (1992b), Alexander (2000), and Garrow (2010). Examining heterogeneous populations enables a broader understanding of nonprofit organization-environment dynamics; yet, this focus on diverse types of organizations also creates a certain level of discontinuity related to interpreting which strategies produce or fail-to-produce better outcomes for organizations. Third and last, few studies explored nonprofit strategic choice together with resource dependence and institutional pressure. Among the literature on nonprofit strategy, few studies (see Alexander, 2000; Balser & McClusky, 2005; Bielefeld, 1992a, 1992b, 1994; Bigelow & Stone, 1995; Froelich, 1999; Golensky & Mulder, 2006; Gronbjerg, 1991; Heimovics et al., 1993; Jones, 2006; Townsend & Campbell, 2007) addressed constructs of resource dependence and institutional pressure together with adaptive strategic action taken by organizations.

The research engaged a systems model to examine strategic choice among a homogenous population of nonprofit CBHOs and incorporated institutionally-relevant strategic tactics. As a result, the study extended prior research on nonprofit survivability by addressing, at least in part, discontinuities from past research as explained above. Studies by Bielefeld (1992a, 1992b, 1994) and Galaskiewicz and Bielefeld (1998) strongly influenced the study, supported its theoretical framework and methodology, and guided the adaptation of instruments used to measure resource dependence, institutional pressure, and strategic choice.

As mentioned previously, the design of the research followed two analytic phases. The first phase involved all variables, including financial measures, to assess correlational relationships. The second analytic phase treated variables of resource dependence, institutional pressure, and strategic choice as independent variables and financial performance as the dependent variable. This section offers an overview of correlational and independent variables

and how specific studies and measures from these studies supported their application within the systems model of nonprofit organizational performance used for this study.

Bielefeld (1992a) and Galaskiewicz and Bielefeld (1998) addressed independent variables of resource dependence and institutional pressure, as measured by the Gibbs-Martin revenue heterogeneity index and Institutional Vulnerability Index (IVI), respectively. The Gibbs-Martin revenue heterogeneity index (Bielefeld, 1992a) is a type of Herfindahl index of revenue heterogeneity and strongly resembled the revenue concentration index developed by Tuckman and Chang (1991). The Gibbs-Martin was used to measure the resource dependence variable in the first (correlational) phase of the study. The Gibbs-Martin value for each organization served as an explanatory variable in the (second phase) multiple linear regression analysis.

The study also used the revenue concentration index (Tuckman & Chang, 1991) to measure revenue concentration (CONCEN) in Phase 1 correlations and Phase 2 multiple linear regression analysis. Retaining the CONCEN measure was important to promote consistency with prior studies that used all four of the financial indicators developed by Tuckman and Chang, including CONCEN. This study, then, engaged the Gibbs-Martin to measure resource dependence and the revenue concentration index to measure revenue concentration, even though these two constructs both measured the degree to which organizations had concentrated or diversified revenue sources.

Resource dependence and revenue concentration variables (constructs) were similar and not independent; consequently, the first-phase correlational analysis did not include an analysis of their association, and the CONCEN model in the second-phase multiple linear regression analysis did not include the resource dependence variable (see Figure 2).

Figure 2 also includes strategic tactics consistent with Bielefeld (1992b, 1994) and Galaskiewicz and Bielefeld (1998). Bielefeld (1992b, 1994) assessed strategic choice through an inventory of revenue seeking, legitimation, and retrenchment tactics. The original design involved a heterogeneous nonprofit population; consequently, the list of tactics, with some minor adaptation, closely applies to the population of interest to the study.

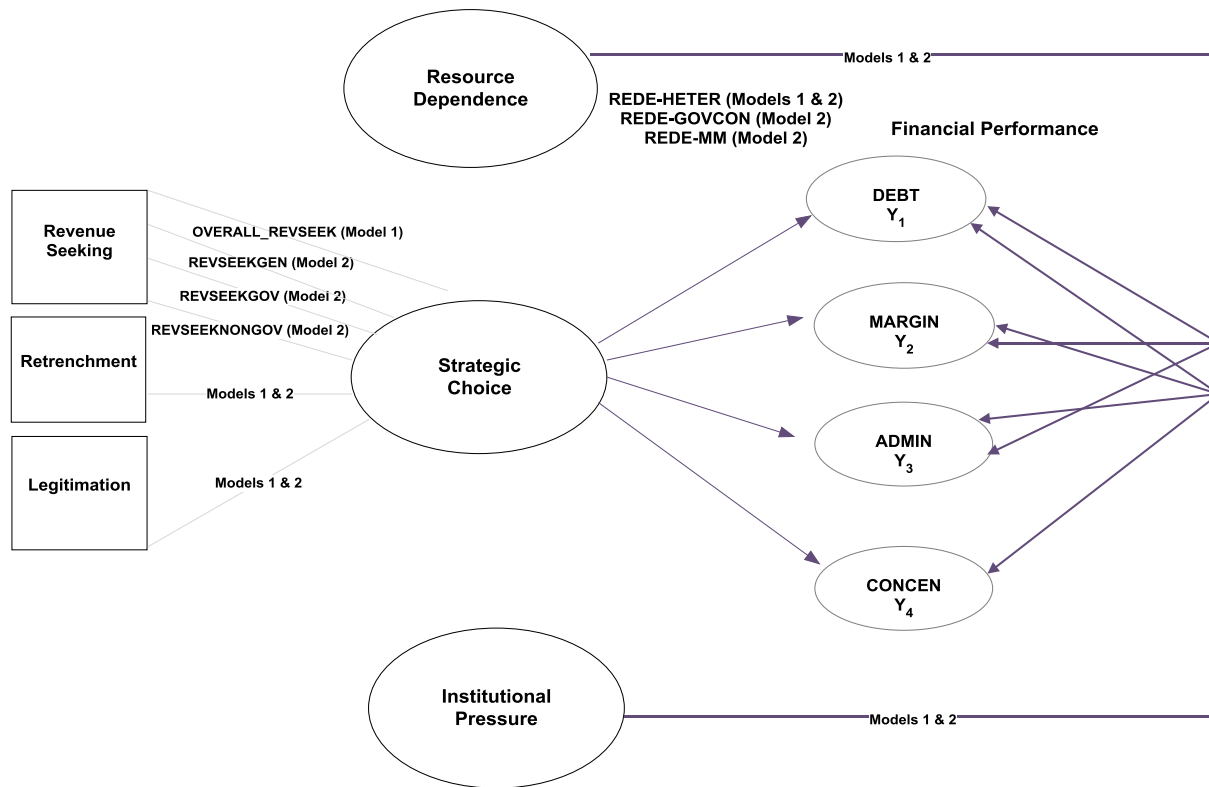


Figure 2. Explanatory models of financial performance of CBHOs. Models included independent variables of resource dependence (1992a), institutional pressure (Bielefeld, 1992a) and strategic choice (Bielefeld, 1992b), and a dependent variable of financial performance (Tuckman & Chang, 1991). Phase 2–Model 1 included the following variables: resource dependence (i.e., revenue heterogeneity–REDE-HETER); institutional pressure; strategic tactics of revenue-seeking (OVERALL_REVSEEK), legitimation (LEGIT), and retrenchment (RETRENCH); and dependent variables of debt (DEBT), operating margin (MARGIN), administrative expense (ADMIN), and revenue concentration (CONCEN). Phase 2–Model 2 included the following variables: resource dependence (i.e., revenue heterogeneity–REDE-HETER; government contract concentration–REDE-GOVCON; and Medicaid–Medicare concentration–REDE-MM); institutional pressure; and strategic tactics of general revenue-

seeking (REVSEEKGEN), government revenue-seeking (REVSEEKGOV), non-government revenue-seeking (REVSEEKNONGOV), legitimation (LEGIT), and retrenchment (RETRENCH); and dependent variables of debt (DEBT), operating margin (MARGIN), administrative expense (ADMIN), and revenue concentration (CONCEN). Phase 2–Model 1 adapted variables from Bielefeld (1992a, 1992b). Phase 2–Model 2 expanded on variables of resource dependence and revenue-seeking strategic tactics.

Chapters 2 and 3 offer greater detail regarding the rationale and process used to adapt the following measures in such a way that they reflected the behavioral healthcare sector and supporting research: (a) Gibbs-Martin revenue heterogeneity index, as a measure of resource dependence (Bielefeld, 1992a); (b) IVI, as a measure of institutional pressure (Bielefeld, 1992a); (c) strategic tactics list, as a measure of strategic choice (Bielefeld, 1992b; 1994); and (d) equity (DEBT), operating margin (MARGIN), revenue concentration (CONCEN), and administrative expense (ADMIN), as measures of financial performance (Tuckman & Chang, 1991). Modifications to measures of institutional pressure, strategic choice, and financial performance were modest, departing marginally from prior versions. Chapters 2 and 3 sufficiently address these modifications. Appendices C, D, E, and F also offer detail on how measures of resource dependence (revenue heterogeneity), institutional pressure, strategic choice, and financial performance, respectively, were adapted or extended. The study attempted to meaningfully extend the variable of resource dependence, which requires introduction here.

Prior studies conceptualized resource dependence in terms of revenue heterogeneity and treated revenue heterogeneity as an independent (Bielefeld, 1992a, 1992b, 1994; Galaskiewicz & Bielefeld, 1998) or dependent (Greenlee & Trussel, 2000; Trussel, 2002; Trussel et al., 2002; Tuckman & Chang, 1991) variable. The current study treated revenue heterogeneity—the degree to which organizational revenues were diversified or concentrated—as a (Phase 1) correlational

variable and Phase 2 independent variable. The current study also used the CONCEN measure in Phase 1 and Phase 2 models.

As previously described, the model used the Gibbs-Martin revenue heterogeneity index (Bielefeld, 1992a) as a correlational variable in the first analytic phase of the study and the revenue concentration index (Tuckman & Chang, 1991; Greenlee & Trussel, 2000; Trussel, 2002; Trussel et al., 2002) as a correlational variable in the first phase and dependent variable in the second phase. This technique, however, still fails to fully capture the depth of organizational dependence on government funding—a critically relevant correlational (Phase 1) and independent/explanatory (Phase 2) variable within the systems model used for this study.

An organization may generate 60% of its revenue from government contracts, yet the Gibbs-Martin does not reveal the scope of this dependence. Within this example, government contract revenue could concentrate within 3 or across 20 contracts, differentially affecting the scope of dependence within the organization. An organization with 60% of its revenue concentrated within 3 contracts would clearly have greater dependence than an organization with 60% of its revenue diffused across 20 contracts.

To date, the body of research suggests that models of organizational adaptation and survival in related studies did not explore this particular issue in detail, even among studies with a strong focus on government dependence (e.g., Besel & Andreescu, 2003; Chambre & Fatt, 2003; Crittenden, 2000; Froelich, 1999; Frumkin & Kim, 2002; Hager et al., 2004; Golensky & Mulder, 2006; Lamothe & Lamothe, 2009). The current study endeavored to capture government resource dependence through three measures: the Gibbs-Martin revenue heterogeneity index (Bielefeld, 1992a), as mentioned above; and the creation of the Government

Contract Concentration Indicator (GCCCI) and Medicaid-Medicare Concentration Indicator (MMCI). Chapter 3 describes and discusses these measures of resource dependence in detail.

Financial Performance: Correlational and Dependent Variables

Since the 1980s, research related to nonprofit effectiveness produced a wide range of conceptualizations of its qualities (Ritchie & Kolodinsky, 2003), but also evoked criticism related to a lack of consensus across studies about factors leading to higher or lower levels of organizational performance (Herman & Renz, 2004; Ritchie & Kolodinsky, 2002). Herman and Renz (2004) pointed to subjective definitions of organizational effectiveness in the nonprofit literature, emphasizing how multiple constituencies confer varied assessments of effectiveness that are qualitatively multidimensional and not reducible to a singular objective measure. Others similarly highlighted this indistinct conceptualization of nonprofit effectiveness as a limitation to studies of nonprofit organizational performance (see Cho, 2007; Forbes, 1998; Rojas, 2000), calling instead for increased use of objective measures of effectiveness (Ritchie & Kolodinsky, 2003). Recent of the last decade includes more robust use of financial models, perhaps in response to these observations and recommendations. Chapter 2 offers a detailed synthesis of the limitations of effectiveness studies in order to support the selection of financial measures as the dependent variable in the Phase 2 models.

Literature specific to the use of financial measures appears to bifurcate among two discrete approaches or models: predicting financial vulnerability (Greenlee & Trussel, 2000; Hager, 2001; Trussel, 2002; Tuckman & Chang, 1991) and measuring financial performance (Ritchie & Eastwood, 2006; Ritchie & Kolodinsky, 2003; Tuckman & Chang, 1991). A review of literature pertaining to financial measurement of nonprofit organizational performance shows growing application of financial measurement as a proxy for effectiveness (Ritchie & Eastwood,

2006; Ritchie & Kolodinsky, 2003) and survival (Hager, 2001; Hodge & Piccolo, 2005). Despite criticisms related to the inability of financial measures to capture qualitative features of nonprofit effectiveness (Ritchie & Kolodinsky, 2003), recent studies applied financial measurement as an indicator of organizational effectiveness or performance.

Extending the seminal ideas of Tuckman and Chang (1991), many set forth and tested financial configurations to reveal financially viable or vulnerable nonprofit organizations (Greenlee & Trussel, 2000; Hager, 2001; Hodge & Piccolo, 2005; Keating, Fischer, Gordon, & Greenlee, 2005; Ritchie & Kolodinsky, 2003; Tinkelman & Donabedian, 2007; Trussel, 2002). Figure 2, delineated earlier in this chapter, illustrated Phase 2 variables within an explanatory model for nonprofit financial performance based on these prior studies. Financial measures as conceived by Tuckman and Chang (1991) and later used by Greenlee and Trussel (2000), Hager (2001), and Trussel (2002), among others, comprised the dependent variables in four separate models of financial performance and encompassed the following performance factors: equity ratio (DEBT); operating margin (MARGIN); revenue concentration (CONCEN); and administrative expense (ADMIN).

Notably, three of four explanatory models articulated previously in Figure 2 (Y_1 , Y_2 , and Y_3) included independent variables of resource dependence, institutional pressure, and strategic choice. The CONCEN model (Y_4), however, excluded the independent variable of resource dependence. Including resource dependence in the CONCEN model would have violated the assumption of independence required for testing regression hypotheses (Norušis, 2008): the CONCEN dependent variable applied revenue concentration (revenue heterogeneity) data, which were also integrated within the (resource dependence) independent variable. The remaining two resource dependence measures—government contract concentration indicator (GCCCI) and

Medicaid-Medicare concentration indicator (MMCI)—also overlapped with CONCEN and were not truly independent. For these reasons, the CONCEN (Y₄) model included only independent variables of institutional pressure and strategic choice (see Figure 1).

Statement of the Problem

As nonprofit organizations operate amidst complex and uncertain economic times, their strategic adaptation to environmental conditions becomes increasingly important and relevant to future viability and survival (Alexander, 2000; Besel, 2000; Bielefeld, 1992b; Golensky & Mulder, 2006; Jones, 2006). Perhaps the most important strategy for sustainability involves maintaining current revenue sources while concurrently pursuing new ones (Bielefeld, 1992b, 1994; Hager et al., 2004; Walker & McCarthy, 2010). When assessing strategy, distinguishable differences between donative and commercial organizational types (Chang & Tuckman, 1994) should be considered. The composition of an organization's funding provides a critical context from which nonprofits formulate strategic choices (Gronbjerg, 1991).

Hansmann (1989) described the donative sector as philanthropic organizations reliant upon donations to support charities offering relief for the poor and distressed, cultural organizations (e.g., museums and performing arts), and institutions dedicated to research and higher education (p.91). Hansmann (1989) further defined commercial nonprofit organizations as those competing directly with other nonprofit and for-profit firms and deriving revenue primarily from the sale of services. Community behavioral healthcare organizations, the population of interest within the research, are a part of this commercial nonprofit sector. A comprehensive statistical report on the status of all mental health services through the year 2002 revealed how nearly 80% of revenues generated from services within the United States came from federal, state, and local government sources, including Medicare and Medicaid (Foley et

al., 2006, p. 222). Of the remaining 20%, 15% came directly from client fees and only 5% from other sources (Foley et al., 2006, p. 222).

While funding sources and concentration of funding sources vary among CBHOs to some extent, many CBHOs rely on government disbursements transferred through provider contracts with federal, state, and local entities, as well as through Medicare and Medicaid payments (Foley et al., 2006; National Institute of Mental Health, 1999). Because CBHOs serve persons with the most severe mental health and addiction disorders, who also often live among America's poor (Essock & Goldman, 1995), the government does, in fact, assume a substantial role in the payment of services delivered to them (Foley et al., 2006; Quinn & Kitchner, 2007). Further substantiating this point, statistics reported by Foster and Fine (2007) on nonprofit organizations with expenditures greater than \$50 million showed how numerous human service organizations, a discrete sector within the overall population of interest to the study, grew to sizable proportions through government contracts and fees.

Data from research on nonprofit strategic adaptation to environmental conditions showed how organizations with resource dependencies, especially those with dependencies on government sources, must consistently cultivate economic resources for their organizations, while also satisfying institutional demands idiosyncratic to their organizational field (Balsler & McClusky, 2003; Heimovics et al., 1993; Jones, 2006; Moore, 2001). Moizer and Tracey (2010) coined this challenge as the "double bottom line" mandate for nonprofit organizations (p. 253). From this cumulative body of research, particular categories of strategic action have surfaced time and again, revealing their particularly adaptive value within resource dependent and institutionalized contexts.

The problem at stake for many nonprofit organizations—including CBHOs—is that levels of resource dependence and institutional pressure vary within a given organizational field, depending on the historical resource relationships cultivated by each organization over time. As a result, the effects of particular strategic choices on financial gains or losses, under varying environmental conditions, have been unclear. Additionally, research focused on relationships between strategic choice and financial performance is in an early stage, given that financial measurement has only recently emerged within the literature as a viable proxy for nonprofit organizational performance (e.g., Froelich et al., 2000; Hager, 2001). As a result, exploring the financial impact of particular strategic choices across a relatively homogenous population becomes increasingly relevant to the body of research in this area (Froelich et al., 2000).

To summarize, in an environment of resource uncertainty, CBHO strategy becomes increasingly relevant to organizational survival. As described by Foley et al. (2006), CBHOs frequently depend on government funding, disbursed through Medicaid-Medicare payments and specific contracts with local, county, state, and federal governmental entities. Institutional pressure associated with resource dependencies likely affects strategic choice, but the effect of this pressure on strategy is unclear. Furthermore, research on nonprofit effectiveness has yet to consider the effects of strategic choice on financial performance, while concurrently considering key factors (i.e., resource dependence and institutional pressure) that may or may not affect such choice. The study extended the literature related to nonprofit strategic adaptation under conditions of resource dependence and institutional pressure by applying methods and instrumentation from past research to a relatively homogenous field of CBHOs, and by linking strategic choice to financial performance.

Purpose of the Study

As environmental uncertainties challenge nonprofit organizations of the 21st century, CBHOs face difficult strategic choices related to how to best grow. Nonprofit sustainability studies reveal how effective organizational decision-making should address the needs, expectations, and preferences of important stakeholders, especially particular institutional and resource-related stakeholders on which an organization depends (Baum & Oliver, 1991; Besel, 2000; Gronbjerg, 1991). Yet, while some studies successfully show the connection between institutional pressure and resource dependence in nonprofit settings, few specifically examine the discrete and combined effects of these variables on the strategic choices activated by nonprofit organizations (Besel, 2000). Furthermore, few studies extend this line of inquiry to explore the effects of institutional pressure, resource dependence, and strategic choice on financial outcomes or performance (Besel, 2000).

Limitations from preceding studies provided an opportunity for this research, which examined specific conditions of resource dependence, institutional pressure, and organizational strategic choice, and their discrete and combined impact on financial performance within large nonprofit CBHOs. This study had three foci: (a) to clarify relationships among important key factors affecting nonprofit strategic choice within CBHOs (i.e., institutional pressure and resource dependence); (b) to objectively measure the efficacy of organizational strategic choice in terms of the effects of choice on financial performance; and (c) to predict financial performance from variables of demonstrated significance. The research holds value for CBHO executives and other nonprofit leaders who require information to improve organizational strategy and financial performance within a sector with varying levels of resource dependence and institutional pressure.

Rationale

The rationale for this study emerged from the comprehensive body of research related to the sustainability of nonprofit organizations based on their strategic adaptation to unique features of the external environment (e.g., Alexander, 2000; Balser & McClusky, 2005; Barman, 2002; Baum & Oliver, 1991; Besel & Andreescu, 2003; Bielefeld, 1992a, 1992b, 1994; Golensky & Mulder, 2006; Jones, 2006; Oliver, 1991; 1997; Ruef & Scott, 1998). Specifically, an examination of related literature revealed conditions of resource dependence and institutional pressure as key environmental conditions to which nonprofit organizations must continually adapt (Alexander, 2000; Bielefeld, 1992a; 1992b; 1994; Froelich, 1999; Gronbjerg, 1991; Jones, 2006; Oliver, 1991; Ruef & Scott, 1998). The resource dependence perspective centers on the organization's pursuit of survival-critical resources and the direct effects of managing factors instrumental to their continuance. Organizational choices in line with the resource dependence perspective involve use of power and legitimacy, cultivation of existing resources, attainment of new resources, influence on external criteria related to future opportunities (Oliver, 1991). According to resource dependence theory, the organization acts with political and calculative purpose (Oliver, 1991).

While resource dependence theory highlights the direct management of resources on which the organization depends, institutional theory explains the indirect pressures created by and through the organization's dependence on the external environment. The institutional context induces organizational compliance and conformity, and ultimately catalyzes the entire organizational field toward a homogenous social order. According to institutional theory, organizations follow institutional norms to obtain legitimacy and privilege within the organizational field (Lawrence, 1999). In turn, legitimation leads to favor conferred by relevant

stakeholders, further contributing to organizational stability (Herman & Renz, 1999, 2004; Ruef & Scott, 1998).

Resource dependence and institutional influences often overlap within nonprofit organizations and can lead to strategic confusion about how organizations should grow. Resource dependence acknowledges practical steps toward resource acquisition and sustainability; whereas, institutionalism focuses on navigating the sociopolitical context of informal and formal institutional rules—institutional logics—in order to achieve power through legitimation. At times, strategies focused on resource acquisition may conflict with institutional norms and expectations (Alexander, 2000). For example, while perhaps pragmatically oriented, an organization's quest toward pursuing a new strategy or resource may contravene in-place norms, standards, and expectations of institutional stakeholders. Existing revenues and contracts may be at stake or even lost as a result.

Nonprofit leaders must evaluate whether and/or how their organization should innovate beyond its dependencies and the sociopolitical context created through such dependencies. Lawrence (1999) framed this dilemma by inquiring whether nonprofits should innovate to their dependencies, beyond them, or to some combined approach that applies features of the institutional context to produce new and legitimated organizational practices and forms (p. 163). The problem for practitioners and scholars, however, is that few researchers have explored the connection of strategic choice to actual organizational performance under a set of conditions unique to a particular organizational field. There is a lack of understanding as to “what works” for nonprofit organizations under varied conditions of resource dependence and institutional pressure.

With some exceptions, including Bielefeld (1992a, 1994), who compared strategies used by surviving and non-surviving nonprofit organizations, and Crittenden (2000), who explored strategies of organizations categorized as financially “successful” or “unsuccessful,” much of the research to date, and used to support this study, emphasized the content of strategy and/or how organizational strategic tactics come about to align with particular environmental conditions, rather than on the effectiveness of strategies used by nonprofit organizations. Departing from this stream of research on strategy content, the study responded to a growing, yet controversial request by researchers to examine organizational (strategic) effectiveness in terms of financial performance (Crittenden, 2000; Hager, 2001; Herman & Renz, 2004; Ritchie & Kolodinsky, 2003), and initiated this endeavor by examining a relatively homogenous population (Froelich et al., 2000).

Some level of controversy surrounds the use of financial performance as an indicator of nonprofit effectiveness, especially when institutionalized practices typically embrace measures addressing goal or mission fulfillment as appropriate indicators of effectiveness (Herman & Renz, 2004). Yet, despite institutional pressure to operationalize effectiveness differently, contemporary resource challenges facing nonprofit organizations call for valid and reliable ways to use financial performance as an indicator of organizational effectiveness and overall sustainability (Crittenden, 2000; Froelich et al., 2000; Hager, 2001; Hodge & Piccolo, 2005; Ritchie & Kolodinsky, 2003). Leaders and funders of healthcare organizations want to better distinguish effective and ineffective strategies as they move forward in uncertain times (Begun & Kaissi, 2004). Pressure to better understand nonprofit performance supports the rationale for use of financial indicators to assess the effectiveness of strategic choices made by nonprofit behavioral healthcare organizations.

With evidence in place to support the selection of the research topic, correlational (Phase 1) and independent (Phase 2) variables of resource dependence, institutional pressure, and strategic choice, and the correlational (Phase 1) and dependent (Phase 2) variable of financial performance, the specific rationale supporting the relevance and selection of the study's target population also must be articulated. The research examined the effects of variables of resource dependence, institutional pressure, and strategic choice among large-sized community behavioral healthcare organizations with annual revenues greater than \$10 million. This population was of interest for three significant reasons.

First, the community behavioral healthcare sector is an organizational field of interest to the researcher, who has served within the field as practitioner, manager, and administrator for more than two decades. This experience offers an understanding of the institutional context at hand and the unique contemporary strategic challenges common to the sector. Second, behavioral healthcare is a highly institutionalized field with embedded values, beliefs, norms, expectations, standards, and regulations; consequently, the researcher anticipated that organizations with varying resource dependencies would encounter variable levels of associated institutional pressure. Analysis of organizational strategic choice and the effectiveness of choice as measured by financial performance will hopefully deepen understanding of what works for CBHOs under varying conditions of resource dependence and institutional pressure.

Third, the study investigated only large-sized behavioral healthcare organizations. Prior research already exposed liabilities associated with organizational size and age (Bielefeld, 1994). Newer and smaller organizations with lower levels of financial resources and manpower were less able to withstand adversity than their older and larger counterparts (Bielefeld, 1994).

The relevance of large nonprofits to the nonprofit sector and United States' economy also supported their selection as a viable target population for this study. Nonprofit organizations with revenues greater than \$10 million comprise only 3.7% of the United States' public charity sector; yet, this subset of nonprofits contributes 82.7% of the total revenues produced by the public charity sector (Wing, Pollak, & Blackwood, 2008, p.142). This subsector is a small but influential part of the nonprofit sector and United States' economy. Moreover, despite the productivity, social value, and economic contribution of this particular group of nonprofit organizations, large-sized nonprofits are among the slowest growing groups within the overall sector, as compared to growth rates of smaller-sized organizations (Wing et al., 2008, p.143).

Bielefeld's (1994) research on surviving and non-surviving organizations revealed that organizations better able to effectively adapt to environmental conditions grow and survive. Additionally, Wing et al. (2008) revealed how the field of human service organizations has narrowed over time. From these findings, the sector of large-sized nonprofit CBHOs seemed an optimal cohort to examine the unique factors of interest. Large-sized CBHOs were expected to have some level of proven effectiveness, given their size and survival. Although a relatively homogenous sector, CBHOs were also expected to vary in terms of resource dependencies, perceived institutional pressure, strategy, and financial performance. Consequently, results might shed light on factors that contribute to financial success or deterioration.

Research Questions

Scholars and practitioners have ongoing interest in the way nonprofit organizations adapt to environmental challenges (e.g., Bielefeld, 1992a, 1992b, 1994; Besel, 2000; Jones, 2006; Stevens 2008) and attend to issues of resource dependence (Bielefeld, 1992a; Galaskiewicz & Bielefeld, 1998), institutionalism (Bielefeld, 1992a) and strategy (Bielefeld, 1992b, 1994;

Galaskiewicz & Bielefeld, 1998; Townsend & Campbell, 2007). Despite increased use of financial measures to assess nonprofit financial performance (Greenlee & Trussel, 2000; Hager, 2001; Hodge & Piccolo, 2005; Ritchie & Eastwood, 2006; Ritchie & Kolodinsky, 2003; Trussel, 2002), financial data have not yet been engaged as operational measures of discrete and combined effects of resource dependence, institutional pressure, and strategic choice on nonprofit organizational performance. The following overarching research question guided this study: “Do resource dependence, institutional pressure, and strategic choice (revenue-seeking, retrenchment, and/or legitimation) affect financial performance of large, nonprofit CBHOs?”

Supporting research questions included:

1. Do type and level of resource dependence affect the degree of perceived institutional pressure of large, nonprofit CBHOs?
2. Do type and level of resource dependence affect the strategic choices of large, nonprofit CBHOs?
3. Does degree of institutional pressure affect strategic choices of large nonprofit CBHOs?

The study involved four variables (resource dependence, institutional pressure, strategic choice, and organizational financial performance) and two analytic phases. The first phase explored relationships between variables of resource dependence, institutional pressure, strategic choice, and financial performance. The second phase examined the explanatory value of variables of resource dependence, institutional pressure, and strategic choice on four discrete dependent measures of financial performance: DEBT, MARGIN, ADMIN, and CONCEN. Hypotheses for the first phase of the systems model used for this study clustered across six discrete sets or categories. Five sets encompassed correlational hypotheses, including those associated with the following: resource dependence and institutional pressure; resource

dependence and strategic choice; institutional pressure and strategic choice; financial performance and resource dependence; financial performance and institutional pressure; and financial performance and strategic choice. The final set encompassed multiple linear regression hypotheses with four discrete models of financial performance (i.e., DEBT, MARGIN, ADMIN, and CONCEN) and independent variables of resource dependence, institutional pressure, and strategic choice. Table 2 provides an overview of the hypotheses that guided the study. Appendix B details the full range of null and alternative hypotheses for Phase 1 and Phase 2 models.

Table 2

Core Hypotheses of Systems Model for Nonprofit Financial Performance

Variable Set	General Hypothesis	Associated Hypothesis Number(s)
Resource Dependence and Institutional Pressure	H _O : There is no significant relationship between resource dependence and institutional pressure. H _A : There is a significant relationship between resource dependence and institutional pressure	1
Resource Dependence and Strategic Choice	H _O : There is no significant relationship between resource dependence and strategic choice. H _A : There is a significant relationship between resource dependence and strategic choice.	2 – 7
Institutional Pressure and Strategic Choice	H _O : There is no significant relationship between institutional pressure and strategic choice. H _A : There is a significant relationship between institutional pressure and strategic choice.	8 – 13
Financial Performance and Resource Dependence	H _O : There is no significant relationship between financial performance and resource dependence. H _A : There is a significant relationship between financial performance and resource dependence.	14 – 16
Financial Performance and Institutional Pressure	H _O : There is no significant relationship between financial performance and institutional pressure. H _A : There is a significant relationship between financial performance and institutional pressure.	17 – 20

Variable Set	General Hypothesis	Associated Hypothesis Number(s)
Financial Performance and Strategic Choice	H _O : There is no significant relationship between financial performance and strategic choice. H _A : There is a significant relationship between financial performance strategic choice.	21 – 44
Financial Performance and Resource Dependence, Institutional Pressure, and Strategic Choice	H _O : There is no significant relationship between financial performance and factors of resource dependence, institutional pressure and/or strategic choice. H _A : There is a significant relationship between financial performance and factors of resource dependence, institutional pressure and/or strategic choice.	45 – 48

Significance of the Study

The research offered a significant contribution to the body of work on nonprofit adaptation and sustainability in the following ways: (a) extended scholarly inquiry related to the effect of environmental context on nonprofit behavior to include more specific consideration of strategic action; (b) applied financial assessment as a proxy for organizational effectiveness; and (c) explored variables of immediate relevance to nonprofit practitioners and leaders in terms of financial performance. To summarize, the study extended current research and explored issues of contemporary interest to nonprofit leaders and their organizations.

For example, a review of the research on the effects of resource dependence and/or institutional pressure on organizational action revealed a resurgence of inquiry related to these topics within the most recent decade (e.g., Balsler & McClusky, 2005; Jones, 2006; Townsend & Campbell, 2007). Among studies in this domain, exploration of organizational strategic adaptation to environmental conditions clearly captured the interest of contemporary scholars (e.g., Alexander, 2000; Crittenden, 2000; Foster & Fine, 2007; Golensky & Mulder, 2006;

Townsend & Campbell, 2007). Despite enhanced attention to nonprofit strategic choice within the literature, some continue to call for more specific attention to strategy and the impact of strategy on nonprofit survivability (Besel, 2000; Rhodes & Keogan, 2005; Walker & McCarthy, 2010), while others advocate specifically for the use of financial measures as an indicator of organizational effectiveness and sustainability (Ritchie & Kolodinsky, 2003; Ritchie & Eastwood, 2006; Trussel, 2002). This study endeavored to apply financial indicators of nonprofit performance, in order to more specifically examine the effects, if any, of resource dependence, institutional pressure, and strategy on nonprofit performance.

Finally, the utility of the research for nonprofit leaders and funding entities seemed to be relevant and timely. Research suggests that nonprofit organizations must find ways to strategically manage a set of unique environmental challenges in order to survive and even thrive (Frumkin & Andre-Clark, 2000; Legree, 2008). The Bridgespan Group (2009) specifically revealed how nonprofit leaders cited funding reduction as an issue of significant contemporary concern, warranting use of financial reserves to cover deficits. Further, specific research elaborated on particular factors of resource dependence and institutional pressure, and how these specific factors could potentially constrain strategy (Gronbjerg, 1991; Young, 2005; Walker & McCarthy, 2010).

Legree (2008), Lawrence (1999), and Rodrigues and Child (2003) highlighted the intentional action nonprofit organizations can take to address challenges manifesting within their influencing environment. Their works exposed the possibility for strategic choice even within highly institutionalized environments. Thus, this study, which used correlational and explanatory models to clarify relationships among resource dependence, institutional pressure, and strategic choice and to examine the effects of these variables on firm financial performance,

offered information for nonprofit leaders and funding entities about specific environment-organization factors that may enable or constrain nonprofit survivability.

Definition of Terms

The following terms, and corresponding definitions herein, guided the study.

Financial Performance. Financial performance was operationally defined in terms of four discrete ratios used by Tuckman and Chang (1991). Tuckman and Chang (1991) originally used the ratios to derive an organizational profile of financial performance. Ratios were later applied as elements of a broader index of financial vulnerability. The Financial Vulnerability Index or (FVI) was developed and applied by Greenlee and Trussel (2000), Trussel (2002), and Greenlee, Trussel, and Brady (2002). Chapter 2 details the strengths and vulnerabilities of the FVI, as well as the rationale to support use of equity (DEBT), operating margin (MARGIN), administrative expense (ADMIN) ratios and revenue concentration (CONCEN) as discrete dependent measures, consistent with Tuckman and Chang (1991).

Institutional Pressure. Institutional pressure is the degree to which normative, cognitive, and regulative mechanisms enable or constrain organizational action. An organization that experiences a high degree of institutional pressure acknowledges significant pressure to conform to beliefs, values, norms, expectations, standards, regulations, practices, policies, and business models articulated by dominant funders and actors in the behavioral healthcare field. Institutional pressure is measured within the study by an adapted Institutional Vulnerability Index (Bielefeld, 1992a), which conflates two measures of institutional pressure (importance and influence) to form a single composite index.

Resource Dependence. Resource dependence is the degree to which an organization successfully adapts to its environment, demonstrated by its capacity to sustain resources essential

to its viability and survival over time. According to resource dependence theory, an organization able to sustain consistent revenue sources has successfully adapted to the environment (Alexander, 2000).

The study assessed the degree to which nonprofit CBHOs depend on particular sources of revenue through three discrete measures: (a) the Gibbs-Martin revenue heterogeneity index (Bielefeld, 1992a); (b) the Government Contract Concentration Indicator (GCCCI), developed for the study, measured concentration of organizational contract funding supported by local, county, state, and/or federal government entities; and (c) the Medicaid-Medicare Concentration Indicator (MMCI), also developed for the study, measured percentage of commercial (third-party) revenues concentrated in Medicaid-Medicare reimbursement. In addition to measuring revenue heterogeneity, the resource dependence construct captured the level of organizational dependence on government sources of revenues, given the degree to which CBHOs depend on such sources (Wing et al., 2008), and their role in shaping institutional expectations, norms, and standards related to organizational structures and services (Gronbjerg, 1991).

Strategic Choice. Strategic choice is an activity pattern or patterns undertaken by an organization to enhance organizational performance and achieve organizational goals (Hitt & Tyler, 1991). Organizations derive strategic choices by framing and interpreting their environment. The study measured strategic choice through a strategic tactic list developed by Bielefeld (1992b), which encompassed three core categories of strategic tactics used by nonprofit organizations: new revenue, retrenchment, and legitimation. Within the scope of this study, minor adaptations to the survey reflected tactics particular to the behavioral healthcare sector. For example, the research attempted to extend Bielefeld's (1992b) new revenue construct by conceptualizing three specific revenue-seeking approaches commonly engaged by nonprofit

organizations in general and by CBHOs in particular. The following bulleted list includes all strategic tactics addressed within the study.

- ***Overall revenue-seeking*** (OVERALL_REVSEEK) encompassed the full list of revenue-items including REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV.
- ***Revenue-seeking general*** (REVSEEKGEN) encompassed generic organizational assessment activities, including formal community needs assessments and market studies, as well as any other earned income venture related to mission, such as selling goods or services produced by individuals served by the organization, or through some other innovation.
- ***Revenue-seeking government*** (REVSEEKGOV) encompassed tactics related to starting or expanding services through legal contracts with governmental entities or by expanding services expected to generate reimbursement from Medicaid-Medicare.
- ***Revenue-seeking non-government*** (REVSEEKNONGOV) captured tactics related to revenue initiatives focused on non-government sources, such as commercial third-party payments, client fees, or private/corporate donors.
- ***Retrenchment*** (RETRENCH) included activities related to reducing internal costs in order to offset diseconomies of actual or potential loss of funding (Bielefeld, 1992b, p.390). Examples of retrenchment activities included the following: (a) increasing staff work responsibilities; (b) instituting freezes or reductions to pay or benefits, including reduction of work week for paid staff; (c) delaying recruitment for vacant positions or eliminating vacant positions.
- ***Legitimation*** (LEGIT) strategies included actions taken by the organization specifically designed and intended to mold the norms that govern funding or to show influential external audiences, including funders, that the organization conforms to existing norms and standards (Bielefeld, 1992b, p.390). Examples of legitimation strategies included the following: (a) publishing work related to services in a journal or presented at conference; (b) collaborating with funders on industry-related projects; and (c) seeking to make services appear more relevant through marketing and other public relations efforts.

Assumptions and Limitations

Introduction

This section frames a series of assumptions according to four discrete categories. The first category conveys assumptions related to the paradigmatic perspective and methodological

approach that guided the study. The second category substantiates the selection of independent and dependent variables. The third addresses the population of interest—community behavioral healthcare organizations—and clarifies how its selection extended prior research on the effects of resource dependence, institutional pressure, and strategic choice on nonprofit survivability. The fourth and last category highlights issues related to survey research, with specific attention to the following: (a) unit of analysis; (b) centrality of the executive as respondent and proxy for the organization; and (c) accuracy of survey responses. Finally, the section concludes with an assessment of potential limitations affecting internal and external validity of the study.

Assumptions Related to Paradigmatic Framework and Methodological Approach

A post-positivist ontological perspective (Creswell, 2003, p.7), guided by tenets of critical realism (Trochim, 2006), and a systems-oriented methodological approach (Katz & Kahn, 1978) supported the study. Positivism, in its purist form, assumes an objective world capable of being revealed through specified deterministic relationships verified through reliable and precisely measured variables (Gephardt, as cited in Swanson & Holton, 2005, p. 20); differently, post-positivism also acknowledges an objective reality, but challenges the notion of absolute truth (Creswell, 2003, p.7). According to post-positivism, objective reality exists but may not be easily apprehended; consequently, variable relationships viewed from such a perspective are likely to be considered as probabilistic (or stochastic) rather than deterministic (Arbnor & Bjerke, 1997).

Further, when social behavior is of interest, as is the case in the current study, absolute or causal claims are not possible (Creswell, 2003, p.7). Critical realism is a specific form of a post-positivism ontology and emphasizes the potential fallibility of observation. Critical realism challenges the absolute ability to know reality with certainty (Trochim, 2006).

Assumptions of post-positivism and associated stochastic relationships support the systems-oriented methodological approach used within the current study. Systems models, by definition, delimit variables to a discrete number of elements among the many possible existing elements within the broader system (Arbnor & Bjerke, 1997). This type of modeling of real systems seeks to concurrently reveal how the organization and environment interact, as well as the ways in which the organization seeks to adapt to the broader environment in order to enhance competitive positioning (Arbnor & Bjerke, 1997, p. 31). Delimitation of elements, such as those pertaining to resource dependence, institutional pressure, and organizational strategic choice, as set forth in this study's model, magnifies the relevance of these selected variables on a particular effect or outcome, such as financial performance.

Yet, by virtue of the model's design, alternative explanations beyond the scope of the model exist. The forthcoming discussion on internal validity addresses this limitation. For the sake of discussion here, the meaningful selection of relevant variables for the systems model used for this study, supported by past research, partially mitigates the impact of arguments related to alternative explanations. Arbnor and Bjerke (1997) made this point by indicating that elements selected for a systems model must have an "inevitable interaction" with each other and relevance within a particular context (p. 112). Accordingly, the next section addresses the selection of independent and dependent variables for the systems model of financial performance used within the current study.

Assumptions related to variable selection.

The study assumed the relevance of selected correlational (Phase 1) and independent (Phase 2) variables within the study by recognizing the body of literature related to them. For example, research related to the effects of resource dependence (Bigelow & Stone, 1995;

Froelich, 1999; Pfeffer & Salancik, 2003; Sidel, 1991) and institutional pressure (Meyer & Rowan, 1977; DiMaggio & Powell, 1983; Greenwood & Suddaby, 2006; Mizruchi & Fein, 1999; Smith & Lipsky, 1993) on nonprofit organizational survival has been consistent and relevant for more than three decades. Commercial-type organizations within the sector, including the CBHOs of interest to the study, must continually adapt to fluctuating conditions of resource dependence and institutional pressure in order to survive (Alexander, 2000; Bielefeld, 1992a, 1992b, 1994; Galaskiewicz & Bielefeld, 1998; Jones, 2006; Pfeffer & Salancik, 2003).

The evolution of research on nonprofit strategy, with specific attention to ways organizations successfully adapt to and potentially influence their environments (Alexander, 2000; Balser & McClusky, 2005, Crittenden, 2000), supports the assumption that nonprofit strategy matters and the selection of strategic choice as a correlational (Phase 1) and independent (Phase 2) variable. The study emphasized the notion that nonprofit CBHOs do more than simply respond to their environment; rather, they hold the potential to influence and shape its context (Lawrence, 1999; Sidel, 1991). The intentional quality of nonprofit organizational strategic choice is therefore one of the study's most fundamental assumptions.

The final assumption pertaining to the relevance and selection of variables clarifies the rationale for using measures of financial performance as the dependent variable and proxy for nonprofit organizational effectiveness. While financial measures do not necessarily capture the qualitative aspects of nonprofit performance, researchers increasingly call for their use to enable objective and uniform assessments of financial performance (Ritchie & Kolodinsky, 2003; Trussel et al., 2002). The research assumed a sufficient level of empirical testing of Tuckman and Chang's (1991) financial indicators of equity, operating margin, administrative expense, and revenue concentration, given their consistent application as discrete measures of financial

performance, and as composite elements of the Financial Vulnerability Index (Greenlee & Trussel, 2000; Hodge, 2006; Hodge & Piccolo, 2005; Trussel et al., 2002). Consequently, while some acknowledge financial assessment as a relatively new area of nonprofit study (Trussel et al., 2002), the study assumed a sufficient level of empirical use of financial measures in related studies, justifying use of Tuckman and Chang's (1991) financial measures as dependent measures and proxies for organizational effectiveness and survival.

Assumptions related to population.

In an effort to extend prior research on nonprofit strategic adaptation to conditions of resource dependence and institutionalism, the study acknowledged recommendations offered by Bielefeld (1994), Froelich et al. (2000), and Hager (2001). These studies called for research to examine organizational performance (or survivability) among a homogenous population in order to produce more specific conclusions about factors that specifically contribute to financial strength or vulnerability. A significant body of related research used heterogeneous nonprofit organizations (e.g., Bielefeld, 1992a, 1992b, 1994; Heimovics et al., 1993; Galaskiewicz & Bielefeld, 1998). Recent studies, however, more narrowly examined adaptations engaged by specific nonprofit subsectors. Research pertaining to human and social service organizations (Alexander, 2000; Golensky & Mulder, 2006; Jones, 2006), among which CBHOs are frequently considered a part, has been of particular interest in the last decade.

For example and relevant to this discussion, Alexander (2000) explored adaptive strategies of nonprofit human service organizations, thus narrowing the population of interest to organizations serving children, youth, and families. The population included traditional organizations (e.g., YMCA and the American Red Cross), community-based organizations (e.g., neighborhood centers and social action organizations), and faith-based organizations (e.g., food

banks, homeless shelters, and child welfare services); moreover, while not specified within the study, but suggested by the types of organizations of interest, the entities sampled from the population likely encompassed donative, commercial, and/or hybrid (donative and commercial) types of nonprofit organizations. Thus, even within recent research where population homogeneity was at issue, the diversity of nonprofits involved limited the conclusions drawn from these studies. Given this, there existed a need for additional effort to further examine homogenized populations of interest in order to facilitate meaningful conclusions about the variables of interest.

According to resource dependence and institutional theories that comprised the framework for this study, source and concentration of funding matter because a firm's capacity for strategic change is strongly bound its dependence on stakeholders (Christensen & Bower, as cited in Pfeffer & Salancik, 2003). Consequently, a key intention of the study was to examine the use and effects of varying strategies among a homogenous population of nonprofit CBHOs. The technique for selecting the population of large-sized CBHOs based on specific classification within the United States' National Taxonomy of Exempt Entities was engaged to produce a homogenized population of CBHOs with similar resource and institutional challenges. This technique was designed to facilitate suitable conclusions related to the effects of resource dependence, institutional pressure, and strategic choice on financial performance.

The research also assumed that published financial data pertaining to organizations sampled from the population are contemporary and accurate. Financial data from the Internal Revenue Service Form 990 (IRS 990) were used to formulate two (of the four) financial ratios within the study (i.e., equity and operating margin). Nonprofit organizations within the research have revenues greater than \$10 million and are required to file the IRS 990 by the 15th of the

month after the conclusion of their fiscal year, with a possibility for two extensions. Considering all possible extensions, nonprofit organizations should file their IRS 990 forms for the fiscal year 2012, whether the year ends 6/30/2012 or 12/31/2012, no later than 11/15/2013, inclusive of allowable extensions (GuideStar, n.d.). GuideStar publishes the IRS 990 within 60 days after an organization has submitted the report to the IRS (GuideStar, n.d.).

The study considered financial data within fiscal years 2009 – 2012 and used data from the three most recent years. By design, the researcher could substitute an appropriate year within the defined (2009 – 2012) range in the event an IRS 990 report was missing. IRS data from fiscal years 2012, 2011, and 2010 were optimal.

The final assumption related to the target population was an important one. Large nonprofit CBHOs serve the most severely mentally ill in American society. Individuals served by CBHOs often live among the poor and depend on government support for needed services (Mechanic & Rochefort, 1992; Taube et al., 1990). The research assumed, then, that the CBHOs within the study depended on government funding to some extent, transferred to them through government contracts and grants, as well as through third-party Medicaid-Medicare disbursements (Foley et al., 2006; National Institute of Mental Health, 1999).

The degree to which CBHOs depended on government funding likely varied, and was of particular interest to the study. Institutional pressure for increased professionalization and bureaucratization and loss of organizational administrative autonomy correlates with dependence on government resources (Nielsen, as cited in Froelich, 1999). Consequently, variation in resource dependence, institutional pressure, and organizational strategic choice, and its effect on financial performance of organizations within a homogenized field, will likely extend research on strategic adaptation of CBHOs. Results may reveal nuanced configurations of independent

variables associated with positive or negative financial performance, should such configurations exist.

Assumptions related to survey research.

The final cluster of assumptions pertains specifically to survey research. First, the research design assumed the organization as the unit of analysis. Second, the Chief Executive Officer (CEO), or designee, was the intended respondent representing his/her organization. The focus on CEO responses, or those from designated senior-level personnel, assumed the centrality of the executive and executive-designates as valid substitutes for the organization. Studies by Alexander (2000), Gronbjerg (1991), Heimovics et al. (1993), and Pfeffer and Salancik (2003) support the use of this technique. Third and last, the research assumed that respondents will complete the survey accurately, truthfully, and in accordance with specified directions.

Limitations

Several methodological limitations may impact the research and affect its internal or external validity. First, the research requires an adequate response rate in order to appropriately test for assumptions related to multiple linear regression analysis, including normality, linearity and independence of data, and constant variance of the dependent variable across values of the independent variables (Norusis, 2008). While a comprehensive plan to assist responsiveness was set forth within the study, as discussed in detail in Chapter 3, an insufficient response rate would likely jeopardize accuracy of the regression analysis, and as a result, unfavorably impact the internal validity of the research.

Resource dependence, institutional, and strategic choice theories informed the research. By design, the systems model delimited included variables to align with the supporting theoretical framework. A second and unavoidable limitation to the study is that other plausible

explanations for financial performance or survivability of nonprofit organizations exist. The scope of the study was purposefully narrow in its design in order to enable meaningful conclusions related to variables of proven importance, tested among a relatively homogenous population of CBHOs.

The third limitation pertained to internal validity concerns associated with the use of financial measures as a proxy for organizational effectiveness (and survival). Using financial measures may expose the research to criticism for its failure to consider other forms of organizational effectiveness relevant to nonprofit survivability. Others acknowledged the broad range of potential indicators of organizational effectiveness (Herman & Renz, 1999; 2004). Yet, qualitative criteria of effectiveness, such as fulfillment of mission or stakeholder perception of performance have similarly attracted their share of criticism given the subjectivity of impressions related to them (see Herman & Renz, 2004).

Thus, challenges related to assessing overall nonprofit effectiveness continue to perplex scholars and practitioners. What is clear, however, is that indicators of financial strength or distress are not only interesting to researchers, but also relevant to organizations seeking information related to organizational viability and to funders who want to allocate their dollars wisely (Hager, 2001). In line with this view, the research used financial measures of organizational performance as the dependent variable in order to provide clear financial data related to the CBHOs of interest. After all, without financial performance, other measures of effectiveness may not even be relevant. Organizations need to survive in order to enhance or improve their effectiveness in other ways.

The final limitation involved the use of a homogenous population of CBHOs for the research and generalizations made from this population. Findings from the study will be

narrowly generalizable to large nonprofit CBHOs and therefore external validity is limited. Despite narrowed generalization of results, the specificity of findings may offer enhanced understanding of the effects of resource dependence, institutional pressure and strategic choice on financial performance.

Theoretical/Conceptual Framework

Consistent with prior studies exploring the adaptation and survival of nonprofit organizations within constraining environments (e.g., Bielefeld, 1992a, 1992b, 1994; Gronbjerg, 1991), the study applied resource dependence, institutional, and strategic choice theories to a system model in order to explain their interrelationships, if any, and effect on financial performance. Resource dependence theory describes how organizations with strong economic dependencies are susceptible to demands and controls imposed by the entities on which they depend (Pfeffer & Salancik, 2003). Institutional theory emphasizes isomorphic pressures that influence organizational managerial and technical processes (Ruef & Scott, 1998).

These demands form an organizational field comprised of socially-integrated patterns of behavior (Meyer, 2008). This social order, in turn, sets forth a salient set of beliefs, values, norms, expectations, standards, regulations, practices, and policies, consistently reinforced by an embedded network of economic and sociopolitical interdependencies (Selznick, 1996). A dynamic process pushes the field toward isomorphism, where the field ultimately becomes increasingly homogenized (DiMaggio & Powell, 1983).

Strategic choice theory (Child, 1972) emphasizes the intentionality of top managers on strategic action, their ability to adjust operations to conform to external demands, and concurrently shape the environmental context to support organizational strategy. While supporting studies have incorporated resource dependence, institutional, and strategic choice

theories and associated variables in varied combinations, the body of research seems to reveal how these variables have not yet been examined in relation to nonprofit financial performance (Besel, 2000).

Organization of the Remainder of the Study

Chapter 2 provides a full literature review related to research on relationships among resource dependence, institutional pressure, and strategic choice and their discrete and combined impact on nonprofit financial performance. Chapter 2 also reviews research on the application of firm financial performance as a proxy for nonprofit effectiveness and survivability. Chapter 3 delineates the research methodology, population and sample, design for the study, and the specific ways in which the instrumentation was adapted to align with the target population of CBHOs. Chapter 4 offers description and analysis of data collected using a quantitative method and survey design. Chapter 5 provides a full summary of conclusions and their implications, including strengths and limitations of the research and recommendations for future inquiry.

CHAPTER 2. LITERATURE REVIEW

Introduction

This chapter reviews and synthesizes the body of research related to the systems model of nonprofit financial performance guiding the current study. An institutional perspective on the types of strategic choices executed by nonprofit CBHOs in context of their resource dependencies supports the study. As a result, the systems model for this research involves variables with known relevance to nonprofit organizations (i.e., resource dependence, institutional pressure, and strategic choice) and applies them to a homogenous population of CBHOs through two analytic phases.

The first analytic phase of the current study assesses relationships of resource dependence, institutional pressure, strategic choice, and financial performance to determine their specific relevance among CBHOs. The second analytic phase offers multiple linear regression models of financial performance, with resource dependence, institutional pressure, and strategic choice as independent variables, and DEBT, MARGIN, ADMIN, and CONCEN as discrete dependent variables in four models. The second analytic phase has two models. Phase 2–Model 1 replicates Bielefeld’s (1992a, 1992b, 1994) measures that have been adapted to the nonprofit community behavioral healthcare sector. Phase 2–Model 2 extends Bielefeld by expanding on the resource dependence variable and revenue-seeking strategy. This chapter conveys key points from prior research on four key variables—resource dependence, institutional pressure, strategic choice, and financial performance—and the complex ways these variables intersect to impact nonprofit organizational sustainability.

Theoretical Framework

The current study examined organizational strategic choice and adaptation within a framework of resource dependence and institutionalism. In institutional environments, motivations other than those directed toward improving performance are often at play when determining how an organization should perform in order to thrive (Frumkin & Kim, 2002). While organizations seek to acquire and sustain adequate resources to fulfill missions and achieve organizational goals, they may also execute other types of tactics not directly intended to improve efficiency and performance (Bielefeld, 1992b; Frumkin & Kim, 2002; Meyer & Rowan, 1977). Specifically, some strategies may pertain to legitimizing the organization with individuals and groups with direct or peripheral control of resources (Alexander, 2000; Crittenden, 2000; Froelich, 1999; Miller-Millesen, 2003).

Alexander (2000) emphasized how an organization's capacity to successfully meet demands of dominant stakeholders affects its survival. Organizations able to successfully meet such demands are among the most viable (Alexander, 2000; Durkin et al., 2010). Yet, Alexander (2000) and Herman and Renz (1999) also conveyed how stakeholder preferences and assessments vary. Consequently, strategic choices may conform to some stakeholder preferences and conflict with others.

Conflict can occur when funders assess a particular organizational strategy as one departing from prevailing institutional expectations. Perceptions of mission drift, dilution, and subsequent loss of organizational legitimacy negatively affect nonprofit viability (Froelich, 1999; Frumkin & Kim, 2002). Meeting explicit funding demands must be an important part of an organization's survival strategy (Begun & Kaissi, 2004; Besel & Andreescu, 2003; Bigelow & Stone, 1995).

Questions pertaining to the effects of resource dependence and institutional pressures on strategic choice, and the impact of choice on organizational sustainability rest at the core of the current study. This research brings together theories of resource dependence, institutional pressure, and strategic choice to assess their influence on organizational effectiveness and sustainability. Financial organizational performance, as measured by DEBT, MARGIN, ADMIN, and CONCEN is the dependent variable and proxy for organizational effectiveness and sustainability. The rationale for using ratios to measure financial performance follows later in this chapter.

Resource Dependence Theory

Resource dependence theory and institutional theory are sometimes conceptualized as parts of a broader theory of political economy (Garrow & Hasenfeld, 2010), but are more often considered on their own discrete merits among studies of nonprofit strategic adaptation and survival (e.g., Alexander, 2000; Bielefeld, 1992a, 1994; Durkin et al., 2010; Hager et al., 2004). Nonprofit organizations with strong institutional ties must successfully sustain two types of resources for long-term viability. Political resources, such as power and legitimacy, establish organizational status in a given field; and economic resources, such as direct funding and in-kind supports, are necessary to support the organization's mission and services (Garrow & Hasenfeld, 2010).

Studies on nonprofit organizational adaptation and survival engage resource dependence and institutional theories to shed light on factors related to survival or demise (e.g., Besel & Andreescu, 2003; Chambre & Fatt, 2002; Sowa, 2008; Twombly, 2003). While interrelated, theories of resource dependence and institutionalism address unique elements of nonprofit organizations as they seek to successfully interact with the environment (Oliver, 1991). Pursuing

economic resources aligns well with resource dependence theory; whereas, cultivating resources to enhance power and legitimacy appears consistent with institutional theory (Oliver, 1991).

Organizations successfully legitimized by and within an organizational field often gain valuable resources, which in turn further enable their survival (Pfeffer & Salancik, 2003). Particular studies on nonprofit adaptation and survival explored this dynamic. Bielefeld (1992b, 1994), Chambre and Fatt (2002), Crittenden (2000), Galaskiewicz and Bielefeld (1998), and Twombly (2003) emphasized the notion that dependence on funders intensifies the impact of the preferences and demands conveyed by such funders.

Resource dependence theory explains how organizations become increasingly susceptible to demands and controls imposed by entities on which they depend (Pfeffer & Salancik, 2003). Bielefeld (1992a) referred to the effects of resource dependence as market drivers of organizational action, illustrating how organizations seek to compete by obtaining necessary resources and acting strategically to manage the dependencies created through resource acquisition. According to the resource dependence perspective, sustainable organizations are those best equipped to establish and maintain consistent exchanges with the supporting environment, and build organizational power and legitimacy over time (Bielefeld, 1992a). Self-interest, power, financial resources, and human capital are among the resources to be achieved (Pfeffer & Salancik, 2003).

Many studies on nonprofit adaptation and survival approach the topic of organizational sustainability from a resource dependence perspective (Besel, 2000), and often in conjunction with other theories, including institutional theory (Bielefeld, 1992a). These studies address nonprofit survival and focus on how organizations manage sources and concentration of revenue (Bielefeld, 1994; Besel, 2000; Fischer, Wilsker, & Young, 2007; Foster & Fine, 2007). Some

also explore the effects of revenue decisions on organizational tactics or strategies (Alexander, 2000; Galaskiewicz et al., 2006; Gronbjerg, 1991) and the impact of strategic action on overall organizational viability (Bielefeld, 1994; Besel, 2000; Crittenden, 2000; Foster & Fine, 2007).

Findings from studies on sources and concentration of nonprofit revenue reveal show a need for greater attention to organizational context in their interpretation. One study may espouse benefits of revenue diversification (heterogeneity), revealing how organizations with greater diversity of funding are more likely to survive (Bielefeld, 1992b). Another may reveal strengths related to revenue homogenization (Foster & Fine, 2007). The effects of revenue strategies engaged by a nonprofit organization vary depending on organization type (Chang & Tuckman, 1994).

For example, Hansmann (1987) showed how revenue strategies for donative and commercial organizations differed. Donative organizations may seek out diverse sources of philanthropic funding to maximize revenue opportunities; whereas commercial organizations may successfully concentrate funding to particular sources, given the obligations often associated with commercial payments and the pressing need to stabilize relationships with these payers (Begun & Kaissi, 2004; Bigelow & Stone, 1995; Gronbjerg, 1991). Fischer et al. (2007) highlighted how mission and services affect revenue sources: some nonprofit causes are more appealing than others and as a result, garner greater donative support. Given varied impressions on the ideal revenue strategy, the importance of organizational context should not be understated.

Research by Bielefeld (1994) and Foster and Fine (2007) revealed discrepant findings pertaining to the effects of revenue on organizational viability. Bielefeld (1994) found that across a sample of 228 diverse-type organizations extracted from 1625 organizations listed within an IRS directory of nonprofits from the Minneapolis-St. Paul metropolitan area of

Minnesota, those with heterogeneous funding were more likely to survive. Because organizational types in Bielefeld's (1994) research were randomly selected from a diverse population of nonprofit organizations and thus reflected a broad nonprofit community, the impact of heterogeneous funding on the survival of varying *types* of organizations is unknown; yet, statistics from this study showed overall, how surviving nonprofits increased funding diversity by 27% and non-surviving nonprofits decreased funding diversity by 23% (p. 31). These findings certainly stimulate future questions about how contextual nuances perhaps distinguish effective from ineffective revenue strategies across varying types of nonprofits.

Findings from Foster and Fine (2007) further illustrate the importance of clarifying the type of nonprofit organization (and context) when examining the effectiveness of funding strategies. Foster and Fine (2007) examined funding strategies across nonprofit organizations with gross revenues greater than \$50 million to examine how high-growth nonprofits evolve. This study revealed how organizations able to develop large-scale funding models accomplished this by concentrating revenues to one or two core sources, aligning funding source(s) with organizational mission and beneficiaries, and developing an infrastructure to meet the demands of the concentrated funding model (Foster & Fine, 2007, p. 49).

Importantly, while high-growth nonprofit organizations focused approximately 90% of their revenue to a distinct type of funding source, such as government contracts or corporate donations, these organizations did not rely on a singular payer within that source (Foster & Fine, 2007). High-growth nonprofits diversified their payers within a particular source. Finally, approximately 20% of these high-performing organizations also cultivated an influential secondary source, which comprised approximately 10% of organizational revenues.

Because Bielefeld (1994) and Foster and Fine (2007) examined different nonprofit populations, each arrived at different conclusions about the relationship between revenue heterogeneity and organizational viability. Discrepant findings from these studies fuel, at least in part, the intention of the current study to clearly define the population of interest and operationalize the resource dependence construct. Bielefeld (1992a, 1994) used a Herfindahl-type revenue heterogeneity index, across a broad and diverse population, to measure the percentage of organizational revenue concentrated within each revenue category (e.g., public (government), donative, commercial fees, and others). Foster and Fine (2007) used interview data from 21 of 110 of the largest nonprofit organizations in the United States to record organizational revenue sources and strategies. Government revenue surfaced as the most important source of funding for high-growth nonprofit organizations (Foster and Fine, 2007, p. 52).

From these approaches and findings, the current study integrated three discrete measures of resource dependence to assess level of revenue heterogeneity (i.e., Gibbs-Martin revenue heterogeneity index) and depth of resource dependence on government sources (i.e., Government Contract Concentration Indicator and Medicaid-Medicare Concentration Indicator). A future section of this literature review incorporates a critical analysis of methodological contributions from studies by Bielefeld (1992b, 1994) and Foster and Fine (2007). Measurement approaches from these specific studies informed the operationalization of resource dependence for the current study.

Resource dependence: Government-nonprofit interdependence.

Research by Saidel (1991) and Gronbjerg (1991) explored the character of interdependencies between governmental entities and nonprofit organizations. Saidel (1991)

examined perceptions of resource dependence across 80 nonprofit organizations in four service areas to assess how state funding agencies and nonprofit organizations perceived levels of dependence. Gronbjerg (1991) used an existing database of 128 human service organizations in a large Midwestern city, comprised profiles of organizations with particular types of funding composition and stability, and compared features of organizations across the following six funding profiles: public-stable; public-turbulent; mixed-stable; mixed-turbulent; fee-stable; and fee-turbulent. This study explored the effects of funders on organizational efficiency, mission, organizational decision-making, and business practices (Gronbjerg, 1991). Both studies by Saidel (1991) and Gronbjerg (1991) featured the impact of government dependence on organizational structures and processes, and as a result, directly pertain to the proposed research.

Saidel (1991) explored the nature of funder-nonprofit relationships. Her survey of 80 nonprofit managers and 73 state agency managers measured the intensity of agreement or disagreement with items designed to measure the importance of the resource relationship, presence of available alternatives to the relationship, and level of pressure exerted by funders within the relationship. Generally, states and nonprofits perceived equal levels of resource dependence, with each sector reporting an inability to exert pressure on the other. State agencies reported less dependence on nonprofits because of the ability of such agencies to pressure nonprofit organizations for more resources.

Interestingly, sector findings within Saidel's (1991) research revealed how nonprofit organizations perceived state resources as less important to nonprofit operations, but state entities differently considered their importance to nonprofits at a high level (p. 546). This brings into question how Saidel specifically measured the *importance* construct. Anecdotally, one would imagine nonprofits to perceive their funders as important.

Saidel's (1991) study included an abridged version of the instrument. The instrument narrowly framed the importance construct in terms of degree to which the nonprofit organization *integrated ideas* from the state into organizational policy. The study did not assess revenue dependence as a part of the importance construct. As a result, interpretation of findings must occur with the specific operational definition of the construct in mind.

On the question of revenue dependence in Saidel's (1991) work, organizations did, in fact, report dependence on state agencies, even when financial resources were not at stake. Discussion points on this surprising finding revealed how perceptions of high dependence occurred because of the multidimensional influence of government on nonprofits in terms of financial and social support, and in shaping legislative policy. Overall, results from Saidel, while strongly tied to subjective perceptions of dependence, revealed symmetrical dependence between state and nonprofit entities and suggested how dependence may constrain autonomous organizational decision-making.

Gronbjerg's (1991) case analysis of six human service organizations with varying funding dependencies further revealed how resource dependence influences organizational structure and work (p. 77). Four of the six organizations Gronbjerg (1991) studied over a prolonged period (4 – 11 years) had significant dependence on government sources of funding, with two organizations having more than 80% dependence on government sources, and the other two at 48% and 42% dependence (p. 162). Specifically, Gronbjerg reflected on how nonprofit leaders and managers must possess the following competencies related to assessing and responding to funder expectations: understand the specific contingencies associated with diverse funding sources in order to assess funding opportunities; translate funder priorities into service or program activities that promote agency missions; and coordinate funding relationships with other

agency resources such as staff expertise, information networks, board capacity, and agency structure (Gronbjerg, 1991, p. 161).

Effects of government funding: Stabilization and legitimization.

Exchanges with government funders frequently occur through formal contract relationships (Salamon, 1987; Scheid, 2003), relational contracts (Sclar, 2000), and fees paid through Medicaid-Medicare reimbursements (National Institute of Mental Health, 1999).

Government funding arrangements benefit nonprofits in three core ways. First, they stabilize revenue patterns (Besel & Andreescu, 2003; Gronbjerg, 1991). Second, they create opportunities for collaboration and legitimization by connecting the organization to others within its field (Chambre & Fatt, 2002; Hager et al., 2004; Sowa, 2008). Third, they tend to assist development of organizational infrastructure and professionalization, further increasing legitimacy (Chambre & Fatt, 2002). Legitimizing aspects of exchanges with stabilizing government sources can transform an organization from the business of charity to a charitable business (Foster and Fine, 2007).

In their study on the relationship between government funding and mortality of Indiana Youth Service Boards (YSBs), Besel and Andreescu (2003) explored funding and organizational factors related to survival or failure of YSBs. Data from semi-formalized interviews with 14 stakeholders in the youth service sector revealed ecological, organizational, and funding differences between surviving and non-surviving YSBs. Surviving organizations originated in higher-populated areas and had budgets more than double non-surviving organizations. Similar to findings by Bielefeld (1992b, 1994), and Galaskiewicz and Bielefeld (1998), which measured organizational size in terms of total expenditures, Besel and Andreescu (2003) found that large organizations were more likely to survive.

Similarly, Chambre and Fatt (2002), Hager et al. (2004), and Sowa (2008) also examined the effects of government funding on survival or failure of nonprofits, while likewise considering observed effects of sociopolitical legitimacy that may or may not occur as a result of government funding. Departing from Bielefeld (1994), who described liabilities of organizational newness and smallness, Chambre and Fatt (2002) articulated a theory pertaining to the liability of adolescence, pointing to a unique condition facing certain organizations able to survive their early years, only to struggle or perish in adolescence. Results showed some support for their theory of adolescence, with nearly one-half of closures reported in the study occurring among adolescent organizations with depleted resources.

Chambre and Fatt (2002) identified three core challenges for adolescent nonprofits: (a) securing organizational leadership capable of growing the organization; (b) building an effective organizational infrastructure to respond to new funders through accountability systems; and (c) managing rapid growth spurts while still under-developed. Chambre and Fatt (2002) also highlighted the powerful relationship between organizational legitimacy and survival in their research. They showed how the legitimating ties of influential supporters were instrumental to reversing a city's decision to defund a low-performing program.

Hager et al. (2004) examined a variety of organizational variables (i.e., age, size, use of organization by elites, board prestige, and dependence on government funding) and ecological (niche density) variables through 11 hypotheses related to mortality rates of nonprofit organizations. Among results related specifically to government dependence, older organizations with government funding were more likely to close than older organizations without government funding. This finding departs from conventional wisdom related to the stabilizing benefits of government funding (see Gronbjerg, 1991). Yet, Hager et al. (2004)

explained this surprising finding with the following three points: (a) government funding is uncertain and susceptible to fluctuations based on political regimes and policy; (b) governmental entities may exercise poor judgment in selecting vendors; and (c) increasing demands by government on organizations may choke organizational autonomy.

Hager et al. (2004) did not point to potential methodological explanations, but they could be relevant here. For example, only one-half of the 229 organizations in the sample had any form of government funding. Further, this study did not assess the depth of organizational dependence on government funding, but instead engaged a dichotomous classification method. Within this study, organizations were labeled as 1 if they received any type of government funding and 0 if they received no funding at any point during the study period, 1980 – 1994. Because the degree of government dependence was not assessed beyond this definition, interpretation of the finding that older organizations with government funding were more likely to close than older organizations without government funding must be rendered with an understanding of the researchers' narrow definition of the government dependence construct.

Finally, Sowa's (2008) compelling investigation of the effects of collaboration among childcare organizations examined strategic factors affecting an organization's decision to formally collaborate with another, as well as the effects of collaboration. Sowa (2008) engaged a purposeful sample of organizations involved in a collaborative strategy, and structured the sample based on type of organizational funding (government versus private) and location (urban versus non-urban). Using a mixed methodological approach comprised of data from 60 management interviews, structured observations, client assessments, and document analysis, Sowa (2008) formulated conclusions on organizational motivation to collaborate and the anticipated effects of a collaborative strategy.

The study addressed two specific types of organizations: Head Start organizations strongly reliant on and regulated by influential government entities; and private childcare organizations, strongly supported by parent fees and oriented toward fulfilling market needs. Six of 20 organizations involved in a collaborative arrangement articulated a motivation based on economic resource dependence needs (Sowa, 2008, p. 1016). As conditions of resource uncertainty and turbulence in funding increased, including the loss of federal funding previously used to supplement fees of low-income clients in one particular organization, collaborations increased. Furthermore, organizations that obtained government funding faced an institutional mandate by funders to increase collaboration with other organizations in order to expand services to families, and received a financial incentive to accomplish this (Sowa, 2008, p. 1017).

Sowa (2008) found that resource needs and institutional pressures motivated all 20 organizations to engage in collaborative strategies, although intentions varied depending on assessed gaps in current services (p. 1013). Head Start organizations already had high levels of service quality, given their compliance with regulatory and institutional requirements related to the content and structure of the services they offer. As a condition of government funding, Head Start organizations must satisfy stringent requirements related to curriculum development, outcome measurement, staff education and competence, and classroom quality. Consequently, high levels of technical competence and legitimacy were already associated with these organizations.

Head Start organizations that forged collaborative arrangements with private providers were able to improve their competitive positioning by offering full-day, full-year services, a capacity not previously demonstrated by their organizations. Differently, private childcare organizations, often perceived as glorified babysitting services in the broader community (Sowa,

2008, p. 1013), suffered from a lack of legitimacy. Private organizations were able to enhance legitimacy by partnering with Head Start Organizations, reaping strategic benefits of improved curriculum and staffing associated with their Head Start partners. Overall, findings from this study revealed organizational benefits of strategic positioning, legitimacy, and survival across collaborating entities.

Government-organization contracts.

Governments divest services to the private sector and use competitive procurement processes to enhance cost-savings, improve efficiency and innovation of services, and create flexibility within the overall system, although these desired outcomes do not always occur across all contracted services (Lamothe & Lamothe, 2009). Oftentimes, informal, cooperative, flexible, and interdependent relational contracts occur before or from formal contracts (Sclar, 2000). As organizations deeply embed within institutional contexts, opportunities for (formal and informal) funding arrangements become more likely.

In their research on the procurement system within the Florida Department of Children and Families, Lamothe and Lamothe (2009) found that 80% of contracts occurred through non-competitive processes. Some states, including Florida, establish exceptions from competitive procurement for specialized services, such as mental health services, when expertise is valued over the lowest cost bidder. In these types of settings, the initial contract is relational, with the government entity selecting a provider-organization it values and trusts.

Lamothe and Lamothe (2009) also found that incidence of relational contracting has decreased over time. In 2000 – 2001, only 15.2% of the contracts reviewed in their research occurred through actual competitive processes; whereas 40% of contracts occurred through

competitive processes during 2004 – 2005 (Lamothe & Lamothe, 2009, p. 172). These findings revealed how competitive contracting is on the rise in social service settings.

Contract consolidation is a demand-side phenomenon in contemporary nonprofit contracting, wherein government entities bundle separate, but interrelated services into a few lead agency contracts (Lamothe & Lamothe, 2009). Government funders adopting this practice may reduce the number of vendors available and qualified to bid on new programs, as smaller organizations become crowded out of the competitive process by larger-sized organizations better equipped to fulfill contractual obligations (Lamothe & Lamothe, 2009). With greater dependence on larger organizations, governmental entities tend to pay closer attention to these organizations and become more involved in their business operations (Keating & Frumkin, 2003; Stone, Bigelow, & Crittenden, 1999).

Research by Lamothe and Lamothe (2009) explored findings from prior studies, including Savas (2002), about the hypothesized absence of competition in social service settings. Lamothe and Lamothe (2009) emphasized limitations of prior studies, including how findings from such works were narrowly construed from case studies or surveys, based on a particular program type or jurisdiction. Lamothe and Lamothe (2009) examined more than 6,000 contracts across 121 service areas such as mental health, substance abuse, child protection, and domestic violence organizations (p. 165) in order to ascertain the level of competitiveness within procurement processes and degree to which the contracting process yields outcomes of efficiency and effectiveness.

Key findings by Lamothe and Lamothe (2009) revealed a general trend toward contract consolidation, as the total number of contracts fell from 1,102 in 2003 to 859 in 2004 – 2005 (p. 180). Second, results showed a positive relationship between problematic organizational

performance, as measured by the number of major contract violations, and contract discontinuance, for organizations with initial contracts achieved through relational, noncompetitive channels (Lamothe & Lamothe, 2009, p. 181). Consequently, while organizational legitimacy and institutional entrenchment may help an organization to secure an initial contract, solid performance is required to sustain the contract over time.

Third, organizations with higher proportions of competitively procured contracts were less likely to maintain contracts, illustrating how competitive processes produced generalized vendor turnover, even when performance was not an apparent issue (Lamothe & Lamothe, 2009 p. 182). Overall, their findings showed an increase in competitive procurement processes and accountability for contract performance. Among organizations with many contractual arrangements, some contract loss occurred even in cases without performance problems. To make sense of this finding, Lamothe and Lamothe (2009) pointed to the broad effect of market competition and the specific condition of contract consolidation as supporting explanations.

Contract-based dependencies create a unique set of strategic issues for nonprofit organizations. Providers that rely on government contracts must develop high-level expertise and resources to develop proposals, manage contract obligations, fulfill reporting requirements, and continue operations when government payments are delayed (Gronbjerg, 1991). Oftentimes, government funders draft multi-year contracts with flat (level) funding for each contract year and few of these contracts include increases. This means nonprofit organizations must find ways to fulfill obligations with resources declining in value (Gronbjerg, 1991).

Despite limitations associated with government funding, many providers recognize its stabilizing effect on organizational continuity and development (Gronbjerg, 1991) and legitimizing effect on services (Baum & Oliver, 1991; Sowa, 2008). Gronbjerg (1991), Foster

and Fine (2007), and Sowa (2008) showed how organizations with dependence on government payers and other fee-paying institutions had high-level organizational success. These organizations had consistent surpluses and growing fund balances, achieved through consistent and predictable government funding (Foster & Fine, 2007; Sowa, 2008). Consistent and predictable funding streams also allowed for the creation of centralized and effective organizational control systems, further improving organizational effectiveness and competitive advantage (Foster & Fine, 2007; Sowa, 2008).

Resource dependence and community behavioral healthcare organizations (CBHOs).

Community-based behavioral health organizations are among the set of nonprofit organizations with strong dependence on government funding (Rowland, Garfield, & Elias, 2003). CBHOs encompass nonprofit organizations specifically designed to offer an array of mental health and addiction recovery services to individuals with the most serious mental health illnesses (Mechanic & Rochefort, 1992). Given the severity of illness and/or disability, this population often lives among America's poor and depends on government support for needed services (Essock & Goldman, 1995; Mechanic & Rochefort, 1992; Taube, Goldman, & Salkever, 1990). Expenditure of government funds to CBHOs most frequently occurs through government-provider contractual relationships and/or Medicaid-Medicare disbursements (Foley et al., 2006; Mechanic & Rochefort, 1992; National Institute of Mental Health, 1999; Quinn & Kitchner, 2007). Consequently, nonprofit CBHOs offering services for individuals with serious mental illnesses often depend on government disbursements to fulfill their missions (Foley et al., 2006; National Institute of Mental Health, 1999).

A statistical report on the status of all mental health services through the year 2002 revealed nearly 80% of revenues from services within the United States came from federal, state,

and local government sources, including Medicaid and Medicare (Foley et al., 2006, p. 222). Of the remaining 20% of mental health revenues, 15% came directly from client fees and only 5% from other sources (Foley et al., 2006, p. 222). These data illustrate the important role government assumes in the payment for behavioral healthcare services for individuals with serious mental illness.

Persons with serious mental illness and addiction constitute approximately 11% of Medicaid beneficiaries but account for about one-third of high-cost benefit disbursements (Rowland et al., 2003). Current trends in government funding reveal dramatic reductions in Medicaid and state-funded services (Oss & Hale, 2009). According to a report by the National Governor's Association and National Association of State Budget Officers (2011), 33 states intended to cut Medicaid provider rates in 2012, even while they expected a 3.8% increase in enrollment (p. 11). Furthermore, recent trend research on mental health spending for the period 1986 – 2005 revealed a decline in the share of behavioral health spending among all national health expenditures, dropping from 9.3% in 1986 to 7.3% in 2005 (Mark, Levit, Vandivort-Warren, Buck, & Coffey, 2011, p. 286).

Reductions in government funding can adversely affect the sustainability of CBHOs depending on their services, revenue planning, and operational and administrative structures (Oss & Hale, 2009). Reduction in net income is another serious strategic challenge for nonprofit CBHOs (Wing et al., 2008). Research data show lower net income among organizations within National Taxonomy of Exempt Entities' (NTEE) *health* and *human services* categories, when compared to other 501(c)(3) entities (Wing et al., 2008, p. 178). In a recent survey of nonprofit leaders, perceptions of executives confirmed the financial realities of an increasingly competitive climate: 80% reported funding reductions in 2009 as compared to 52% in 2008; and 48%

indicated their organization used reserves to cover deficits, as compared to 19% in 2008 (Bridgespan Group, 2009).

Overall, governmental revenue sources for behavioral health services are clearly in a state of change (Rowland et al., 2003). As states address budget shortfalls with varied funding arrangements (Verdier, Barrett, & Davis, 2007), CBHOs able to survive this uncertainty will likely sustain funding through adaptive strategic action (Alexander, 2000; Bielefeld, 1994). Findings from Bielefeld (1994) supported this claim, revealing how surviving entities tended to be larger and older organizations that engaged a broader range of strategic (change) responses, and possessed a deeper reserve of human and financial assets, than non-surviving counterparts.

A recent database search of Guidestar.org, a web-based research site for nonprofit organizations, revealed 508 nonprofit CBHOs with revenues greater than \$10 million (see Table 4 in Chapter 3). Applying Bielefeld's (1994) conclusions related to differences between surviving and non-surviving nonprofits, these largest CBHOs should remain viable over time given their size and likely fiscal, human, and reputational assets. Consistent with the resource dependence perspective, fewer CBHOs will likely compete for increasingly scarce resources and organizations best able to successfully manage resource relationships will likely survive and perhaps even thrive, while others may flounder or perish.

Synthesis of methodological considerations from literature on resource dependence.

Three methodological considerations emerged from the literature related to resource dependence of nonprofit organizations. First, while many studies examine resource dependence by using Herfindahl-type measures of revenue heterogeneity and applying categorical measures of government-specific dependence, no singular study offers the requisite level of specificity to support the intentions of the articulated systems model. The systems model engaged by this

study to examine nonprofit financial performance required clear, concise, and relevant conceptualization of the resource dependence construct, as the construct applied to the target population of CBHOs. Second and in particular, the depth of organizational dependence on government funding needs to be measured beyond the categorical options provided by supporting studies (e.g., Frumkin & Kim, 2002; Guo & Acar, 2005; Hager et al., 2004). Third and last, the rationale to support the use of the Gibbs-Martin revenue heterogeneity index (Bielefeld, 1992a) as a valid measure of resource dependence for CBHOs needs to be established.

The literature related to resource dependence of nonprofit organizations reveals quantitative and mixed methodological approaches to assessing dependence. Studies using quantitative measurement of resource dependence commonly engage Herfindahl-type indices of revenue heterogeneity (Bielefeld, 1992a, 1994; Greenlee & Trussel, 2000; Tuckman & Chang, 1991), and categorical techniques, such as applying a dichotomous variable to signify presence or absence of government funding (Hager et al., 2004) or varying degrees of government funding (Guo & Acar, 2005). A common mixed methodological approach involves extracting data from multiple sources, such as interviews, direct observation, and/or historical documents, to formulate organizational case studies.

Case studies then undergo a comparative analysis to reveal differences in organizational resource patterns and/or dependencies. Besel and Andreescu (2003) and Chambre and Fatt (2002) used this approach to compare surviving and non-surviving organizations; Crittenden (2000) used the same technique to compare high, moderate, and low performing organizations; and Durkin et al., (2010) engaged case study to examine the diverse actions activated by long-term-care organizations with strong dependence on Medicare funding.

Frumkin and Kim (2002) used an alternate approach to explore the relationship between government funding and nonprofit efficiency. They applied a multiple-step measurement technique by first dichotomously categorizing organizations as to whether or not they received any type of government funding during the period 1985 – 1995. Frumkin and Kim (2002) then further assessed organizations in terms of the degree to which they relied on government grants or contracts.

A major objective in research is to generate valid inferences (Stone-Romero, 2009, p. 304). None of the approaches used to date appear to fully capture the essence of the focal construct of resource dependence as intended for the current study. Stone-Romero (2009) emphasized how reliable measures free from bias can still have a low level of construct validity because of design shortfalls in the construct's operationalization. Findings from Hager et al. (2004), Frumkin and Kim (2002), and Bielefeld (1992a) exposed how design specifications affect interpretation of results.

As previously discussed, Hager et al. (2004) engaged a dichotomous conceptualization of government dependence. An organization received a variable value of 1 if the entity had any type of government funding and a value of 0 if the entity did not. Depth of dependence was not included in the operationalization of the resource dependence construct. Perplexing results showed how older organizations with government funding were more likely to close than older organizations without government funding; a finding different from Gronbjerg (1991) and Froelich (1999), who highlighted the stabilizing effect of government funding on nonprofit operations. Findings from Hager et al. (2004) should be interpreted (narrowly) in accordance with the manner in which the study defined the *government funding* construct.

Notably, Frumkin and Kim (2002), Hager et al. (2004), and Guo and Acar (2005) focused on government dependence as an important aspect of nonprofit resource dependence. The systems model within the current study similarly considers government dependence as a critical part of resource relationships in CBHOs. The current study addresses a research opportunity noted among the aforementioned studies (e.g., Hager et al., 2004; Guo & Acar, 2005) by providing a clear conceptualization of the degree to which nonprofits depend on government sources of revenue, beyond categorical approaches. The research engages three specific measures to fully conceptualize the resource dependence construct: (a) consistent with Bielefeld (1992a), the Gibbs-Martin revenue heterogeneity index captures the degree to which an organization's revenues are concentrated or diversified; (b) the Government Contract Concentration Indicator (GCCCI), developed specifically for the current study, measures the depth of an organization's dependence on government contract revenue; and (c) the Medicaid-Medicare Concentration Indicator (MMCI), also developed for the current study, assesses the depth of an organization's dependence on government third-party reimbursement.

The most common method for measuring overall resource dependence is the Herfindahl-type index, applied similarly across numerous studies (Bielefeld, 1992a; Fisher et al., 2007; Tuckman & Chang, 1991). Herfindahl-type measures capture the depth of revenue heterogeneity within an organization by assuming equal weights for each possible stream. The index nears 1.0 on the side of complete concentration in one revenue stream, and the lower bound approaches zero. Upper and lower bounds are a function of the number of revenue streams included in the index, and typically, higher index levels reflect greater levels of revenue concentration, whereas lower levels reflect greater levels of revenue heterogeneity (Fischer et al., 2007).

Borrowing from Bielefeld (1992a), the current study shall use the Gibbs-Martin heterogeneity index to measure the resource dependence (revenue heterogeneity/homogeneity) of participating CBHOs. Researchers including Galaskiewicz and Bielefeld (1998), Trussel et al. (2002), and Tuckman and Chang (1991) considered Herfindahl-type indices, such as the Gibbs-Martin revenue heterogeneity index, as valid and reliable measures of revenue heterogeneity. While the Gibbs-Martin index narrowly describes the percentage of organization revenue within each source category of the index (e.g., fundraising/donative, governmental contract, third-party government, third-party commercial, service fees, etc.), the measure does not specifically capture the depth of dependence, warranting the addition of the aforementioned Government Contract Concentration Indicator and Medicaid-Medicare Concentration Indicator to compensate for this gap. These three measures (i.e., Gibbs-Martin, GCCI, and MMCI, addressed at length in Chapter 3, expand on prior conceptualizations of resource dependence by providing data related to revenue heterogeneity of CBHOs, as well as their dependence on government sources of revenue.

Institutional Theory

Institutional theory has a complex history dating back to the mid-nineteenth century (Scott, 2008), but many credit Weber with defining organizational legitimacy as a phenomenon achieved by conforming to formal and social laws (see Deephouse & Suchman, 2008; Johnson, Dowd, & Ridgeway, 2006), and Selznick (1949, 1957) for his seminal conceptualization of institutionalization as a process through which organizations become infused with value beyond their technical efficiencies. As organizations and fields evolve, their structures become increasingly stable, permanent, and institutionalized.

Institutional demands create a salient, normative order to an organizational field. An interdependent network of economic and sociopolitical institutions consistently reinforces this social order (Selznick, 1996). Broom and Selznick (1955) fittingly described institutionalized fields as those wherefrom orderly, stable, and socially-integrated activity patterns emerge from unstable and loosely organized ones. Thus, values, beliefs, norms, standards, expectations, and regulations created by and reinforced by an institutional field are powerful forces that can enable or constrain organizational strategic activity. Institutionalized demands pose a real challenge for nonprofit organizations trying to effectively manage concurrent and oftentimes competing stakeholder mandates (Herman & Renz, 2004; Rodrigues & Child, 2003).

At the core of institutional theory is a social constructivist view of reality, espousing how perceptions of actors and observers instrumentally shape our understanding of the world (Berger & Luckmann, 1967). As a result, social constructions in organizational environments become realized in terms of beliefs, norms, practices, and rules that become “rationalized and mythologized” (Stevens, 2008, p. 64) over time to guide the formation and evolution of institutional contexts (Dacin, 1997; Meyer & Rowan, 1977). Mizruchi and Fein (1999) succinctly described the social constructionist view of institutionalism as follows:

Events occur, but only certain elements of them are catalogued by the participants.

Actors and observers emphasize some moments and ignore others. Through multiple social interactions, the character and meaning of these events take shape, and eventually the events take on lives of their own. With this social construction comes distortion, not necessarily a complete negation of reality, but a modified and selective picture. (p. 654)

Early institutional theorists, such as Selznick (as cited in Scott, 1987), viewed organizational structure as an “adaptive vehicle shaped in reaction to the characteristics and

commitments of participants as well as to influences and constraints from the external environment” (p. 494). Such early thought on institutional effects “tended to downplay the potential for strategic choice, for organizations to actively shape their environments, seeing social rules as taken-for-granted and therefore less malleable” (Pfeffer & Salancik, 2003, p. xv). Organizational fields begin as diverse organisms, but as dominant coalitions form, the field moves toward homogenization or to dominant standards and norms (Mizruchi & Fein, 1999).

As institutional theory evolved into what some call neo-institutional theory (Frumkin & Kim, 2002; Kraatz & Zajac, 1996; Meyer 2008; Mizruchi & Fein, 1999), the notion of the empowered actor replaced its more passive-adaptive predecessor (Meyer, 2008). New institutionalism has a political core and emphasizes cultural diffusion of roles, rituals, and practices, many of which come from government mechanisms, such as licensing, inspection, and regulation frequently associated with government structures (Frumkin & Kim, 2002, p. 2). A forthcoming section on institutional pressure within the population of nonprofit community behavioral healthcare organizations (CBHOs), of specific importance to the current study, addresses the linkage between government funding and institutionalization of a sector, as applied to CBHOs.

DiMaggio and Powell (1983) described the process of field or sector homogenization as institutional isomorphism, emphasizing the tendency of institutionalized organizations to gradually accept and assimilate agreed-upon rules of the field into organizational practices. In rational environments, the pursuit of efficiency drives market and organizational actions (Weber, 1968); but, in institutional environments, the pursuit of power and legitimacy, achieved through organizational congruence with standardized norms, practices, and rules of the influencing field,

often influences positive perceptions of performance (DiMaggio & Powell, 1983; Zimmerman & Zeitz, 2002).

In institutionalized contexts, standards, norms, practices, and rules essentially become a “class of elements” (Scott, 1987, p. 497) that account for the existence or elaboration of organizational structure. Meyer and Rowan (1977) famously coined the phrase “rationalized myth” (p. 347) to describe the evolutionary process through which generalized patterns of beliefs become rationalized to form impersonal prescriptions reflective of particular social purposes, and produce rule-like means to follow them (p. 343). Organizations facing institutional pressure tend to adopt this class of elements, sometimes referred to as *institutional logics* (Alford & Friedland, 1985; Thornton & Ocasio, 1999, 2008), even under conditions when their assimilation fails to necessarily produce efficiencies for such organizations (DiMaggio & Powell, 1983).

Assimilation of institutional elements may produce either technical utility or institutional utility for the organization, or a combination of both (Scott, 1987). The clear point here is that achievement of rational efficiency may not serve as means or end to an organization’s adoption of structures, practices, or programs created and supported within and by its institutional context. Research does show a relationship between the degree to which an organization assimilates institutional practices (regardless of the technical outcomes that emerge as a result) and its legitimacy, power, and positioning within its respective field (Scheid, 2003; Scheid & Greenley, 1997).

DiMaggio (as cited in DiMaggio and Powell, 1983) conceptualized the process of field/sector structuration (or isomorphism) to involve three change mechanisms (coercive, mimetic, and normative) that foster the following field characteristics: (a) an increase in

interaction among organizations in the field, resulting in diffusion of information to relevant stakeholders; (b) an emergence of dominant organizational structures and patterns of coalition; (c) an increase in information related to the field and its elements; and (d) an increase in mutual awareness among field participants that they are involved in a common enterprise. Coercive isomorphism stems from political influences that envelop an organization and its quest for legitimacy within this political context (DiMaggio & Powell, 1983). Coercive isomorphism takes shape through formal (regulative) and informal (persuasive) pressures exerted upon an organization by entities on which the organization depends (DiMaggio & Powell, 1983).

Formal pressures include government regulations (Fennell & Alexander, 1987), contract specifications (Frumkin & Kim, 2002), and other stakeholder mandates (Herman & Renz, 2004; Ruef & Scott, 1998). Informal pressures encompass specific requests or preferences conveyed by resource-holding stakeholders not otherwise stipulated in legal agreements. In such instances, organizations may experience the power of persuasion exerted by an influential funder, field expert, or other stakeholder, which catalyzes the organization to take a particular action understood as preferred or favored by its initiator (DiMaggio & Powell, 1983; Miller-Millesen, 2003).

Mimetic isomorphism involves standardization, replication, and modeling of structures across a field, and often occurs when members of the organizational field do not understand influencing technologies, when goals are ambiguous, or when the resource environment is uncertain (DiMaggio & Powell, 1983). DiMaggio and Powell (1983) consider mimetic isomorphism as a common organizational response to environmental uncertainty. Studies by Galaskiewicz and Wasserman (1989), Kraatz and Zajac (1996), and Townsend and Campbell

(2007) showed how organizations tend to copy practices used by field leaders or experts to mitigate institutional and resource-based uncertainties.

Normative isomorphism occurs through the professionalization of a field (DiMaggio & Powell, 1983). Normative isomorphism encompasses a variety of mechanisms through which institutional beliefs, values, norms, standards, and rules diffuse throughout an organizational field (DiMaggio & Powell, 1983). DiMaggio and Powell (1983) highlighted the formative role training and education, networking, and other sociopolitical actions have in producing a type of closed universe with clear in-group membership characteristics.

Despite the social-like quality of institutional environments, government or community constituencies attached to the organization's task environment are often instrumental in shaping them. Features of the organizational task environment, conveyed by government and other influencing stakeholders within the task environment, often possess a quality of uncontested social acceptance and administrative authority within the relevant field or context (Baum & Oliver, 1991). Townsend and Campbell (2007) examined the power and influence of institutional environments, and used a grounded theory method to examine factors that constrain organizational practices in a homogeneous field of rape prevention programs.

Their study involved interviews with 10 organizations, with open-ended questions pertaining to basic organizational operations, characteristics related to the organization's rape prevention services, procedures for curriculum development, and level of outside influence of community funders and state coalitions. Findings strongly supported mimetic and normative aspects of institutional theory, revealed processes by which organizations became isomorphic with each other, and further showed how the coercive power of funding entities shaped organizational practices and services.

Results revealed 80% of organizations grafted processes and practices directly from other organizations, and 70% of organizations used ideas from other organizations to generate new ideas within their own organizations. Organizations not embedded in the professional network had more innovative practices, and organizations embedded in professional networks often shared similar organizational practices, supporting Lawrence's (1999) claim that in-group membership likely promotes the continuity of an institutionalized status quo. Finally, Townsend and Campbell (2007) found that coercive pressures related to service preferences, imposed by funders, tended to elicit acquiescent responses by organizations dependent on state funding and more resistant responses from organizations not dependent on state funding. Findings from this study show strong support for the impact of institutional pressures on the homogenization of the nonprofit sector of rape prevention organizations.

Institutional pressure on nonprofit organizations.

Institutionalism seeks to explain how social and normative contextual conditions drive organizational action (Zucker, 1983; DiMaggio & Powell, 1983; Meyer & Scott, 1983). A significant challenge for nonprofit organizations involves managing preferences and demands of multiple constituencies (Herman & Renz, 1999). Among organizations dependent on government funding, demands and preferences articulated by funders seem to be among the strategic concerns that matter most (Smith & Lipsky, 1993). Many studies, however, also reveal the need for organizations to respond well to the demands of other stakeholders as well (Balser & McClusky, 2005; Herman & Renz, 1999), as well as the value of managerial skill and diplomacy when managing multiple and conflicting stakeholder pressure (Balser & McClusky, 2005).

Oliver's (1991) typology of responses to institutional pressure reflects a neo-institutional perspective because the schema emphasized the intentional capacity of organizations as they

strategically responded to the demands of their environment. In this work Oliver (1991) noted a lack of research devoted to the adaptive responses of organizations to institutional pressure and called upon researchers to critically review early institutional frameworks, which highlighted the passive role of organizations within institutional environments (see DiMaggio, 1988). Oliver (1991) challenged assumptions of early institutionalists by clarifying intentional ways organizations can and do take action to influence, change, and even resist institutional pressure.

Oliver (1991) revealed five distinct types of organizational strategic response to institutional processes on a continuum of intentional energy directed toward managing the institutional context. An *acquiescent* response encompasses complete compliance with taken-for-granted norms, accepting and obeying rules of the field, and mimicking models promulgated and endorsed by the field. *Compromise* involves activities designed to placate and accommodate institutional elements. This strategic response acknowledges institutional pressures are at work; however, the compromise response attempts to balance institutional demands with organizational goals through negotiation with institutional stakeholders. An *avoidant* strategic response encompasses activities that conceal or buffer organizational nonconformity with institutional norms. Organizations using this approach may seek to loosen their institutional attachments and change goals, activities, or domains due to the constraints imposed by the institutional context. *Defiant* and *manipulative* strategies reflect organizational action that directly contests institutional requirements or tries to shape them, respectively.

The manipulation strategy necessitates organizational understanding and awareness of institutional rules and their value to organizational sustainability and requires dominant positioning of the organization within the institutional context. Legitimation strategies explored by Bielefeld (1992b) and Galaskiewicz and Bielefeld (1998) encompassed tactics activated by

nonprofit organizations to shape and influence institutional environments in order to bridge the organization with its supporting environment. By engaging legitimation activities such as those discussed by Bielefeld (1992b) and Galaskiewicz and Bielefeld (1998), such as trying to make services more relevant to the priorities of funders, seeking endowments or other contributions from prominent stakeholders, and making cash or noncash contributions to support the influencing environment, the organization embeds itself within the field and becomes better positioned to shape the influencing environment. Lawrence (1999) described organizational actions related to shaping institutional contexts by enhancing power and legitimacy as institutional strategies, and asserted how perceptions of power and legitimacy within a field lead to positive attributions of organizational effectiveness. Strategies related to managing sociopolitical aspects of the institutional context really do matter (Lawrence, 1999).

In their study on nonprofit management effectiveness, Balser and McClusky (2005) used a three-phased, mixed methodological approach to distinguish management differences between effective and non-effective nonprofit organizations. The first phase used data from semi-structured interviews with 14 nonprofit executives to construe criteria of effectiveness. The second phase engaged a panel of experts familiar with the organizations to rate them using such criteria.

Finally, the researchers compared two organizations rated at the highest level of effectiveness, with one organization at the lowest level, to distinguish differences in stakeholder management practices by high and low rated organizations. Results showed how effective organizations formulated a consistent thematic approach to managing stakeholder relations, whereas the low performing organization did not (Balser & McClusky, 2005, p. 311). Among

successful organizations, effective rationales focused on the organization's mission and values, or on building relationships and networks related to funding.

Bigelow and Stone (1995) specifically examined organizational responses to coercive/regulative pressures from funders on nonprofits to implement cost saving strategies by changing organizational staffing and productivity policies. This study applied a comparative case study method across four organizations, using data extrapolated from interviews and archival documents related to the following: organizational dimensions of administrative values and skills; dominant coalition values, skills, and internal relationships; and relationship quality between organization and funder, and between organization and other external entities. Bigelow and Stone (1995) characterized organizational responses based on Oliver's (1991) typology of *complete compliance* (e.g., acquiescent and/or compromise strategies), *failed compliance* (e.g., avoidant strategies), *symbolic compliance* (e.g., compromise, avoidant, and/or manipulative strategies), and *resisted compliance* (e.g., defiant compliance).

Organizations within Bigelow and Stone's (1995) study showed a wide range of responses to institutional demands. Organizational responses strongly reflected each entity's distinct approach to managing the external environment. In fact, the way in which each organization's dominant coalition related to funding sources was most influential on the response style engaged by the broader organization.

For example, organizations demonstrating complete compliance or resistance had a strong dominant internal coalition focused on meeting or opposing demands of external constituencies, respectively. The profile for symbolic compliance encompassed a less bounded internal coalition, more active conflict among organizational stakeholders, and multiple ties between organizational stakeholders and a broad range of diverse constituents. Results showed

how organizations with multiple stakeholders used higher levels of symbolic compliance with institutional pressure.

Importantly, Bigelow and Stone (1995) revealed the degree to which an organization incorporates diverse values of external stakeholders into organizational decision-making as the most potent factor related to its response to institutional demands. This perspective suggests, “Responses to institutional pressure are shaped by the extent to which the nonprofit mirrors the diversity found externally and the extent to which the nonprofit reduces or intensifies external diversity through the range of its alignment” (Bigelow & Stone, 1995, p. 191).

Heimovics et al. (1993) explored the effects of the growing partnership between nonprofit organizations and governmental entities, with specific attention to the actions of executives and the level of perceived effectiveness of actions taken. This study used Bolman and Deal’s (1991) frame analysis, which tests the multiple (structural, human resource, political, and/or symbolic) frame orientation of organizational leaders as they interact with key stakeholders in the external environment. From a listing of 90 effective organizations, a panel of experts familiar with the organizations conferred nominations of effectiveness. Organizational CEOs with at least two nominations were defined as effective and 26 agreed to participate. Organizations with one nomination were excluded from the study, and organizations with no nominations were defined as comparison CEOs. Twenty-four comparison CEOs agreed to participate.

Researchers used the critical event interview method to explore actions taken by executives in response to one successful and one unsuccessful event. Executive responses reflecting action-based, observable and discrete behavior were recorded and classified as

structural, human resource, political, or symbolic. One executive from each group (effective and comparison) was unwilling to discuss an unsuccessful event.

Results revealed how effective CEOs operated most frequently within the political frame. These executives discussed the political frame when referring to both successful and unsuccessful events. The comparison group was less likely to use the political frame. Furthermore, effective CEOs also operated from multiple frames more than comparison CEOs. Finally, effective CEOs deemed external critical events as more important than internal events. Overall, results suggested that effective CEOs take an externally-oriented approach to stakeholder management, and thus, more directly acknowledged the impact of institutional relationships on organizational operations.

The aforementioned studies by Balser and McClusky (2005), Bigelow and Stone (1995), and Heimovics et al. (1993) clearly illuminate, at least in part, how institutional factors affect organizational responses, the ways responses can vary, and the manner in which stakeholder perceptions of effectiveness can shape such responses. These studies also show how government funding brings forth associated demands within a particular organizational field. As organizations comply with institutional standards, they fortify external perceptions of legitimacy; however, over time, contextual norms and rules tend to constrain the management arrangements accepted by the social order (Ashworth, Boyne, & Delbridge, 2007).

Institutional pressure has been thought to limit strategic choices and decisions of nonprofit organizations (Alexander, 2000; Bielefeld, 1992a; Jones, 2006) and has been famously described as the “iron cage” by DiMaggio and Powell (1983, p. 147). Organizations engage in a process called “institutional structuration” (DiMaggio, 1982), wherein they increasingly participate in activities related to defining their common enterprise, create inter-organizational

patterns of domination and coalition, and promote awareness of the more formally-defined and bureaucratized organizational field. Thus, through structuration, organizations take strategic action in areas perceived as valuable by the field rather than those designed to enhance efficiencies related to their technical services (Townsend & Campbell, 2007).

Institutional legitimacy.

Institutional theory explains how organizations achieve legitimacy within their given field (DiMaggio & Powell, 1983; Oliver, 1991; Ruef & Scott, 1998). In a comprehensive review of literature related to managing organizational legitimacy, Suchman (1995) distinguished two approaches to the study of organizational legitimacy—strategic and institutional—and noted a vast array of definitions or conceptualizations of legitimacy that tend to cluster among three broad types, *pragmatic*, *moral*, and *cognitive*. Research in the strategic tradition emphasizes ways organizations instrumentally act to garner support; whereas research in the institutional tradition attends to ways sector dynamics create cultural pressures on organizations that oftentimes transcend any single organization's purposive control (Suchman, 1995, p. 572).

Pragmatic legitimacy rests on the self-interested calculations of important organizational stakeholders (Suchman, 1995, p. 578) and involves exchanges between the organization and stakeholders, and degree to which organizational actions reflect and satisfy stakeholder expectations. In pursuing pragmatic legitimacy, organizations seek to achieve positive evaluations of organizational performance and transform them into more generalized perceptions of organizational legitimacy (Suchman, 1995, p. 579). Scott (1995) labeled this type of legitimacy as regulative legitimacy and showed how organizations build positive perceptions of regulative legitimacy by conforming to rules, standards, and other performance requirements promulgated by funders and sector elites.

Attributions of moral legitimacy come from positive perceptions about how an organization altruistically pursues its objectives as measured by evaluations of its procedures, structures, outputs, and leaders (Suchman, 1995). Importantly, an organization's processes and leadership work in tandem to form favorable external perceptions of organizational legitimacy. Scott (as cited in Suchman, 1995) labeled legitimacies related to procedures, structures, and outputs, as procedural, structural, and consequential respectively. Weber (1978) referred to assessments of organizational legitimacy based on leadership charisma and/or actions as a type of personal legitimacy.

Important stakeholders and/or those considered as industry elites shape cognitive legitimacy through overt and affirmative support for the organization (Suchman, 1995). Cognitive legitimacy can also occur through a generalized taken-for-granted understanding of an organization's premium placement within an institutional field (Suchman, 1995). Ruef and Scott (1998) and Scott (1995) referred to this nuanced type of cognitive legitimacy as normative legitimacy. They suggested that organizations achieve this type of legitimacy by assimilating prevailing norms and standards of their field into organizational practices and structures. By doing this, conforming organizations become increasingly isomorphic with others in the same institutional context, and become increasingly valued by its stakeholders.

Research by Herman and Renz (2004) revealed the multidimensional nature of organizational legitimacy in nonprofit fields and showed how perceptions of stakeholder groups vary. Diverse stakeholder groups may articulate a range of views encompassing pragmatic (e.g., regulative), moral (e.g., procedural, structural, consequential, personal), and cognitive (e.g., normative) legitimacy. For example, an organization may achieve a high level of pragmatic legitimacy from funders and regulators given its strong compliance with institutional standards

and regulations; but, client constituencies may confer less favorable ratings of moral legitimacy, focusing perhaps on a perceived failure of the organization to serve a particularly needy group. Depending on stakeholder group and level of interaction with the organization, assessments of cognitive legitimacy may similarly vary, with some considering the organization as a pioneer, innovator, or practice leader in a field, while others holding less favorable views of the organization's status.

Regardless of type, enhanced legitimacy often translates into favorable position among relevant others in an organizational sector or field (Walker & McCarthy, 2010). Organizational legitimacy facilitates a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate with some socially constructed system of norms, values, beliefs, and definitions (Suchman, 1995, p. 574). As a result, sociopolitical legitimacy involves outside institutions and authorities within an already-established organizational field. Ascriptions of legitimacy emerge from dominant stakeholders in the field (Balser & McClusky, 2005; Baum & Oliver, 1991; Herman & Renz, 2004). Such ascriptions frequently pertain to an organization's managerial and technical (service) processes (Ruef & Scott, 1998; Scott, 2003), and contribute favorably to organizational viability (Baum & Oliver, 1991; Bielefeld, 1992a; Ruef & Scott, 1998).

Ruef and Scott's (1998) comprehensive research on 143 hospitals in the San Francisco, California examined the effects of organizational age, size, niche, and ownership-type and an ecological control variable of organizational density, on an organization's managerial legitimacy, technical legitimacy, and survival. The study adopted an institutional approach to legitimacy, operationalizing the legitimacy construct in terms of the number of accreditations and memberships associated with each hospital and used exploratory factor analysis to ensure factors

loaded as anticipated under managerial and technical legitimacy. Managerial legitimacy involved the number of connections to the American Hospital Association (AHA), Blue Cross Association (BCA), California Hospital Association (CHA), and Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Technical legitimacy encompassed the number of linkages with JCAHO, American College of Surgeons (ACS), Medical School (LCME), and Residents Association (ACGME). While factor loadings showed two distinct categories, some sources of legitimacy, such as the ACS, clearly revealed how some entities contributed to both managerial and technical legitimacy. Negative loadings also showed how some linkages elevated one type of legitimacy and reduced another. For example, the “quality-of-care and professional training standards of a medical school accreditation may be inimical to the efficiency standards inherent in managerial legitimacy (and vice versa)” (Ruef & Scott, 1998, p. 891).

Ruef and Scott’s (1998) innovative approach engaged four models of organizational survival. Model 1 addressed all variables, except legitimacy. Findings showed how small hospitals were more likely to exit than larger-sized organizations, a phenomenon called the liability of smallness. Model 2 included variables of managerial and technical legitimacy and findings showed strong association between technical legitimacy and managerial legitimacy and survival. Model 3 explored managerial and technical legitimacy variables at a deeper level, across three distinct healthcare eras—professional dominance, federal involvement (Medicaid-Medicare), and managed (competition) care. Model 3 evaluated the salience or importance of each type of legitimacy within each respective time period. In the era of professional dominance, there was high salience for managerial legitimacy and no salience for technical legitimacy; in the era of federal involvement, results showed high salience of technical

legitimacy and higher salience of managerial legitimacy, as compared to the prior era. The managed care era revealed an intermediate effect of technical legitimacy and the highest level of salience for managerial legitimacy across the three eras.

The final model explored four antecedents of technical and managerial legitimacy: organizational age, size, niche (generalist/specialist), and ownership (for profit/government) (Ruef & Scott, 1998). Organizational age was a positive predictor of technical and managerial legitimacy. Organizational size was positively associated with technical legitimacy and negatively associated with managerial legitimacy. Larger hospitals had less managerial legitimacy than smaller hospitals. Market niche (generalist/specialist hospital) was an inconclusive predictor of technical legitimacy, but was negatively associated with managerial legitimacy. Niche hospitals had substantially lower managerial legitimacy than general hospitals.

Related to organizational ownership, for-profit status was negatively associated with technical legitimacy and managerial legitimacy. Interestingly, the negative association with managerial legitimacy occurred only within the era of professional dominance. For-profit status in eras of federal involvement and managed care was a positive predictor of managerial legitimacy. Government ownership status was a positive predictor for technical legitimacy only. Overall, these findings revealed how both managerial and technical legitimacy have a positive effect on organizational survival; yet, the strength of their effects strongly hinged on features of the institutional context.

Antecedents and effects of organization legitimacy have been examined in various ways, including Ruef and Scott's (1998) abovementioned analysis of organizational linkages with elite bodies of the hospital sector, and Baum and Oliver's (1991) influential study on the effects of

community ties on sustainability of childcare organizations. Baum and Oliver (1991) explored the effect of institutional linkages on the mortality of 1028 childcare organizations licensed in metropolitan Toronto, Canada between the years 1971 and 1987. Mortality rates of day care and nursery schools revealed the exit of 143 day cares and 119 nursery schools. The study considered the following across a series of seven hypotheses: organizational characteristics of age, size, strategy (generalist or specialist), and profit orientation (nonprofit and for-profit); two specific types of community linkages (Purchase of Service Agreements [POSAs] and Site Sharing Arrangements [SSAs]); and environmental conditions of demand and munificence.

A POSA linkage encompasses a special certification enabling the childcare organization to provide subsidized services to children of financially eligible families, paid for by a designated government authority. An organization with a POSA is one that has successfully passed rigorous licensing and inspection visits, and thus enjoys a level of legitimation conferred by the government authority validating the organization as a provider of reliable and high-quality care. A SSA is a different type of linkage, which involves collaboration between the childcare provider and some other community-based educational, social service, or religious organization.

The childcare provider operates its services in space leased or provided by some other community organization; as a result, SSAs may have a heightened level of legitimation, transferred from the host site to the childcare organization by virtue of their site-sharing affiliation. Childcare organizations connected to “institutions that evoke values of compassionate or responsible care, such as churches, well-known social service agencies, community centers, and public schools, reinforce parents’ perceptions that these childcare service organizations are legitimate and reliable providers of high-quality care” (Baum & Oliver, 1991, p. 198).

Seven hypotheses articulated by Baum and Oliver (1991) tested the effects of institutional linkages on organizational mortality and the effects of competition on mortality (especially among younger, smaller, and specialist organizations with greater vulnerability to external pressure). The research specifically examined whether institutional linkages viewed as legitimate by the broader institutional environment significantly reduced mortality as compared to organizations with linkages viewed as non-legitimate. Finally, the research examined if legitimated linkages helped to reduce the risk of failure often associated with organizational change or transformation.

All hypotheses were supported and showed how linkages reduced mortality overall, and mitigated the effects of competition on mortality among young, small-sized, specialist organizations. Furthermore, linkages viewed by the broader institutional environment as legitimate produced lower mortality rates and appeared to reduce risks associated with organizational change. Overall, childcare organizations with either or both types of institutional linkages (SSAs and/or POSAs) exhibited a distinct survival advantage over competing organizations without benefit of these linkages (Baum & Oliver, 1991, p. 213).

Findings by Ruef and Scott (1998) and Baum and Oliver (1991) clearly showed how institutional relations, vis-à-vis organizational linkages and strategic actions, influence perceptions of technical and managerial legitimacy, and in turn, affect organizational sustainability. Ashworth et al. (2007) posited a relationship between degree of assimilation of institutional pressure into organizational practices and an organization's capacity to "escape from the iron cage" (p. 165) of institutional pressure. Their study of public organizations in England distinguished a difference between organizational compliance and convergence with institutional pressure.

Compliance encompasses organizational action in the direction consistent with isomorphic pressures, requires identification of prevailing norms, and implementation of specific organizational strategies designed to reveal congruence between organizational action and institutional mandates. Convergence reflects the embedded effects of organizational compliance across an organizational sector or field. Consistent with DiMaggio and Powell's (1983) conceptualization of isomorphism, convergence reflects how organizations respond to constraining aspects of institutional pressure by becoming similar to one another. Interestingly, and contrary to their assumption that institutional pressure would only peripherally affect organizations in terms of their structures and processes, findings from Ashworth et al. (2007) instead showed how institutional pressures strongly influenced core and substantive organizational elements of culture and strategy.

While relevant to public organizations, these findings provide contemporary evidence of relationships between context and strategy, and thus support conclusions from early thought and research on organizational strategy in institutional contexts by Bielefeld (1992a, 1992b, 1994), Froelich (1999), Galaskiewicz and Bielefeld (1998), and Oliver (1991). These early studies on organizational strategic adaptation to environments with strong resource relationships and institutional pressures remain relevant today. Such studies guide the strategic focus within the articulated systems model. Before moving on to literature on strategic choice in nonprofit settings, the next section provides specific evidence to demonstrate how institutional norms, practices, and legitimacy shape specific features of the CBHO sector and of organizations within this sector.

Institutional pressure, legitimacy, and the community behavioral healthcare sector.

Coercive or regulative pressures, both formal and informal, influence policy and practices in healthcare and human service sectors, including the behavioral healthcare field of interest to the current study. Tied to its dependence on government sources of revenues, the behavioral healthcare sector exists within a highly structured institutional environment. A recent report by the U. S. Department of Health and Human Services (2007) on the administration of mental health services by Medicaid agencies showed how states often centralize their public mental health services under the authority of one state-level agency and one state-level mental health agency.

Some states, including California, Iowa, Ohio, and Utah use county-level mental health agencies that function under the authority of their respective state agency. Other states bifurcate authority across child and adult populations (U. S. Department of Health and Human Services, 2007, pp. 8-12). Centralized state authority leads to the institutionalization of formal industry practices, including utilization data and service reporting (U. S. Department of Health and Human Services, 2007, p. 26).

Community behavioral healthcare industry reporting systems include the Mental Health Statistics Improvement Program (MHSIP) developed in the 1990s, which used the MHSIP Report Card to measure performance initiatives developed during the reform period of that time for providers of community mental health services reimbursed with public funding. The next generation of measures, the MHSIP Quality Report, encompassed 13 *universal* indicators, including consumer outcomes, level of engagement in treatment, and quality of treatment, among 10 others (Smith & Ganju, 2004, p. 61). The MHSIP Quality Report also measured *population-specific* indicators for all adults (e.g., level of peer support and improvement in work

functioning), adults with serious mental illness (e.g., access to new generation medications and availability of illness self-management training), and for all children (e.g., improvement in school functioning; level of social relationships; involvement with juvenile justice system; and availability of illness self-management training) (Smith & Ganju, 2004, p. 62). Finally the MHSIP Quality Report included *setting-specific* indicators in hospitals and inpatient facilities (e.g., use of seclusion and restraint), and community-based systems (e.g., perceptions of access) (Smith & Ganju, 2004, p. 62).

The Uniform Reporting System (URS) is another centralized reporting system for state mental health services funded, in part, through the United States Substance Abuse and Mental Health Services Administration (SAMHSA)/Center for Mental Health Services (CMHS) Federal Community Mental Health Block Grant, the largest single funding source dedicated to mental health services (Lutterman & Gonzalez, 2004). Finally, the National Outcome Measures (NOMS), initiated in 2004, are the most recent measures required of SAMHSA-funded programs (Lutterman & Gonzalez, 2004). Stakeholder groups can access publicly available NOMS data via CMHS Uniform Reporting System Output Tables and compare performance across states on core domains of importance to the United States' community mental health system (United States SAMHSA, n.d.).

The content of the NOMs sheds light on the institutional standards of the community behavioral healthcare sector. For the adult mental health sector, as an example, state and federal funding entities monitor utilization rates, adult employment, service satisfaction, hospital readmission rates, housing status, social connectedness, involvement with the criminal justice system, and use of evidence-based practices, such as supported housing, supported employment, assertive community treatment, family psycho-education, dual diagnosis treatment, illness self-

management, and medication management (United States SAMHSA, 2010). These measures reveal service and performance outcomes of interest to important governmental funders; as a result, providers within the industry often structure service and business practices around these content domains.

The MHSIP Report Card, MHSIP Quality Report, URS, and NOMS reflect regulative and normative standards of service use, access, and quality adopted by behavioral healthcare organizations across the United States since 1996 (Smith & Ganju, 2004). Much research has focused on the impact of professionalization and bureaucratization on organizational structures and practices (DiMaggio & Powell, 1983). Golensky and Mulder (2006) revealed how professionalization and bureaucratization processes instill norms, values, and standards across an organizational field, enabling their continuity and steady maturation.

Organizations able to meet institutional standards and fulfill formal and informal expectations of constituencies tend to build reputational distinction with funders (Balsler & McClusky, 2005; Jones, 2006). With an entire industry focused on similar practices, services, and structures, a strategic dilemma for organizations embedded within an institutionalized field involves finding ways to reflect institutional standards while achieving strategic differentiation across a field of similar organizations.

Since the passing of the Patient Protection and Affordable Care Act (PPACA) on March 23, 2010, SAMHSA, the federal authority on behavioral healthcare services, initiated its new platform for all SAMHSA-funded programs to encompass reformed recovery domains, elements, outcome data, and curricula, all components of a redesigned healthcare system (Hyde, 2011). The five-step SAMHSA change model articulates the following process of institutionalization of new reforms: (a) *innovation*, which describes concepts, underlying research, and evidence-based

practices; (b) *translation*, which encompasses demonstration programs, curriculum and policy development, and financing models and strategies; (c) *dissemination*, which leverages technical assistance, policy academies, practice registries, social media, publications, and graduate education; (d) *implementation*, which highlights capacity-building, infrastructure development, policy change, workforce development, and systems improvement; and (e) *wide scale* adoption by Medicaid, Medicare, SAMHSA block grants, private insurance, and other governmental entities (Hyde, 2011). Notably, this process strongly reflects processes of coercive (regulative), mimetic, and normative isomorphism articulated by DiMaggio and Powell (1983) in their description of the ways in which fields become homogenized and organizations isomorphic with one another.

The process described above reflects the professionalization of the industry. Prescribed educational curricula and programs to institutionalize new reforms diffuse norms throughout the behavioral healthcare system. Linkage of regulative policy with funding enables total adoption. Given the widespread normative and financial effects of this expansive change initiative on CBHOs, strategic responses to institutional pressure are vitally important to organizational sustainability.

Synthesis of methodological considerations from literature on institutional theory.

Three core methodological influences emerged from the literature on ways organizations successfully manage institutional pressure within nonprofit contexts. Consistent with a neo-institutional perspective, the current study assumed that organizational strategic action can influence both environment and organization in institutionalized sectors. Second, the current study also assumed the centrality of the executive in managing institutional effects. Third and last, the research extrapolated and adapted measures of institutional pressure and legitimation

strategies from prior research by Bielefeld (1992a, 1992b) and Galaskiewicz and Bielefeld (1998), considered as seminal studies examining the effects of organizational and environmental factors on nonprofit performance and sustainability. This section reviews these three influences to lend support for the systems model for organizational financial performance created for this study.

Effectuating change within an institutionalized field presents organizations with a unique set of challenges, especially under conditions where the organization has a strong dependence on funders who also play a role in shaping and enforcing institutional rules and practices (Greenwood, Suddaby, & Hinings, 2002). An earlier section on the role of government funders in shaping norms, policies, and requirements in the community behavioral healthcare sector illustrated this point well; yet despite these pressures, many researchers strongly espouse the intentional capacity of organizations to take action and successfully shape their environment and perceptions of significant stakeholders within this environment (Balsler & McClusky, 2005; Heimovics et al., 1993; Guo & Acar, 2005; Lawrence, 1999). Strategies that successfully embed the organization within a field enable the entity to integrate institutional preferences, mold perceptions of legitimacy, and position the organization to effectuate sector-level changes (Lawrence, 1999).

Lawrence (1999) postulated how organizations able to understand and demonstrate “reciprocated typifications” (p. 164) of field rules and other prevailing rational concepts, and establish and cultivate in-group membership, might be best able to reproduce existing institutional structures and also assume a lead role in field-level structuring or restructuring. Organizations able conform to institutional rules while concurrently shaping them may likely realize competitive advantages within the field (Lawrence, 1999). These advantages take shape

in the form of revenues, legitimacy, impression management, control of field discourse, and access to important political and business mechanisms (Lawrence, 1999).

Others differently asserted how organizations at the periphery of a field can best change the field (Greenwood & Suddaby, 2006). Greenwood and Suddaby (2006) conveyed how new ideas typically occur at the margins of a field because “it is there that organizations are less embedded, less privileged, and more exposed to institutional contradictions. Organizations at the field’s center, in contrast, are more informed, continually socialized, better advantaged, and thus more embedded and resistant to change” (p. 29).

Clearly, the impressions of Lawrence (1999) and Greenwood and Suddaby (2006) differ; moreover, because much is still unknown about institutional effects on nonprofit strategic action and the consequences or outcomes of strategies taken by organizations, the systems model created for this study explored these divergent claims in greater depth, as applied to community behavioral healthcare organizations (CBHOs). The model engaged executive insights as a viable proxy for organizational strategic response in order to examine specific strategies used by nonprofit CBHOs (e.g., revenue-seeking, legitimation, and/or retrenchment). The model also aimed to reveal how differences in strategic approach, if any, related to resource dependencies and perceptions of institutional pressure, and affected financial performance.

The literature lends support for considering the executive as a viable proxy for organizational performance (see Alexander, 2000; Balser & McClusky, 2005; Bielefeld, 1992a; Gronbjerg, 1991; Heimovics et al., 1993; Jones, 2006). Heimovics et al. (1993) explained this in terms of the complexity of political and funding challenges confronting nonprofit organizations and the instrumental role the chief executive officer assumes in understanding these challenges and taking action to manage them. Furthermore, the executive is responsible for successful and

unsuccessful results, is at the center of the organization where information flows in and out, assumes the prime position within the organization to understand and act upon the external environment, and is uniquely empowered to shift dependencies of the organization by managing resources and the political environment (Heimovics et al., 1993).

Studies on institutional environments and their effect on organizations reveal their power and complexity, and how organizational compliance with demands of external dominant actors affects viability and sustainability of the nonprofit enterprise (Alexander, 2000; Besel & Andreescu, 2003; Bigelow & Stone, 1995). Schneiberg and Clemens (2006) described how the decision to measure institutional effects within a single industry rests on researchers' judgments concerning categories of relevance for organizations included in the analysis (p. 202). The articulated systems model does not assess the content of institutional pressure per se, such as specific demands for services/programs, staffing arrangements, clinical technologies, outcome measures, or business practices, as examples, but rather examines only the level of pressure an organization perceives emanating from stakeholder demands.

The *content* of institutional pressure does not fall within the scope of the study's current system model; instead, the research investigates the effects of institutional pressure on five organizational domains—strategic goals, organizational structure, organizational operations, types of clients served, and types of services/programs—described vis-à-vis a quantitative index of institutional vulnerability (i.e., IVI) introduced by Bielefeld (1992a). The IVI, originally designed by Bielefeld (1992a), applied to a heterogeneous population of nonprofit organizations. The index can be successfully adapted for sector-specific research. Chapter 3 includes a thorough discussion on the adaptation of the IVI.

Finally, the systems model engaged for the current study extrapolated from the literature on institutional legitimacy by evaluating if and how pressures on organizations to adopt legitimated practices and/or programs really affected their strategic actions and financial outcomes. The model integrated strategic tactics that reflected the value of organizational legitimacy in the nonprofit sector. In accordance with the strategic approach to organizational legitimacy, which assumes the intentional capacity of organizations to act upon the environment, the current study measured organizational use of legitimation strategies (Bielefeld, 1992b; 1994; Galaskiewicz & Bielefeld, 1998) as one of three core strategic tactics commonly used by nonprofit organizations to promote sustainability.

Bielefeld (1992b; 1994) constructed a strategic tactics list to measure organizational adoption of legitimation, retrenchment, and revenue-seeking strategies used by nonprofits to promote viability and sustainability. The current study extrapolated from Bielefeld's (1992b; 1994) strategic tactics, and adapted the strategic tactics list to more closely align with the community behavioral healthcare sector. The next section discusses revenue-seeking, legitimation, and retrenchment, strategies. Chapter 3 includes a full discussion of the adaptation of the strategic tactics list for the current study.

Strategic Choice Theory

An interest in the effects of strategic actions undertaken by organizations to remain viable guided the design of systems model created for the current study and informed the development of the strategy component within the model. The strategic choice perspective emphasizes intention and agency of top organizational managers and their capacity to respond to and shape external influences (Child, 1972). Aligned with contributions from Galbraith (1973), Lawrence and Lorsch (1967), and Weick (1969), strategic choice theory highlights strategic fit between

organization and environment as fundamental to organizational strategic management. Many have called for systematic examination of strategy content and the various ways organizations seek to align with their external environment (Burton et al., 2002; Donaldson, 2001; Ginsberg & Venkatraman, 1985; Ray, 2004).

Across studies on ways nonprofit organizations adapt to external influences, three discrete streams of inquiry emerge, each explaining the ways nonprofits adapt to environmental factors with increasing detail. The first stream examines broad-based types of organizational response to issues of resource dependence and/or institutional pressures within the nonprofit sector. Examples of broad-based strategies include bridging (DiMaggio & Powell, 1983; Fennel & Alexander, 1987; Meyer & Rowan, 1977), boundary-spanning (Alexander, 2000; Bielefeld, 1992a; Fennel & Alexander, 1987; Galaskiewicz et al., 2006; Thompson, 1967), and buffering (Meyer & Rowan, 1977; Thompson, 1967). In this same broad-based tradition, others expanded on specific techniques of bridging, boundary-spanning, and buffering by creating typologies of organizational responses that encompass them (e.g., Oliver, 1991; Bigelow & Stone, 1995).

The second research stream investigates specific strategic choices or tactics available to and used by nonprofit organizations, highlighting ways nonprofits manage their relationships with important funders (Balsler & McClusky, 2005; Bielefeld, 1992b; 1994; Besel, 2000; Frumkin & Galaskiewicz, 2004; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006; Gronbjerg, 1991; Heimovics et al., 1993). The final stream focuses on organizational adaptation to field-level changes, with notable attention to ways organizations manage specific changes imposed by their funders (Durkin et al., 2010; Sowa, 2008; Twombly, 2003). This section reviews important scholarly contributions related to these three primary streams, with a focus on the second, given that the systems model used for the current study extrapolated from Bielefeld

(1992b, 1994) and Galaskiewicz and Bielefeld (1998) to measure organizational use of a specific set of revenue-seeking, legitimation, and retrenchment strategies or tactics. The section concludes by synthesizing methodological influences from the supporting body of research on nonprofit strategy that directly informed the design of the current study.

Generalized adaptive responses of nonprofit organizations.

Seminal works by Meyer and Rowan (1977) and DiMaggio and Powell (1983) on the ways institutional environments shape organizational structures and actions are among the earliest theorizing on how organizations take action to meet institutional demands in ways that support rather than subvert organizational goals. Alexander (2000) revealed how goal displacement or distortion occurs from nonalignment between an organization's distinct competency and available funding opportunities. Organizations oftentimes modify or shift services to match funding opportunities, which can potentially dilute their mission, a phenomenon referred to as mission drift or mission creep (Froelich, 1999; Frumkin & Kim, 2002).

Dilution of mission erodes organizational legitimacy and some consider such erosion as a significant threat to organizational sustainability (Froelich, 1999; Frumkin & Kim, 2002). Consequently, an organization's capacity to align its mission and task environment to funding opportunities (Besel & Andreescu, 2003) while also responding to explicit demands of funders in a manner perceived as appropriate and favorable (Bigelow & Stone, 1995) are vital to organizational viability. Many consider these concurrent processes as a delicate dance that occurs between the nonprofit organization and its supporting environment (Bigelow & Stone, 1995; Crittenden, 2000; Deephouse & Suchman, 2008; Herman & Renz, 2004; Oliver, 1991).

Organizations commonly engage responses of bridging, boundary-spanning, and buffering to effectively manage their position within highly elaborated institutionalized contexts (Scott, 2003). Bridging involves actions enabling the organization to become isomorphic with its environment, frequently achieved by assimilating rules, practices, and structures favored by the institutional environment within the organization's infrastructure (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Sowa, 2008). Boundary-spanning responses link the organization with its supporting environment. Many legitimation strategies articulated by Bielefeld (1992b; 1994) served this purpose. Linkages with the environment help to reduce environmental uncertainty, provide an avenue to critical resources for the organization, and enable co-optation of institutional practices that enhance organizational legitimacy (Scott, 2003).

Buffering responses protect the organization's technical core or task environment from institutional pressures (Scott, 2003). Organizations buffer their technical core by engaging in activities designed to reflect, support, and even perpetuate the continued proliferation of *rationalized myths* (Meyer & Rowan, 1977), those tenets and practices of the social structure that become embedded institutionalized elements of a field to the degree that they become taken-for-granted understandings (Meyer, 2008). Buffering occurs through the elaboration of relational networks, participation in the collective environment, and degree to which an organization assumes a lead position among the collective (Meyer & Rowan, 1977). Importantly, Meyer and Rowan (1977) highlighted the following:

Organizational success depends on factors other than efficient coordination and control of productive activities. Independent of their productive efficiency, organizations which exist in highly elaborated institutional environments and succeed in becoming isomorphic with these environments gain the legitimacy and resources needed to survive. (p. 352)

As described so succinctly by Meyer and Rowan (1977), generalized organizational responses of bridging, boundary-spanning, and buffering are not directly connected to creating organizational efficiencies. Instead, these responses help to shape perceptions of success through sagacious conformity with norms and practices legitimated by the field (Meyer & Rowan, 1977, p. 352). Organizational leaders and managers assume primary responsibility for shaping perceptions of influential stakeholders (Alexander, 2000; Bielefeld, 1992a; Heimovics et al., 1993; Jones 2006) and often engage a variety of bridging, boundary-spanning, and buffering responses to accomplish this (Oliver, 1991).

As previously mentioned earlier in this chapter, works by Oliver (1991) and Bigelow and Stone (1995) conveyed typologies of responses used by organizations to manage and influence perceptions of influential stakeholders. A more recent study by Durkin et al. (2010) engaged Oliver's (1991) typology (acquiescence, compromise, avoidance, defiance, and manipulation) to explore tactics used by Inpatient Rehabilitation Facilities (IRFs) in response to a new Prospective Payment System (PPS) and its associated regulatory requirements. The purpose of this study was to formulate an industry-specific predictive model of the ways organizations respond to institutional pressure for industry-level change. A later section of this review conveys findings from this study; yet, the ways organizations used a variety of bridging, boundary-spanning, and buffering techniques, ultimately conceived by the researchers to form particular acquiescent, compromise, avoidant, or manipulative organizational response pattern (Durkin et al., 2010), are worthy of some attention here.

For example, a case analysis of a particular organization in the study showed an overall compromise approach produced from bridging and buffering actions (Durkin et al., 2010). The organization offset financial losses from the capitated PPS by using other parts of its medical

system to provide and reimburse particular services that would have been previously provided and reimbursed exclusively through the IRF (Durkin et al., 2010). Under the new PPS, the admitting facility would refer a new patient needing diagnostic services into its acute care unit (rather than directly to the IRF) in order to receive payment for testing services (not covered within the IRF). In the event the patient was admitted straight to the IRF, diagnostic services provided under the umbrella of IRF care and its associated PPS system would be a part of the capitated rate based on the patient's assignment to a case mix group (CMG). The organization's strategy to use other resources in its system to provide costly diagnostic services buffered the agency from institutional perceptions of nonconformity while also affording the capacity to realize revenues from diagnostic testing.

In addition to changing how diagnostic services were managed, the organization also engaged a second strategy requiring professional staff to use more consistent and sensitive clinical assessment practices within its IRF. By increasing the frequency and intensity of assessment, the organization sought to more carefully capture symptoms and conditions that might likely push the patient into a CMG reimbursed at a higher rate. Through these two adaptive tactics, the organization successfully decoupled its technical environment (actual healthcare services) from its institutional environment (new PPS practice and reimbursement standards). The organization also bridged its goals with those of institutional stakeholders by conforming to PPS requirements. Overall, the compromise approach applied by this particular organization shows the value of engaging both bridging and buffering strategic tactics to manage institutional pressures (Durkin et al., 2010).

Strategic tactics.

Among the most comprehensive streams of literature related to the effects of resource dependence and institutionalism on nonprofit organizations are studies focused on adaptive (strategic) actions executed by organizations to meet resource needs and successfully manage institutional demands (Alexander, 2000; Baum & Oliver, 1991; Bielefeld, 1992b, 1994; Bigelow & Stone, 1995; Galaskiewicz & Bielefeld, 1998; Galaskiewicz et al., 2006; Gronbjerg, 1991; Jones, 2006; Saidel, 1991). Included among studies on nonprofit strategy are those that made an effort to distinguish effective from ineffective strategies under varied environmental conditions (Alexander, 2000; Balser & McClusky, 2005; Bielefeld, 1992b; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006; Walker & McCarthy, 2010). A review of research on organizational sustainability and survival reveals revenue enhancement, legitimation, retrenchment, and managerial professionalization among the most frequently observed strategies used by nonprofit organizations; however, factors such as distinct competence (Alexander, 2000; Crittenden, 2000), resource dependencies (Alexander, 2000; Bielefeld, 1992a, 1992b, 1994; Foster & Fine, 2007; Galaskiewicz & Bielefeld, 1998; Gronbjerg, 1991), and institutional demands (Alexander, 2000; Bielefeld, 1992b; Jones, 2003, 2006) affect their usage.

Revenue enhancement tactics involve actions and structures designed to cultivate revenue sources and quantities (Golensky & DeRuiter, 2002; Guo & Acar, 2005; Sowa, 2008).

Legitimation tactics broadly encompass actions intended to enhance perceptions of the organization's status when compared with competitors (Alexander, 2000; Barman, 2002; Bielefeld, 1992b, 1994; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006; Ruef & Scott, 1998). Retrenchment tactics involve internally-oriented organizational practices designed to promote and increase efficiencies (Bielefeld, 1992b, 1994; Galaskiewicz & Bielefeld, 1998;

Golensky & Mulder, 2006); and managerial tactics improve organizational leadership and/or influence external perceptions of the capacities of organizational leaders and managers (Galaskiewicz & Bielefeld, 1998).

Revenue-seeking tactics.

Nonprofit organizations seek to consistently expand revenues, but must consider new opportunities in relation to the organization's distinct competence and/or capacity for growth (Alexander, 2000; Crittenden, 2000). Organizations considering new revenue sources must also consider such opportunities in relation to current resource dependencies (Alexander, 2000; Bielefeld, 1992b, 1994; Foster & Fine, 2007; Galaskiewicz & Bielefeld, 1998; Gronbjerg, 1991) and institutional demands (Alexander, 2000; Bielefeld, 1992b; Jones, 2006). Gronbjerg's (1991) research used case study analysis of six organizations to examine the efficacy of strategies engaged for sustainability. This study set the stage for later research on how organizations manage resource dependencies and institutional pressure to sustain competitive advantage.

Gronbjerg (1991) emphasized how successful organizations closely align their mission with community needs and funding, sustain resource flexibility to cushion against potentially disruptive funding jolts, and leverage networking and boundary-spanning activities to enhance legitimacy and cultivate new resources. Organizations with many important funding sources often experience challenges related to sustaining well-coordinated relationships with funders because of the substantial organizational resources needed to accomplish this. Consequently, organizations with important resource relationships seek to promote exceptional intra-agency communication between service and administrative personnel.

Intra-agency communication enables alignment of service needs with funding accountabilities (Gronbjerg, 1991). Organizations may also repackage their services to highlight

alignment between services and funder priorities. In some cases, organizations may simply obtain funding through an accidental approach, where the organization stumbles upon an opportunity and then tries to assimilate the opportunity into the organization's mission (Gronbjerg, 1991).

Gronbjerg (1991) also showed specific ways nonprofit organizations cushion themselves against disruptive changes in funding. First, they develop unrestricted supporting sources of revenue. Second, they seek new and predictable markets for commercial services; although, Foster and Bradach (2005) questioned the viability of earned-income opportunities in their trend analysis of IRS 990 forms for the period 1991 – 2000.

Foster and Bradach (2005) found that most nonprofits with earned-income strategies had trouble making such ventures profitable (p. 95). In a survey of randomly-selected nonprofits with philanthropic funding for an earned-income venture, 71% labeled their ventures as unprofitable, 24% as profitable, and 5% as break-even (Foster & Bradach, 2005, p. 96). Foster and Bradach (2005) further posited how rhetoric affirming the benefits of earned-income opportunities in nonprofit organizations often comes from a tendency among nonprofits to overlook or undercount commercial ventures' operating costs, especially management, administrative, and facilities expense.

Finally, Gronbjerg's (1991) research featured legitimation tactics designed to cultivate and sustain institutional relationships, as well as retrenchment tactics (e.g., centralization of contract reporting systems) to maximize revenue efficiencies within the organizations. Her work emphasized the legitimating value of networking with funders to protect existing relationships and cultivate new ones, and similar to Heimovics et al. (1993), observed the unique role of the organizational executive in forming and sustaining these relationships. Gronbjerg (1991)

revealed how nonprofits rarely voluntarily choose to network with competitors because of how this action can compromise professional autonomy. Gronbjerg (1991) further explained how organizations often engage in joint programs only when urged by a funding or institutional mandate.

Sowa's (2008) findings on the motivations of collaborating childcare organizations in New York and Virginia supported Gronbjerg's (1991) assertion. Sowa (2008) revealed how preferences and incentives conveyed by funders influenced the formation of partnerships in the sector. Strategic benefits to collaboration included increased resources and prolonged organizational survival, enhanced institutional legitimacy, and improved strategic positioning (Sowa, 2008).

Findings from Durkin et al. (2010) and Lamothe and Lamothe (2009) further illustrated very specific linkages between funders, their institutional demands, and revenue-seeking actions initiated by organizations to sustain funding and meet institutional mandates. In their research on IRFs, which was detailed earlier in this chapter, Durkin et al. (2010) showed how organizations strategized to meet new institutionalized payment processes and rules, while sustaining existing resource relationships with the government (i.e., Medicare). Research by Lamothe and Lamothe (2009) revealed processes, other than purely competitive ones, affecting government decisions to procure services from particular human service providers above others. As mentioned earlier in the section on resource dependence, government contracts provide a rich revenue resource for many nonprofit organizations (Chambre & Fatt, 2003; Crittenden, 2000); consequently, at times political factors may influence government decisions above other factors that are more firmly based on objective measures of competitiveness (Lamothe & Lamothe, 2009).

In a study on Florida-based contracts funded by the Department of Children and Families (DCF), 80% of initial contracts occurred through non-competitive processes (Lamothe and Lamothe, 2009). Instead, DCF solicited and supported particular organizations to provide highly technical behavioral healthcare services. While 15.2% of total contract spending was competitively bid in fiscal year 2000 – 2001, this reached 40% by fiscal year 2004 – 2005, due to statewide legal and policy mandates urging increased competition (Lamothe & Lamothe, 2009, p. 173). Thus, while competitive procurement processes increased between 2000 and 2005, 85% and 60% of total services procured in those years, respectively, still came about through noncompetitive processes.

Smith and Lipsky (2003) explained how enmeshed government-nonprofit relationships evolve over time through a variety of sociopolitical processes, including advocacy, rule-setting, and service and policy development. Organizations able to successfully engage in collective or boundary-spanning institutional practices of their field become a part of its social sphere (Scott, 1987) and are perhaps more likely to be called upon by funding sources because of their perceived legitimacy and connections to elites in the field. Yet, results from Lamothe and Lamothe (2009) also clearly showed how funders hold contracted organizations accountable to deliver on required obligations, and that at times, regardless of level of accountability, organizations with many contracts are likely to lose some of them to available competitors.

Consequently, perception and reality can be incongruent in many contracting regimes. The presence of competitors has been shown to increase competition in a field (Lamothe & Lamothe, 2009); yet, in practice many nonprofits view procurement processes as more political than competitive, assume the incumbent organization will prevail, and do not use their resources to compete, especially against incumbent organizations (Savas, 2002). Findings by Savas (2002)

provided support for industry perceptions of non-competitiveness, showing how incumbent New York organizations frequently prevailed in competitive processes.

Nonprofit organizations can pursue a vast range of revenue-seeking tactics but assess existing resource dependencies, institutional pressures, and organizational resources when choosing the best revenue strategy for the organization (Alexander, 2000; Gronbjerg, 1991). Alexander (2000) measured executive perceptions across more than 200 human service organizations providing services to children, youth, and families in Cuyahoga County, Ohio in order to determine the most necessary strategies for contemporary nonprofit organizations. Enhancing revenue by developing new services that closely align with the organization's distinctive competence and broaden current services emerged as one of four primary strategies (Alexander, 2000). The other three strategies included professionalizing business management techniques, engaging in boundary-spanning activities, and cultivating a public service character through commercialization (Alexander, 2000).

Crittenden (2000) similarly distinguished effective financial strategies as those new business opportunities strongly aligned with existing programs, activities that increase client usage of current service offerings, and fundraising and marketing directed towards reaching financial goals. Finally, Bielefeld (1992b, 1994) and Galaskiewicz and Bielefeld (1998) developed a measure of strategic tactics, which included an inventory of specific actions related to revenue-seeking, legitimation, and retrenchment.

Legitimation tactics.

Legitimation tactics target the sociopolitical environment and enhance the organization's status when compared to competitors, and serve to build reputation and prestige, and position the organization favorably for future resources (Alexander, 2000; Barman, 2002; Bielefeld, 1992b,

1994; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006; Ruef & Scott, 1998). These tactics may involve organizational conformity to norms, standards, or practices of a field (Oliver, 1991) or a more intentional approach designed to change or influence an institutional field. Oliver (1991) framed this intentionality as environmental “manipulation” (p. 167); whereas Lawrence (1999) described legitimation as “institutional strategy” (p. 162) engaged by the organization to “articulate, sponsor, and defend particular practices and organizational forms as legitimate or desirable, rather than the ability to enact already legitimated practices or leverage existing social rules” (p. 163).

Empirical studies by Alexander (2000), Bielefeld (1992b, 1994), Galaskiewicz and Bielefeld (1998), Golensky and Mulder (2006) and Ruef and Scott (1998) revealed specific tactics engaged by nonprofit organizations to achieve legitimacy within institutional environments. Executives of nonprofit human service organizations identified boundary-spanning activities as instrumental to cultivating legitimizing relationships with funders, clients, media, and other complementary organizations, and also specifically observed the critical value of relationships between organizational board members and funders or potential funders (Alexander, 2000; Golensky & Mulder, 2006). Because boundary-spanning relationships build legitimacy by embedding an organization within a particular institutional field, the organization tends to become increasingly isomorphic with the field, assimilating its legitimizing features, but potentially constraining strategic flexibility to enact tactics not already a part of or endorsed by the field (Alexander, 2000).

Ruef and Scott’s (1998) longitudinal study of hospitals over a 46-year period examined antecedents and effects of legitimating strategies on 143 hospital organizations. While considering a variety of strategies used by hospital systems to enhance legitimacy, this study

focused on normative tactics, such as organizational conformity with norms conveyed through accreditation, professional organizations, and industry advocacy groups. External referents of legitimacy included licensing boards, funding agencies, field intellectuals, professional bodies, business circles, public opinion, and the media, among others (Ruef & Scott, 1998, p. 880). The study adopted an institutional approach to legitimacy, operationalized the legitimacy construct in terms of the number of accreditations and memberships associated with each hospital, and used exploratory factor analysis to ensure factors loaded as anticipated under managerial and technical legitimacy. Some external referents of legitimacy, such as the American College of Surgeons, contributed to both technical and managerial legitimacy of hospital organizations; whereas other sources contributed to either type, but not both. Findings from this research showed how the types of tactics engaged by organizations in institutional contexts influence perceptions of technical and/or managerial legitimacy of healthcare organization.

Bielefeld (1992b) and Galaskiewicz and Bielefeld (1998) similarly explored how different types of legitimizing tactics organizations establish and sustain tend to elevate their status within nonprofit contexts, and developed an inventory of tactics used by organizations to successfully adapt to and thrive within such contexts. Bielefeld (1992b) labeled this set of strategies as legitimation tactics; whereas, Galaskiewicz and Bielefeld (1998) described them as political tactics. While labeled differently by Bielefeld (1992b) and Galaskiewicz and Bielefeld (1998), the content of tactics were similarly-focused across both studies in that they involved internally and externally oriented strategies engaged by organizations to achieve favorable field positioning above competitors. Legitimation tactics reveal how the organization conforms to existing norms and standards (Bielefeld, 1992b) and include activities such as assimilating the code of ethics of the field into organizational practices, integrating policies and procedures

reflecting institutional norms and practices, and/or revamping services to more closely align with institutional priorities (Galaskiewicz & Bielefeld, 1998, p. 11).

Many managerial tactics (Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006) fulfill a legitimating function. Such tactics involve actions related to manipulating institutional gatekeepers (Suchman, 1995) and achieving regulative (pragmatic), moral, and/or cognitive legitimacy. Additional examples of external tactics involve actions geared toward shaping public perception, such as engaging in industry-related collective and/or political action (Bielefeld, 1992b; Galaskiewicz & Bielefeld, 1998), receiving endowments/endorsements from field elites (Bielefeld, 1992b; Pfeffer & Salancik, as cited in Galaskiewicz & Bielefeld, 1998), securing prominent government contracts (Lamothe & Lamothe, 2009; Oliver, 2001; Savas, 2002), and giving cash or non-cash support to other industry stakeholders (Bielefeld, 1992b).

While Bielefeld (1992b) did not report reliability data for his tactic measures of new revenue, legitimation, and retrenchment tactics, Galaskiewicz and Bielefeld (1998) did compute Cronbach's α for each tactic measure (retrenchment, political, and managerial) within each of four periods included in their study (1980 – 1984; 1984 – 1988; 1988 – 1992; and 1988 – 1994). The α s for political (legitimation) items were .694, .685, .700, and .707, respectively, revealing high reliability (Galaskiewicz & Bielefeld, 1998). The final portion of this review section, which delineates how specific contributions from related strategy research informed methods for the current study, includes an assessment of Bielefeld's (1992b) and Galaskiewicz and Bielefeld's (1998) influence on the construction of strategic tactic measures used within the current study. Chapter 3 provides fuller detail about how Bielefeld's (1992b, 1994) strategic tactics list shall be adapted for the current research.

Retrenchment tactics.

Retrenchment tactics address internal organizational processes and focus on ways organizations streamline operations to create rational efficiencies (Alexander, 2000; Bielefeld, 1992b, 1994; Galaskiewicz & Bielefeld, 1998). Golensky and Mulder's (2006) exploratory survey research on the nature and scope of four types of adaptive management strategies used by nonprofit executives in Michigan, California, and North Carolina showed how executives adopted productivity, retrenchment, new revenue, and transformational strategies to manage environmental uncertainty. Productivity tactics encompassed upgrading computer systems, improving staff training, enhancing internal coordination, encouraging staff recognition, and increasing staff incentives. Retrenchment tactics included increasing staff workload, reducing staffing, increasing volunteers, consolidating programs, reducing or eliminating programs, and tightening eligibility and benefits. New revenue tactics included starting new services, approaching new funders, raising fees, introducing new products or services, strengthening marketing, increasing referrals, and increasing lobbying. Transformation strategies encompassed tactics such as collaborating or merging with another organization, considering market exit, franchising programs, restructuring the board, and revising organizational mission.

Results from Golensky and Mulder (2006) illustrated how new revenue and productivity strategies were strongly favored by nonprofit executives; whereas retrenchment strategies were used about half as frequently, and transformational strategies used least. Most rated retrenchment strategies as successful, except for the tactic of increasing staff workload, where only 20% of executives who leveraged this strategy reported satisfaction with its success (Golensky & Mulder, 2006, p. 17). Within uncertain environments executives prioritized tactics

related to generating new revenues, but also supplemented new revenue activities with a broad range of other retrenchment and transformational tactics (Golensky & Mulder, 2006).

These findings were consistent with Bielefeld (1994) who examined tactic differences among surviving and non-surviving organizations in a longitudinal panel study comprised of a stratified sample of 325 Minnesota nonprofits. The study involved successive interviews with 228 of 325 organizations in 1980, 1984, and 1988 (Bielefeld, 1994). Forty-three organizations closed operations during the period, six organizations refused to continue with the research through 1988, three became for-profit organizations, and two organizations left the area (Bielefeld, 1994, p. 21). Overall, surviving organizations used slightly more strategies than non-surviving organizations, but favored legitimation strategies; whereas non-surviving organizations mostly engaged retrenchment strategies in response to environmental uncertainty. Among health and welfare organizations in the sample, survivors and non-survivors similarly activated revenue and retrenchment strategies, but surviving organizations used legitimation more. Because of small sample numbers, Bielefeld cautioned against intemperate generalization from these findings; yet, despite this recommendation, results of this study shed light on the value legitimacy brings to the sustainability of nonprofit organizations.

Managerial professionalization tactics.

Managerial tactics encompass internal strategies designed to enhance organizational professionalism, such as training programs and long-term planning (Alexander, 2000; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006). Two primary perspectives appear to guide research on organizational use of managerial tactics. The first perspective focuses on use of managerial tactics as a way to enhance stakeholder perceptions of organizational effectiveness (Herman & Renz, 2004); whereas the second examines the effects of managerial

tactics on organizational viability and/or sustainability (Alexander, 2000; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006).

Executive respondents in Alexander's (2000) research on human service organizations identified use of proactive tactics. These included strategic planning, nonprofit leadership development, infrastructure investment, and marketing, as critical practices for sustainability. Golensky and Mulder (2006) referred to these types of strategies as transformational, and included among these types of tactics those geared toward fundamentally changing the organization (e.g., formed a legal partnership or merger; considered closing the organization; franchised program; restructured board of directors; or revised the mission).

Galaskiewicz and Bielefeld (1998) included a specific inventory of managerial practices within their comprehensive measure of strategic tactics, which included actions such as starting a management training program, increasing staff workload, reorganizing executive and administrative staff, engaging in long-term strategic planning, developing a long-range funding strategy, setting up a profit-making venture or subsidiary, increasing fees or enhancing fee collection, among several other tactics. A problem with Galaskiewicz and Bielefeld's (1998) managerial tactics is their multicollinearity with other types of tactics. For example, restructuring executive staff and increasing workload could be considered as retrenchment tactics (and were by Bielefeld, 1994), even though such tactics have a managerial focus.

Similarly, managerial tactics related to enhancing revenue, such as developing earned-income opportunities, increasing fees, or enhancing fee collection, might also be appropriately conceptualized (and were by Bielefeld, 1994) as revenue-seeking strategies. Galaskiewicz and Bielefeld (1998) cautioned future users of their strategic tactics list to assess the potential for multicollinearity (p. 101). Given the potential limitations identified by Galaskiewicz and

Bielefeld (1998), the current study adapted the earlier version of the strategic tactics list developed by Bielefeld in 1994.

While research on managerial tactics appears to bifurcate across perspectives of organizational effectiveness and organizational sustainability, the value of the effectiveness-sustainability is noteworthy and relevant to a core assumption related to the current research: institutional environments affect organizations and their strategic choices. Nonprofit effectiveness studies (e.g., Herman & Renz, 2004; Scheid & Greenley, 1997) describe criteria of effectiveness, as well as stakeholder evaluation of criteria, in relation to the organization. While criteria and involved stakeholders vary by study, consistent across studies are observations of ways institutional norms and definitions of performance shape effectiveness criteria, and how assessments conferred by stakeholders on such criteria influence perceptions of organizational legitimacy in institutional contexts (Scheid & Greenley, 1997).

Scheid and Greenley (1997) highlighted the legitimizing value of stakeholder assessments in contexts such as the behavioral healthcare sector, wherein institutionally-developed service models guide evaluations of programs within the sector. Industry elites often develop service models delivered within the sector because technical services delivered by behavioral healthcare organizations and outcomes of such services are notoriously hard to define and measure (Scheid & Greenley, 1997, p. 403). Consequently, high levels of disagreement about the appropriateness of varied treatments and their efficacy are typical for the sector and leave more room for subjective opinions on the quality of services provided by organizations within the sector. As a result, evaluations of behavioral healthcare services often occur on the basis of program conformity with institutionalized beliefs and preferences (Hasenfeld, as cited in Scheid & Greenley, 1997). Institutionally-aligned attributions of quality performance enhance

legitimacy, which in turn enables resource acquisition and institutional linkages vital to organizational sustainability over time (Baum & Oliver, 1991).

Studies of managerial tactics, whether guided by an effectiveness or sustainability perspective, clearly highlight the importance of managerial tactics intended to enhance organizational legitimacy within institutional contexts. As mentioned earlier, Bielefeld (1994) and Galaskiewicz and Bielefeld (1998) delineated an entire set of legitimation (or political) tactics focused on shaping perceptions of external stakeholders, such as lobbying and contributing to local causes. Managerial tactics that reflect “correct management practices” (Herman & Renz, 2004, p. 695) by incorporating socially-legitimated and rationalized elements within organizational operations, maximize organizational legitimacy and increase resources and survival capabilities (Meyer & Rowan, 1977, p. 313). Consequently, internally-oriented managerial tactics often favorably shape external perceptions of the organization as the organization becomes increasingly professionalized.

Tactics and field-level change.

The third and last stream of research related to strategic choice in nonprofit settings pertains to organizational response to field-level changes. Studies of organizational adaptation to sector changes analyze varying tactics engaged by organizations in response to a shared environmental challenge. Twombly (2003) examined organizational responses to industry practice changes from resource dependence and institutional perspectives. Specifically, Twombly (2003) examined nonprofit exit (failure) and entry during a period of national welfare reform, 1991 – 1997. Research by Durkin et al. (2010) focused more specifically on organizational responses to changes in resource dependence, although this study also discussed how institutional pressures affect new reimbursement practices.

Durkin et al. (2010) extrapolated from Oliver's (1991) organizational response typological framework (i.e., acquiescence, compromise, avoidance, and defiance) to map key sources of institutional pressure and resources. Durkin et al. (2010) sought to examine constraints on organizational behavior resulting from environmental pressures, and to identify diverse response patterns among organizations facing similar challenges (p. 7). Finally, Sowa (2008) assumed an institutional perspective to examine organizational motivation for collaboration across 20 childcare organizations engaged in collaborative arrangements urged by institutional authorities. This section describes research by Twombly (2003), Durkin et al. (2010), and Sowa (2008) in detail.

While populations and sectors of interest in the abovementioned research varied, each study conveyed how resource-related and institutional pressures influenced organizational response, regardless of sector or industry. Twombly's (2003) study emerged in response to welfare reform of the 1990s, which allowed states to apply for exemption from federal requirements and gain greater discretion of their social welfare system. Fifty-three metropolitan areas of the United States experimented with the waiver system and the study evaluated factors related to organizational exit and entry during this period of reform.

Size of the nonprofit organization was negatively associated with likelihood of exit. Organizations with the least amount of assets (i.e., less than \$35,000) were 20 times more likely to exit than organizations with greater assets (i.e., greater than \$750,000). Organizations providing emergency welfare services (only) were 27% less likely to exit than organizations providing core welfare services. Core providers face a more complex array of competitive pressures associated with government contracting processes (Twombly, 2003, p. 228). Furthermore, both sociopolitical legitimacy and resources influenced survival. Affiliations with

local and extra-local industry elites were significant, yet largely mediated by resources. Results from this comprehensive study showed how above all else, cultivating resources emerged as the surest path to survival.

Durkin et al. (2010) used maximum variation sampling to derive a sample of three Inpatient Rehabilitation Facilities (IRFs) from each of three states. Of the nine involved, four were freestanding organizations and five were part of a hospital system. An important management question conveyed in this work involved whether or not freestanding IRFs with greater resource dependence would make different strategic choices in response to a new, mandated Medicare Prospective Payment System (PPS), than IRFs attached to a hospital system.

The study assumed that IRFs attached to a hospital system would have access to a broader range of strategies and resources and as a result, freestanding IRFs would demonstrate more overtly compliant responses, such as acquiescence and compromise, than their hospital-connected counterparts. Results showed how organizations used an array of responses. All IRFs, to some degree, used acquiescence by imitating overt responses of compliance, imitating practices demonstrated by others in the sector.

This response promoted the appearance of homogenized actions across IRFs, such as extending daily and weekend hours, hiring staff with PPS experience, and engaging other visible tactics aimed at increasing efficiency. One freestanding IRF was unable to survive, even with enhanced efficiency, and dropped the service line reimbursed by the PPS. Overall, IRFs only used tactics supported by the institutional context.

Both freestanding and hospital-connected IRFs used compromise tactics to balance the needs of the organization with demands of multiple constituencies, such as payers, administrators, physicians responsible for care decisions, and other professional staff; yet,

hospital-connected IRFs seemed to use more avoidance tactics than freestanding IRFs (e.g., promoting shorter stays, scaling back goals, and reducing the number of medically complex patients by referring them to another service within their system to address acute needs), although this observation was not specifically articulated in the study. Instead, specific examples of avoidance strategies delineated in the research were those of hospital-connected IRFs. Notably, IRFs rarely used any type of defiance strategy, given their strong dependence on Medicare funding and unwillingness to overtly oppose a key funding source on which they depend.

Sowa's (2008) purposeful sample of 20 childcare organizations engaged in collaborative arrangements included two specific types of organizations: Head Start agencies, characterized as high quality and legitimated organizations; and childcare centers, notably less legitimated in the sector, but with better business practices related to fulfilling diverse needs of families through enhanced service accessibility. The research assumed a strategic management perspective to explain how organizations take action in their environment to achieve competitive advantage. Results from this study offered strong support for strategic management theory.

Organizations tended to view a collaborative strategy as a specific boundary-spanning activity designed to increase organizational resources, visibility in the community, and/or legitimation, depending on the unique features of collaborating entities. Childcare centers that did not provide Head Start services, but ultimately enjoined their services with Head Start organizations, benefitted from increased legitimacy associated with Head Start programs (Sowa, 2008). Head Start programs rely heavily on government funding and are therefore subject to strict regulatory requirements pertaining to curriculum, staff credentials and training, classroom quality, and performance measurement (Sowa, 2008). Childcare centers are not subject to the

same institutional requirements, and as a result, can be perceived as less qualified (or legitimated) providers of childcare services (Sowa, 2008).

Consequently, collaborations between Head Start and childcare centers helped to legitimate participating childcare centers. Collaboration also benefitted Head Start partners by broadening the scope of organizational services offered through the collaborative arrangement (Sowa, 2008). Organizations engaged in collaborative arrangements created mutually-beneficial service enhancements, increased alignment with legitimizing norms of the sector, and improved competitive positioning within the sector.

Synthesis of methodological considerations from literature on strategic choice.

Studies of strategic adaptation of nonprofit organizations revealed a diverse range of tactics used by organizations to cultivate sustainable revenue sources (Alexander, 2000; Bielefeld, 1992b, 1994; Crittenden, 2000; Foster & Fine, 2007; Gronbjerg, 1991), achieve legitimacy (Alexander, 2000; Baum & Oliver, 1991; Bielefeld, 1992b, 1994; Golensky & Mulder, 2006; Ruef & Scott, 1998), promote internal efficiencies (Bielefeld, 1992b, 1994; Golensky & Mulder, 2006), and increase organizational professionalization (Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006). Many of these studies used case study analysis or comparative case studies to explore how organizations strategize for sustainability (e.g., Barman, 2002; Bigelow & Stone 1995; Crittenden, 2000; Durkin et al., 2010; Gronbjerg, 1991). Others used focus groups, surveys, or interviews to produce data about how organizations strategize under specific environment conditions, including resource dependence and institutional pressure (e.g., Alexander, 2000; Balser & McClusky, 2005; Bielefeld, 1992a, 1992b, 1994; Golensky & Mulder 2006; Heimovics et al., 1993; Jones, 2006; Townsend & Campbell, 2007).

Studies by Bielefeld (1992b, 1994) and Galaskiewicz and Bielefeld (1998) are unique to this body of research in that they developed and used a specific inventory of strategic tactics to gauge the degree to which nonprofits use revenue-seeking, legitimation, and retrenchment strategies and their effects. Bielefeld's (1992a, 1994) longitudinal research encompassed a cross section of nonreligious nonprofit organizations to discover whether particular environmental conditions (high or low resource dependence and institutionalism) affected the strategic choices made by nonprofit organizations. Bielefeld (1992b, 1994) assessed the degree to which nonprofit organizations used new revenue, retrenchment, or legitimation strategies or tactics as adaptive responses to changes in their supporting environment.

New revenue tactics included actions geared toward generating new income by assessing needs, starting new services, and/or approaching new funders. Retrenchment tactics encompassed internally-focused activities designed to maximize organizational efficiencies, such as increasing staff workloads, reducing costs, and raising fees. Legitimation tactics included those geared toward favorably influencing perceptions of influential stakeholders within the sociopolitical environment in order to enhance organizational reputation and prestige (Bielefeld, 1994, pp. 29-30). Galaskiewicz and Bielefeld (1998) sought to redefine these strategies over time, labeling them as retrenchment, political, and managerial tactics.

Galaskiewicz and Bielefeld (1998) also used data from the 1980 – 1994 collection to form a case study of the entire charity sector within Minneapolis-St. Paul, Minnesota. Their comprehensive study encompassed three distinct exploratory pathways. The first path examined 13 hypotheses related to factors that lead to growth and decline of nonprofit organizations and focused on ways political, retrenchment, and managerial strategies increased or decreased organizational fiscal and human resources. The second path investigated environmental and

embeddedness effects on organizational strategic choice by testing 11 hypotheses related to the effects of resource dependencies and environmental competitiveness on choice of political, retrenchment, and/or managerial tactics. The third path examined eight hypotheses on the internal effects of strategic choices within the organization. This research is among the most comprehensive studies of ecological and organizational factors affecting nonprofit viability and survival.

Bielefeld (1992b, 1994) and Galaskiewicz and Bielefeld (1998) used similar strategic tactics in both studies but labeled some tactics differently. Revenue-seeking strategies were identified as such in Bielefeld (1992b, 1994). Galaskiewicz and Bielefeld (1998) did not measure these directly, but instead appeared to capture some revenue-seeking strategies under the political category (e.g., approached a new funder type for money) or managerial category (e.g., set up a profit-making venture or subsidiary; increased or instituted service fees). Strategies designed to promote organization legitimacy were identified as legitimation tactics in Bielefeld (1992b, 1994) and as political tactics in Galaskiewicz and Bielefeld (1998).

While labels differed, both studies included similar tactics within designated categories. Retrenchment tactics were also similar in both studies. Finally, Galaskiewicz and Bielefeld (1998) included a managerial tactic category, which included actions that could be considered as retrenchment (e.g., increased staff workload; reorganized executive/administrative staff) or revenue seeking (e.g., set up a profit-making venture or subsidiary; increased or instituted service fees), but focused mostly on internal, managerially-oriented actions, such as strategic planning and market studies, among others.

Bielefeld (1992b) performed factor analysis to confirm revenue-seeking, legitimation, and retrenchment categories. Galaskiewicz and Bielefeld (1998) performed factor analysis and

successfully confirmed two strategy factors: retrenchment and political (legitimation), but as mentioned above, did not specifically address revenue-seeking. Reliability tests in Galaskiewicz and Bielefeld (1998) revealed high reliability for each list of tactics, yet the researchers cautioned future users about potential multicollinearity among lists. Because of this observed limitation in Galaskiewicz and Bielefeld (1998), the research extracted from Bielefeld's (1992b, 1994) revenue-seeking, retrenchment, and legitimation strategic lists, and adapted them to include strategies commonly used by community behavioral healthcare organizations.

Nonprofit Survival: Financial Performance as Proxy for Organizational Effectiveness

Academic study of nonprofit organizational effectiveness has a "long and tortuous" history (Herman & Renz, 1999, p. 108). Rojas (2000) comprehensively reviewed studies on nonprofit effectiveness to illustrate the proliferation of theory and debate on the definition and correlates of organizational effectiveness within the literature. Cho (2007) and Forbes (1998) concentrated their attention on empirical studies of effectiveness, illustrating varied models, criteria, and measures used to describe effectiveness within nonprofit organizations.

The "unique criterion problem" (Herman & Renz, 1999, p. 121) associated with nonprofit effectiveness studies pertains to its definition and measurement. Newman and Wallender (as cited in Forbes, 1998) provided insight related to this criterion problem, highlighting the amorphous constitution of nonprofit goals and intangible quality of services. Furthermore, nonprofit operations strongly center on values, about which there may be little or no consensus (Forbes, 1998). Consequently, reviews of nonprofit effectiveness research reveal studies encompassing varying theoretical perspectives and objectives, making knowledge accumulation and integration impossible (Herman & Renz, 1999, p. 101). Without commonly-accepted

approaches and measures of effectiveness across different samples, meaningful interpretation of findings becomes difficult (Cho, 2007).

Discontinuity across effectiveness studies occurs because of variation in the conceptualization and measurement of the effectiveness construct and its correlates. Approaches to measuring nonprofit effectiveness as a dependent variable most frequently involve goal fulfillment, systems resource, multiple dimensions, multiple constituency or stakeholder (Rojas, 2000), and process-related (Forbes, 1998) models. This section briefly explicates each of these five approaches to understanding nonprofit organizational effectiveness.

The goal fulfillment model (Parsons, 1964; Perrow, 1965) captures the capacity of an organization to reach its goals (Glisson & Martin, 1980), but has been criticized for its application in institutional environments (Herman & Renz, 1999). Herman and Renz (1999) asserted, “In institutional theory, effectiveness is not an objective reality; rather, effectiveness is a social construction, an achievement of organizational agents and other stakeholders in convincing each other that an organization is pursuing the right objectives in the right way” (p. 109). Consequently, goal fulfillment models neglect many aspects of organizational performance that are qualitatively non-rational, such as activities designed to enhance organizational legitimacy, favor, and power within institutional contexts (Herman & Renz, 1999).

The systems resource model (Provan, 1980; Yuchtman & Seashore, 1967) describes organizational effectiveness in terms of an organization’s ability to obtain and sustain necessary resources and uses objective indicators of resource acquisition as measures of effectiveness (Provan, 1980). Multiple dimension models are among the most frequently applied within effectiveness studies (Forbes, 1998), and engage complex scales designed to measure varied

dimensions of effectiveness (Glisson & James, 2002; Quinn & Rohrbaugh, 1983). Multiple constituency or stakeholder models employ a subjective lens to assess effectiveness, through which various stakeholders define criteria used to evaluate nonprofit organizations (Herman & Renz, 1999). According to the multiple constituency perspective, differing constituencies likely favor varying priorities, making the possibility of widely applicable dimensions unlikely (Herman & Renz, 1999, p.111).

Conclusions from Herman and Renz (2004) supported their earlier proposition related to varying assessment of effectiveness among stakeholder groups. Ratings of board and organizational effectiveness varied significantly across funding source, employee, and board stakeholder groups (Herman & Renz, 2004). There was no consensus of organizational effectiveness among these groups. Finally, process-related models of effectiveness address the concept of organizational effectiveness as the negotiated product of repeated interactions between organizational actors and the environments in which they function (Forbes, 1998, p. 195). The manner in which effectiveness is conceived, negotiated, and measured in the contemporary nonprofit world is at the core of process-oriented effectiveness studies (Forbes, 1998).

Among empirical studies on correlates of effectiveness, Forbes (1998) identified a wide variety of intra-organizational correlates, including various characteristics and processes of an organization's board of directors (e.g., formalization of planning, power and influence, and resource acquisition). Rojas (2000) described a variety of multidimensional correlational models and Cho (2007) showed how differing criteria of effectiveness across studies impede interpretation of findings. Cho (2007) specifically articulated this point by showing how three studies by Holland, Konick, Buffum, Smith, and Petchers (1981), and Schmid (1992), produced

seemingly contradictory results on the impact of centralization and formalization of planning on organizational effectiveness because of a lack of uniformity across studies related to the conceptualization and measurement of correlates.

Reviews of nonprofit effectiveness studies reveal an advancement of varied conceptualizations, models, and measures of the effectiveness construct itself and its correlates (see Cho, 2007; Forbes, 1998; Rojas, 2000). Lack of cohesion across studies of nonprofit organizational effectiveness gave way to more recent calls for consideration of financial measurement as a proxy for organizational effectiveness (Herman & Renz, 1999; Ritchie & Kolodinsky, 2003). Financial measurement is conspicuously absent from the previously summarized frameworks. Among 21 empirical studies reviewed by Forbes (1998), encompassing the years 1977–1997, only three studies addressed financial performance (e.g., Chait, Holland, & Tyler, 1991; Provan, 1980; Siciliano, 1997).

In their seminal work on financial vulnerability, Tuckman and Chang (1991) pointed to limited accessibility of financial data available to the general public as an impediment to research related to nonprofit financial performance. Others conveyed skepticism about the capacity of a financial measure to appropriately reflect the complex phenomenon of organizational effectiveness (Tinkelman & Donabedian, 2007), while Herman and Renz (1999) similarly highlighted pressure within institutionalized contexts to focus on effectiveness measures other than financially-based ones, asserting, “effectiveness should be evaluated not in monetary terms but in moral terms, in terms of the extent to which nonprofit organizations respond to the moral values that motivate donors and recipients” (p. 112).

Commercial values appear to influence contemporary studies on nonprofit effectiveness (Herman & Renz, 1999). Accordingly, Herman and Renz (2004) identified resource acquisition

as an important kind of effectiveness, indicating, “it may be the most important criterion of effectiveness for chief executives or board members (though they would never say so), but it seems unlikely to be important to other stakeholders” (p. 695). Ritchie and Eastwood (2006) similarly noted how recent studies more regularly integrate financial measures as acceptable indicators of organizational performance. Furthermore, public access to nonprofit financial data through resources such as the National Center for Charitable Statistics (e.g., Greenlee & Trussel, 2000), Internal Revenue Service Core Files database (e.g., Trussel, 2002), and GuideStar (e.g., Froelich et al., 2000; Hodge, 2006) ameliorates the data access barrier noted by Tuckman and Chang (1991) to a great extent. Given enhanced access to nonprofit financial data, use of financial measurement as a proxy for effectiveness enables objective data comparison across organizations (Herman & Renz, 1999, p. 111).

The following section reviews literature related to financial measurement within nonprofit organizations. The section features two commonly applied models of financial measurement—financial performance and financial vulnerability—and discusses the strengths and limitations of these models, as well as their application among nonprofit studies. Findings from critical evaluation of financial models ultimately justified the selection and use of four discrete financial measures, introduced by Tuckman and Chang (1991), as measures of financial performance in the current study. Specifically, the current model uses Tuckman and Chang’s (1991) equity ratio, operating margin, revenue concentration, and administrative expense as Phase 1 correlational and Phase 2 dependent variables.

Financial performance and nonprofit organizational effectiveness.

Responding to the need for objective measures of nonprofit performance, researchers across the 1980s and 1990s commonly used ratios, in varied combinations, as indicators of

nonprofit financial performance (e.g., Hall, 1982; Hairston, 1985; Siciliano, 1996). More recent studies continue to use discrete ratios to measure organizational financial performance (e.g., Brown, 2005; Callen, Klein, & Tinkelman, 2003; Ritchie & Eastwood, 2006; Ritchie & Kolodinsky, 2003, Pins, 2011). Yet, the seminal work of Tuckman and Chang (1991) and the introduction of the Financial Vulnerability Index (FVI) by Greenlee and Trussel (2000) appear to set a new course of action among studies of nonprofit financial performance by directing attention to the specific use of ratios to classify organizational performance or describe and/or predict financial performance.

Research in recent years applies and extends the Tuckman and Chang (1991) ratios through application of the FVI (Greenlee & Trussel, 2000; Trussel et al., 2002), a composite measure comprised of the Tuckman and Chang ratios. Consistent application of these measures firmly instills their use and value across nonprofit studies. Specifically, Tuckman and Chang (1991) ratios have been used to rank and classify organizations (Tuckman & Chang, 1991), predict financial vulnerability (Greenlee & Trussel, 2000; Keating et al., 2005; Trussel, 2002; Trussel et al., 2002), and generate a descriptive composite measure of performance (Hager, 2001; Hodge, 2006; Hodge & Piccolo, 2005). While engaging financial models to classify organizations, predict financial distress, or describe performance is relatively new and somewhat elusive to researchers (Ritchie & Kolodinsky, 2003), their use and value appear to be on the rise, as reflected by continued application and refinement among recent studies (see Brown, 2005; Hodge, 2006; Hodge & Piccolo, 2005; Lenaghan, 2006; Pins, 2011).

Financial performance: Descriptive, correlational, predictive, and dependent variables.

A review of studies pertaining to nonprofit financial measurement shows its application as a descriptive variable (Tuckman & Chang, 1991), correlational variable (Hodge, 2006; Hodge

& Piccolo, 2005; Pins, 2011; Ritchie, Kolodinsky, & Eastwood, 2007), independent/predictive variable (Greenlee & Trussel, 2000; Hager, 2001; Trussel, 2002; Trussel et al., 2002), and dependent variable (Hodge, 2006; Hodge & Piccolo, 2005; Pins, 2011; Ritchie et al., 2007). Use of financial measures in studies of nonprofit sustainability has increased with the development of the FVI (Greenlee & Trussel, 2000; Trussel, 2002; Trussel et al., 2002). The FVI was applied by Hager (2001) with both descriptive and prescriptive purpose and by Hodge (2006) and Hodge and Piccolo (2005) with a descriptive focus.

Descriptive use of financial ratios, applied discretely or in composite form (e.g., FVI), is common and includes the seminal work of Tuckman and Chang (1991). This important work classified organizations according to their capacity to successfully withstand a financial shock, and then compared ratio performance of organizations across varying descriptive categories. Other descriptive studies include Brown (2005), Ritchie et al. (2007) and Siciliano (1996). This section reviews research based on the ratios introduced by Tuckman and Chang (1991) to categorize an organization's level of risk to financial distress. The current study draws on this body of research in order to justify the use of Tuckman and Chang's (1991) financial measures of equity, operating margin, revenue concentration, and administrative expense, as correlational and dependent variables within the systems model used for the current study.

Tuckman and Chang (1991).

Tuckman and Chang (1991) set a new course for the use of financial ratios to assess the performance of nonprofit organizations by attempting to distinguish financially vulnerable from non-vulnerable organizations. Non-vulnerable organizations have greater financial flexibility than vulnerable organizations, demonstrated by diversified sources of revenue, high administrative costs, high operating margin, and access to adequate equity balances (p. 451).

Table 3 summarizes the manner in which important studies applied measures by Tuckman and Chang (1991), and includes specific formulas for three of the four ratios: equity balance, operating margin, and administrative costs.

The process for calculating revenue concentration follows:

For each nonprofit, the square of the percentage share that each revenue source represents to the total revenue is summed to produce an index. This provides a revenue concentration measure that captures both the number of revenue sources and the extent of revenue dispersion. (Tuckman & Chang, 1991, p. 453)

In addition to revenue concentration, Tuckman and Chang (1991) also highlighted the financial value of high equity, administrative expense, and operating margin ratios.

Organizations with larger net worth relative to revenue, yield higher equity ratios, and possess a greater ability to replace revenue than organizations with a smaller net worth (Tuckman & Chang, 1991, p. 452). Organizations spending more on administrative costs can cut back on these costs, before reducing or eliminating services when faced with a financial shock.

Organizations with high operating margin can draw on the surplus if revenues decline.

Sampling from a universe of all nonprofits filing an IRS 990 form in 1983 ($N = 4730$), Tuckman and Chang (1991) divided organizations across a six category typology (e.g., religious, education, health care, charitable institution, supportive organizations, and other) and calculated equity, administrative expense, revenue concentration, and operating margin for each organization. After a particular ranking strategy for each financial indicator—equity, administrative expense, revenue concentration, and operating margin—organizations were labeled *severely at risk*, *at risk*, or *not at risk* for vulnerability to financial shock (p. 455). This enabled organizational comparison across the sector and within particular nonprofit categories.

Table 3

Financial Performance: Methodological Contributions from Key Studies

Research	Research Intent	Instrumentation	Contribution(s) to Current Study
Tuckman & Chang (1991)	Descriptive Explanatory	Ratios for equity balance, administrative expense, and operating margin. Herfindahl-type revenue concentration index.	Used ratios to describe organizations according to financial position. Pointed out importance of sector-specific comparisons.
Greenlee & Trussel (2000)	Predictive	Computed probability ratio for financial vulnerability, creating the FVI.	Creation of FVI from Tuckman & Chang (1991) ratios. Misclassification of organizations as vulnerable or non-vulnerable is an issue with the FVI, which precludes its application in the current study.
Hager (2001)	Descriptive and Predictive	Used FVI	Use of FVI to support validity and reliability of Tuckman and Chang (1991) measures among homogenous population.
Greenlee, Trussel, & Brady (2002)	Predictive	Added organizational size to FVI; set average financial ratio benchmarks by industry; articulated a decision rule for determining financial vulnerability.	Weaknesses in FVI predictive value lead to discrete rather than composite application of FVI elements in the current study.
Trussel (2002)	Predictive	Used FVI, but did not include ADMIN element.	Issues retrieving administrative expense from IRS 990: current study shall use self-reported rather than IRS-reported administrative expense data.
Hodge & Piccolo (2006)	Relational-Predictive	Used FVI	Used Provan (1980) to justify use of small sample.

Note. Calculation for equity balance is assets - liabilities/total revenues; calculation for operating margin is revenue - expenses/revenues; calculation for administrative expense is administrative expense/total expense (Tuckman & Chang, 1991).

From this classifying framework, Tuckman and Chang (1991) compared organizational performance vis-à-vis ratio analysis. Their findings revealed, as expected, an inverse relationship between revenues and risk. As revenue increased, risk decreased. Vulnerable organizations also had lower levels of equity and liquidity, and long-term debt was higher for at-risk organizations, and considerably higher for severely-at-risk organizations. Finally, results exposed differences in administrative expense: at-risk and severely-at-risk organizations allocated a higher percentage of revenues for program services than organizations not-at-risk for financial vulnerability. Because at-risk and severely-at-risk organizations allocated greater expense to programs, such organizations generally had lower administrative expense than their not-at-risk counterparts. According to the researchers, organizations with greater allocation of revenues to administrative expense (i.e., not-at-risk organizations) were endowed with a built-in budgetary area for cutting costs before making any reductions to services.

Strengths and limitations of the Financial Vulnerability Index (FVI).

Several studies apply, test, and extend Tuckman and Chang (1991) by developing new applications for the four financial indicators. Two limitations of the original Tuckman and Chang model included its vague operationalization of the vulnerability construct (Greenlee & Trussel, 2000), and the use of single-year data as a valid measure of an organization's financial positioning (Ritchie & Kolodinsky, 2003). Financial data from Tuckman and Chang (1991) were extracted from 1983 IRS reports. These data were susceptible to idiosyncratic performance or conditions reflective of that singular year, which may or may not accurately reflect the organization over time. Finally, some used the Tuckman and Chang (1991) ratios as a foundation for a new predictive model of financial distress, creating the FVI from this foundation

(Greenlee & Trussel, 2000; Trussel, 2002; Trussel et al., 2002). This section highlights literature related to the development of the FVI based on attempts to address limitations of Tuckman and Chang, and to develop a predictive composite measure of financial distress from their ratios.

Tuckman and Chang (1991) vaguely defined the construct of financial vulnerability as a reduction in services, asserting that an organization in financial distress would ultimately decrease service provision. Since the time financial vulnerability was first conceptualized, there is wide variation in the manner in which studies apply the construct. Greenlee and Trussel (2000) defined vulnerability as a decrease in program expense in each year, across a three-year period. In this conceptualization, they specifically sought to refine Tuckman and Chang's (1991) original definition of vulnerability (i.e., reduction in program expense). Greenlee and Trussel (2000) also addressed the temporal limitation of Tuckman and Chang (1991) by using data across multiple years to formulate a measure of average performance.

A different approach by Hager (2001), common to ecological studies of nonprofit survival, encompassed conceptualizing organizations not listed on IRS lists as dead. Dead organizations were operationally defined as *vulnerable* organizations. Organizations listed on IRS lists were considered as surviving and *not vulnerable*. Still a different approach, Trussel (2002) defined financial vulnerability as a reduction in an organization's fund balance by 20% over three years.

In an effort to develop a predictive model of financial performance, researchers incorporated Tuckman and Chang's (1991) ratios into a probability (regression) model of financial performance (Greenlee & Trussel, 2000; Trussel, 2002; Trussel et al., 2002). Greenlee and Trussel (2000) were the first to formulate the FVI using one-half of a randomly separated sample of 5,918 organizations filing IRS 990 forms with the National Center for Charitable

Statistics. Developing the logistic regression model, the dependent variable was defined as 1 if the organization was financially vulnerable and 0 otherwise. The criterion for financial vulnerability was decreased program expense across a consecutive three-year period. In their initial model, revenue concentration, operating margin, and administrative expense ratios were significant, while the equity variable was not (Greenlee & Trussel, 2000, p. 205).

The final steps of the model involved computing the probability of financial vulnerability for all organizations in the initial sample, using actual ratio data from their IRS 990s. Greenlee and Trussel (2000) arrayed all probabilities and selected 8% as the cutoff point for financial vulnerability, determined as optimum to minimize misclassification. Using the 8% cutoff, Greenlee and Trussel (2000) correctly predicted 58% of the organizations as financially vulnerable or not vulnerable. For organizations with probability greater than 10% or less than 7%, there is strong or weak indication of financial vulnerability, respectively; however, Greenlee and Trussel (2000) encouraged cautious interpretation when classifying organizations with probabilities between 7% – 10% (p. 206). These findings suggested some level of uncertainty related to the FVI's predictive value (Greenlee & Trussel, 2000, p. 206).

Trussel and Greenlee (as cited in Trussel, 2002) expanded on the FVI by adding a six sector classification, controlling for size as measured by total assets, and operationalizing financial vulnerability as a decrease in equity over a three-year period. This model was significant for three of five indicators, including debt ratio, operating margin, and organizational size (Trussel, 2002, p. 19). Trussel (2002) expanded the model by controlling for ten broad nonprofit sectors and further refined the operational definition of financial vulnerability as a 20% decrease in fund balance across a three-year period (1997 – 1999). Trussel (2002) used data from the IRS Core Files database, which classifies organizations with assets greater than

\$10 million, and further includes a random sample of two thousand smaller organizations.

Trussel (2002) added organizational size to remain consistent with prior research, and included all of the Tuckman and Chang (1991) indicators, except for administrative expense because the database did not include information to compute this variable,

Of the 9,402 charities examined by Trussel (2002), 18% were vulnerable and 82% were not (p. 22). Similar to Greenlee and Trussel (2000), and Trussel et al. (2002), Trussel (2002) encouraged users of the FVI to carefully determine the appropriate cutoff point for the designation of financial vulnerability, noting relatively high error rates in his extensive analysis of costs associated with misclassification. Given high error rates, Trussel (2002) articulated the potential for a Type I or Type II error, depending on the cutoff point, claiming a Type I error involves misclassifying a financially vulnerable charity as not financially vulnerable, and a Type II error encompasses misclassifying a non-vulnerable organization as vulnerable (Trussel, 2002, pp. 24-25).

The possibility for misclassification of organizations appears to be a critical limitation of the FVI (Greenlee & Trussel, 2000; Trussel, 2002). In fact, Keating et al. (2005) discouraged its use for predictions related to important purposes, including default, bankruptcy, or reduction of programs. Similarly, Trussel (2002) cautioned against exclusive use of his iteration of the FVI, but continued to assert its value to screen, monitor, and identify potential issues, and to complement a more rigorous financial analysis of the organization. The current research honors recommendations to refrain from using the FVI with predictive intent, and consistent with Hager (2001), acknowledges the value of its descriptive elements as originally set forth by Tuckman and Chang (1991).

Synthesis of methodological considerations: Financial performance.

Studies of nonprofit financial performance extend across recent decades. Early works used discrete ratios singularly and in varying combinations (e.g. Hairston, 1985; Hall, 1982; Tuckman & Chang, 1991; Siciliano, 1996), an approach still used in contemporary studies (e.g. Brown, 2005; Callen et al., 2003; Ritchie & Eastwood, 2003; Ritchie & Kolodinsky, 2003). Tuckman and Chang (1991) used ratios to classify organizations according to their financial performance on equity, revenue concentration, administrative expense, and operating margin. This classification process offered a holistic alternative to simple ratio analysis and sought to distinguish organizations likely to perish from revenue disruption from others likely to survive. The study reignited research interest in using financial measures to better understand nonprofit performance, which ultimately led to the development of the FVI (Greenlee & Trussel, 2000; Trussel, 2002; Trussel et al., 2002). While the FVI has significant limitations as previously discussed, its component elements—equity, margin, administrative expense, and revenue concentration—as articulated by Tuckman and Chang (1991), remain as viable measures for the current study.

When new research replicates innovations and addresses limitations from prior works, a more consistent approach to measuring financial performance emerges. Consistent application builds consensus understanding about organizational performance and enables comparisons across nonprofit organizations and sectors (Ritchie & Kolodinsky, 2003). Ritchie and Kolodinsky (2003) pointed out shortcomings among recent studies, highlighting a lack of consistency across them, and low consensus on effective financial measures used to describe organizational performance. The current research responds to a call by Ritchie and Kolodinsky (2003) for more studies to test new and existing measures of financial performance. This section

articulates the following recommendations that informed the current research, many of which were earlier conveyed in Table 3: (a) focus research to a homogenous group of nonprofit organizations; (b) consider IRS 990 information as reliable data for the Tuckman and Chang (1991) equity and operating margin ratios; (c) use self-reported data to formulate a clearer measure of revenue concentration and administrative expense; and (d) apply the discrete elements of the FVI, as originally articulated by Tuckman and Chang (1991) and further applied by Hager (2001), as measures of organizational financial performance. Specifically, the current study used performance measures of equity, operating margin, administrative expense, and revenue concentration as correlational variables in the first analytic phase and as dependent variables in the second analytic phase. This section addresses each discrete recommendation.

Research across a homogenous sector.

Consistent with prior studies, including Bigelow and Stone (1995), Chambre and Fatt (2002), Durkin et al. (2010), and Sowa (2008), the current research examined financial performance across a homogenous sector of nonprofit organizations, specifically CBHOs with revenues greater than \$10 million. Selection of large-sized organizations assured at least some evidence of sustained organizational success. By concentrating on large and similar organizations, the systems model attempted to distinguish effective and ineffective strategies, while also considering resource dependencies and perceived institutional pressure, across organizations with some proven capacity to compete and survive among other nonprofits.

Bielefeld (1994) emphasized the need to study homogenous population to test conclusions about the impact of strategies under similar environmental conditions. Furthermore, conflicting results from Bielefeld (1994) and Foster and Fine (2007) on the efficacy of homogenous versus heterogeneous funding strategies further illustrate the importance of

examining strategies across similar types of organizations. Bielefeld (1994) showed how heterogeneous funding enabled survival; whereas Foster and Fine (2007) advocated for a more homogenous strategy. Foster and Fine (2007), did, however, emphasize the importance of revenue diversification within a primary source of funding. The systems model for the current study enabled specific investigation of financial effects of strategy among similar organizations operating within the same organizational field.

Accuracy and reliability of IRS 990 data.

Researchers articulate some concern related to the accuracy and reliability of IRS 990 data (Froelich et al., 2000; Hager, 2001; Hodge, 2006; Trussel, 2002). Issues pertaining to the lack of publicly-available IRS data for organizations with revenue less than \$25,000, conveyed by Hager (2001), do not apply to the current study, since all involved organizations have revenues greater than \$10 million and are required to file an IRS 990. Another concern related to the IRS 990 involves failure to file and/or incomplete data (Hager, 2001). Research shows a high level of compliance and accuracy among health and human service organizations, which includes the behavioral healthcare sector (Froelich et al., 2000, p. 250).

Related to incomplete data, the current research used data from three most recent years, within the period 2008 – 2012. Thus, if an IRS 990 was unavailable through the sources and methods identified earlier in this chapter, a substitute year within the (2008 – 2012) range was accepted. The optimal organizational data set would include IRS 990 data from fiscal years 2012, 2011, and 2010.

Many researchers have averaged data across multiple years to reduce error and this practice is sufficiently entrenched in the supporting literature (Greenlee & Trussel, 2000; Hager, 2001; Hodge & Piccolo, 2005; Ritchie & Kolodinsky, 2003; Trussel, 2002). Overall, many

consider the IRS 990 as a reliable source of data for basic information on the income statement and balance sheet, including total income, total expenses, total assets, and total liabilities (Froelich et al., 2000), which are core elements of Tuckman and Chang's equity and operating margin measures of financial performance. While still reliable, IRS 990 data sources pertaining to revenues and administrative expense exhibited a lower level of consistency with audited financial statements than the aforementioned data elements (Froelich et al., 2000). The next section addresses the reliability of these elements on the IRS 990.

Limitation of IRS 990 data: Herfindahl index and administrative expense.

The Herfindahl index is a measure of an organization's revenue concentration, typically across a variety of categories (e.g., contracts, gifts, and grants; program service revenue; membership dues; sales of unrelated goods; and investment income) (Tuckman & Chang, 1991, p. 453). IRS 990 data engaged to produce the Herfindahl index tend to be unreliable because organizations classify revenues differently (Hager, 2001; Gronbjerg, 1991). Under-reporting of government revenue by classifying such revenue as *program fees*, is a noted problem on the IRS 990 (Froelich, 1999; Froelich et al., 2000; Hager, 2001; Gronbjerg, 1991). This tendency toward revenue misclassification directly influenced the measurement of revenues used within the current study. Therefore, the current research applied a technique used by Bielefeld (1992a), which enabled respondents to classify revenues instead of using the researcher to interpret and extract data from the IRS 990. Respondents were able to classify revenues. Consequently, the technique used was expected to minimize misinterpretation and misclassification of data related to revenue concentration.

A second concern related to reliability of IRS 990 data pertains to the accuracy of administrative costs. Administrative expense is difficult to extract from the IRS 990 because

there is little standardization of reporting. Furthermore, because of lack of standardization, administrative expense has been susceptible to accounting manipulation (Trussel, 2002). Trussel (2002) omitted administrative expense from the FVI because of these issues. Rather than omit the measure, respondents in the current study were asked to answer a single question related to their organization's administrative overhead. As an administrator in the behavioral healthcare sector for nearly 20 years, the researcher assumes most executives are informed of the percentage of organizational expenditures comprised of administrative expense, or can readily obtain this percentage from a financial designate, such as chief financial officer or controller.

Correlational and dependent measures of financial performance.

Finally, the current study accounted for articulated by Greenlee and Trussel (2000), Hager (2001), Trussel (2002) and Keating et al. (2005). These studies cautioned against use of the FVI for predictive purposes. Drawing directly from Tuckman and Chang (1991), who developed the component measures of the FVI, and Hager (2001), who used equity, operating margin, revenue concentration, and administrative expense indicators in their discrete forms to describe financial performance of nonprofit organizations, the current research similarly applied measures of equity, operating margin, administrative expense, and revenue concentration as correlational variables in the first analytic phase of the research, and as dependent variables in the second analytic phase. The purpose of using financial variables in this way was to evaluate how well the Tuckman and Chang (1991) financial indicators would perform among a homogenous population of CBHOs, and to facilitate a more precise understanding of factors affecting an organization's financial position.

Conclusion: Synthesizing Toward a Model of Nonprofit Performance

The current systems model engaged specific variables of relevance to nonprofit sustainability, as supported by decades of literature described at length within the scope of this chapter. Systems models, by definition, delimit variables to a discrete number of elements among the many possible existing elements within the broader system (Arbner & Bjerke, 1997). This type of modeling of real systems is engaged to reveal how the organization and environment interact, as well as the ways in which the organization seeks to adapt to the broader environment in order to enhance competitive positioning (Arbner & Bjerke, 1997, p. 31). Delimitation of elements, such as those pertaining to resource dependence, institutional pressure, and organizational strategic choice, as set forth in the current model, magnifies the relevance of these variables on a particular effect or outcome, such as financial performance.

Community behavioral healthcare organizations engage diverse strategies for sustainability, and as a result, likely create a broad range of resource dependencies; yet, the literature suggests a strong reliance by nonprofit CBHOs on governmental sources or revenue (Mechanic & Rochefort, 1992; Taube et al., 1990). Institutional pressure also affects nonprofit performance, sustainability, and survival (Balser & McClusky, 2005; Baum & Oliver, 1991; Mizruchi & Fein, 1999). Many assert that the degree of institutional pressure exerted upon an organization closely aligns with its in-place dependencies, especially when such dependencies involve government sources (e.g., Gronbjerg, 1991; Froelich, 1999). Finally, research across recent decades reveals a range of ways nonprofit organizations execute strategic tactics in response to their resource dependencies and demands of dominant institutional actors (Alexander, 2000; Bielefeld, 1992b, 1994; Durkin et al., 2010; Sowa, 2008); however, the diversity of organizations, their type (donative or commercial), size, purpose, and level of

formality or professionalization, restrict the scope of generalization possible from studies on strategic adaptation (Bielefeld, 1994; Froelich et al., 2000).

Froelich and Knoepfle (as cited in Froelich et al., 2000) specifically called for mechanisms to organize the nonprofit sector into homogenous groups to better enable data comparisons within, and meaningful generalizations from, cross sectional, nonprofit, sustainability studies. In response to this call, the current study investigates variables of resource dependence, institutional pressure, strategic choice, and financial performance across a homogenous population of large-size nonprofit CBHOs. Four core methodological influences, already discussed at length in the content of this chapter, inform the design of the current model and frame the methodological discussion introduced in the next chapter.

First, the current research engaged a survey methodology to measure views of nonprofit executive respondents (or their designates) as viable proxies for their organizations. Executives have been considered as viable proxies in terms of assessing and responding to institutional pressures (Balser & McClusky, 2005; Gronbjerg, 1991; Heimovics et al., 1993) and executing specific tactics to increase organizational resources and legitimacy (Alexander, 2000; Bielefeld, 1992a; Jones, 2006). Second, the current study used executive responses across a homogenous population of CBHOs to assess the impact of key factors of resource dependence and institutional pressure on the organization, and to more specifically test conclusions about the strategic value of particular tactics, such as revenue-seeking, legitimation, and retrenchment (Bielefeld, 1992b, 1994). The current study modestly adapted Bielefeld's (1992b, 1994) revenue-seeking, legitimation, and retrenchment strategies, with the most significant adaptation targeted at expanding revenue-seeking tactics to more specifically distinguish between general, government-based, and non-government based revenue-seeking activities. This level of

differentiation appeared to be new to the body of research of similarly-focused studies. Overall, the effort to apply (and extend) Bielefeld's (1992b, 1994) strategic tactics lists emphasized the primacy of revenue-seeking, legitimation, and retrenchment strategies among nonprofits, as reflected by Alexander (2000), Barman (2002), Crittenden (2000), Foster and Fine (2007), Galaskiewicz and Bielefeld (1998), Golensky and Mulder (2006), and Ruef and Scott (1998), among many others, who have examined some or all of these tactics in their research.

Third, the current study also offered an effort to expand on the resource dependence measure by adding two additional indicators of government dependence to Bielefeld's (1992a) Gibbs-Martin revenue heterogeneity index. Specifically, the current study added the Government Contract Concentration Indicator to measure the degree to which organizational revenues are concentrated within government contracts, and the Medicaid-Medicare Concentration Indicator to assess the level of revenues generated from government-supported insurance. This resource dependence adaptation also appears to be new to the literature stream pertaining to dependencies of nonprofit organizations, even though many have pointed to the ways government dependencies affect organizational structures and processes (Frumkin & Kim, 2002; Hager et al., 2004; Guo & Acar, 2005).

Fourth and last, the comprehensive review of literature related to the current study revealed evidence that suggests no one to date has specifically explored the potential effects of varying conditions of resource dependence, institutional pressure, and strategy on nonprofit firm financial performance. Among extant literature, Bielefeld (1992a, 1992b, 1994), Crittenden (2000), and Galaskiewicz and Bielefeld (1998) most closely approximated the scope of the current research and as such, strongly informed its supporting theoretical framework and methodology; yet, there appears to be a paucity of specific empirical exploration on how

organizational strategic processes affect financial performance (Stone, as cited in Crittenden, 2000).

Despite some controversy related to using organizational financial performance as a viable indicator of nonprofit effectiveness (Herman & Renz, 1999), many call for the use of valid and reliable measures of financial performance to assess organizational performance and sustainability (Crittenden, 2000; Froelich et al., 2000; Hager, 2001; Hodge & Piccolo, 2005; Ritchie & Kolodinsky, 2003). Given broad and sustained application of the Tuckman and Chang (1991) financial indicators of equity, operating margin, administrative expense, and revenue concentration, in numerous nonprofit studies, these indicators are long-acknowledged as valid and reliable measures of financial performance. Tuckman and Chang's (1991) financial indicators are therefore justifiably included as correlational variables in the first phase of the systems model developed to guide the current study, and as dependent variables in the second analytic phase.

CHAPTER 3. METHODOLOGY

Introduction

The cross-sectional, correlational (Phase 1) and explanatory (Phase 2) research design describes and explains factors affecting the sustainability of nonprofit community behavioral healthcare organizations. The research engaged a systems model of nonprofit financial performance and incorporated the following variables of known relevance to nonprofit effectiveness, performance, and sustainability: resource dependence, institutional pressure, and strategic choice. Prior qualitative and mixed methodological studies revealed variables of resource dependence (e.g., Bigelow & Stone, 1995; Froelich, 1999; Pfeffer & Salancik, 2003; Saidel, 1991), institutional pressure (e.g., Alexander, 2000; Besel & Andreescu, 2003; Bigelow & Stone, 1995), and strategic choice or adaptation (e.g., Alexander, 2000; Bielefeld, 1992b, 1994; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006), as instrumental to the viability of nonprofit organizations. The breadth of past inquiry into these variables of relevance supported their inclusion within the current model.

This study explored the following primary and supporting research questions: Do resource dependence, institutional pressure, and strategic choice (i.e., revenue-seeking, retrenchment, and/or legitimation) affect financial performance of large, nonprofit CBHOs?

1. Do type and level of resource dependence affect the degree of perceived institutional pressure of large, nonprofit CBHOs?
2. Do type and level of resource dependence affect strategic choices of large, nonprofit CBHOs?

3. Does degree of institutional pressure affect strategic choices of large, nonprofit CBHOs?

Across a homogenous population of nonprofit CBHOs, the study incorporated relevant variables of resource dependence, institutional pressure, and strategic choice within a systems model of financial performance, and evaluated variable relationships through two discrete analytic phases.

Phase 1–Model 1 investigated relationships between all variables of resource dependence, institutional pressure, strategic choice, and financial performance (see Figure 1 in Chapter 1). Phase 2–Model 1 investigated the effects of resource dependence, institutional pressure, and strategic choice on organizational financial performance. Phase 2 models engaged dependent variables of organizational equity (DEBT), operating margin (MARGIN), administrative expense (ADMIN), and revenue concentration (CONCEN), with each dependent variable defining its respective model. Phase 2–Model 2 also investigated the effects of resource dependence, institutional pressure, and strategic choice on organizational financial performance, but included expanded variables of resource dependence and revenue-seeking strategic tactics. Figure 2, described earlier in Chapter 1, delineates the full range of variables in Phase 2–Model 1 and Phase 2–Model 2.

Research Design

This quantitative study employed a cross-sectional, correlational (Phase 1) and explanatory (Phase 2) design using survey data from CEOs of large-sized CBHOs on measures of resource dependence, institutional pressure, strategic choice, and financial performance. The organization was the unit of analysis. Consistent with Alexander (2000), Balser and McClusky (2005), Bielefeld (1992a), Gronbjerg (1991), and Heimovics et al. (1993), the design assumed the centrality of the executive and considered the executive participant or his/her designate as a

viable proxy for the organization. The executive operates at the center of the organization where information flows in and out, assumes the prime position within the organization to understand and act upon the external environment, and has the unique capacity to shift dependencies of the organization by managing resources and the political environment (Balser & McClusky, 2005; Bigelow & Stone, 1995; Heimovics et al., 1993).

A post-positivist ontological perspective (Creswell, 2003, p.7), guided by tenets of critical realism (Trochim, 2006), and a systems-oriented methodological approach (Katz & Kahn, 1978) supported the research. According to post-positivism, objective reality exists but may not be easily apprehended; consequently, variable relationships viewed from such a perspective are likely to be considered as probabilistic (or stochastic) rather than deterministic (Arbnor & Bjerke, 1997). A critical realism ontology, which is a specific form of post-positivism, emphasizes the potential fallibility of observation and therefore questions the absolute ability to know reality with certainty (Trochim, 2006).

The narrow construction of the systems model used for the study presumes the relevance of included variables, based on their prior exposition across a large body of related studies (e.g., Alexander, 2000; Bielefeld, 1992a, 1992b, 1994; Crittenden, 2000; Durkin et al., 2010; Galaskiewicz & Bielefeld, 1998; Walker & McCarthy, 2010). By design, delimited variables of resource dependence, institutional pressure, strategic choice, and financial performance allow for other plausible explanations of organizational financial performance. The intention of the system model and research design was to examine the effects of specific variables of prior demonstrated relevance, and enhance their operationalization and application across the specific population of large-sized CBHOs.

Four opportunities from supporting studies specifically informed particular methodological features of the current study. First, the current study intentionally focused on a homogenous population of CBHOs, rather than a broad range of nonprofit organizations. Second, the theoretical framework entwined theories of resource dependence, institutional, and strategic choice to support a delimited systems model of financial performance. Third, the study engaged financial measurement as a proxy for organizational effectiveness. Finally, the research extended an effort more specifically operationalize and measure the resource dependence construct.

The study's design encompassed involved two discrete analytic phases and three models. Phase 1–Model 1 explored relationships between variables of resource dependence, institutional pressure, strategic choice, and financial performance. Phase 2–Model 1 and Phase 2–Model 2 investigated the degree to which resource dependence, institutional pressure, and strategic choice explained variation in organizational financial performance. Phase 1 included all variables in the study; Phase 2–Model 1 included the following variables from Bielefeld (1992a, 1992b, 1994): resource dependence revenue heterogeneity (REDE-HETER); institutional pressure (INPRESS); and strategic tactics (overall revenue-seeking [OVERALL_REVSEEK], legitimation [LEGIT], retrenchment [RETRENCH]). Phase 2–Model 1 also involved the following dependent (financial) variables from Tuckman and Chang (1991): equity (DEBT), operating margin (MARGIN), administrative expense (ADMIN), and revenue concentration (CONCEN). Discrete sections of this chapter offer more detail on all variables involved in the study.

Phase 2–Model 2 included REDE-HETER, INPRESS, LEGIT, and RETRENCH, as well as the following expanded variables of resource dependence and revenue-seeking activity: resource dependence–government contract concentration (REDE-GOVCON); resource

dependence–Medicaid-Medicare concentration (REDE-MM); revenue-seeking general (REVSEEKGEN); revenue-seeking, government (REVSEEKGOV); and revenue-seeking, nongovernment (REVSEEKNONGOV). Phase 2–Model 2 also involved the following dependent (financial) variables from Tuckman and Chang (1991): DEBT; MARGIN; ADMIN; and CONCEN. Discrete sections of this chapter offer more detail on all variables involved in the study. Table 7 also offers a comprehensive summary of all variables.

Sample

The population included all nonprofit CBHOs in the United States of America with revenues \geq \$10 million in fiscal year 2012, or the IRS filing year closest to 2013. The United States' government uses the National Taxonomy of Exempt Entities (NTEE) classification system to group tax-exempt entities by similarity of purpose, activity, type, and major function (Wing et al., 2008, pp. 3-4). The NTEE system includes 26 categories to appropriately classify nonprofit organizations by primary purpose. CBHOs fall within the *health* category, under sub-category *mental health* (F), and/or within the *human service* (P) category.

Using GuideStar (www.guidestar.org), a web-based database of nonprofit organizations, only organizations within the identified mental health and human services categories, and also with revenues \geq \$10 in the most recent fiscal year (i.e., FY 2012 or FY 2013, if filed by the organization at the time of data collection), comprised the final population. The GuideStar database included financial reporting forms (i.e., IRS 990) for the nonprofit organizations of interest to this study. IRS 990 data offered financial information used to identify to CBHOs organizations with revenues greater than \$10 million. Specifically, the population encompassed organizations within the following categories and with revenues \geq \$10 million:

- F22 (Alcohol and Drug Treatment);

- F30 (Mental Health Treatment);
- F32 (Community Mental Health Centers);
- F33 (Group and Residential Treatment);
- F53 (Eating Disorders Treatment);
- F54 (Gambling Disorders Treatment);
- F70 (Mental Health Disorders);
- F99 (Mental Health and Crisis Intervention, not otherwise classified); and
- P99 (Human Service and Multipurpose Organization, not otherwise classified), if the P99 organization primarily offered behavioral healthcare services, as reflected in its mission and vision statements.

The population ($N=508$) excluded mental health hospitals because their strategic issues differed from that of community-based nonprofit, behavioral healthcare organizations.

Table 4

Population: Nonprofit CBHOs with Revenue > \$10 Million (GuideStar, n.d.)

NTEE Category	NTEE Description	N
F22	Alcohol and Drug Abuse Treatment	66
F30	Mental Health Treatment	164
F32	Community Mental Health Center	174
F33	Group Home, Mental Health Residential Treatment	65
F53	Addictive (Eating) Disorder	1
F54	Addictive (Gambling) Disorder	0
F70	Mental Health Disorders	3
F99	Other Mental Health, Crisis Intervention	20
P99	Human Services, Multipurpose (behavioral health only)	15
	Total $N =$	508

Note. Field testing involved 10 organizations; pilot study involved a sample of 50 organizations; the full survey population included 448 organizations. The full survey sample included 350 organizations.

The study utilized three separate samples for field testing, pilot study, and full survey segments of the study, with each sample derived by using the selection-without-replacement sampling technique. The field testing sample included 10 organizations. The pilot testing sample included 50 organizations. The full survey sample included 350 organizations.

Field Testing Sample

Expert panelists for the field testing segment fulfilled the following criteria:

- worked within an organization included among the top (total revenue) quartile of organizations in the target population distribution;
- performed as the CEO, COO, or other executive-level position responsible for strategic planning and execution; and
- served in an executive-level position for at least five years; a timeframe assumed to be an adequate level of experience required to obtain and manage resources, as well as to address the demands of multiple stakeholder groups.

A fundamental assumption of the study involved the notion that experienced CEOs, who led organizations at the highest revenue echelon in the community behavioral healthcare sector, possessed strategic expertise to review, comment on, and improve the proposed survey instrument.

CEOs ($N = 10$) from California, Illinois, Massachusetts, New York, Pennsylvania, Tennessee, and Utah received field testing packets. Four CEOs from California, Illinois, and Tennessee responded, one CEO from California declined, and five did not respond. All CEO respondents represented organizations with FY 2012 minimum annual revenue of \$50 million. The mean annual revenue from responding organizations was \$77 million, and the range extended from \$54 million to \$152 million.

Pilot Study Sample

With 10 organizations removed from the total population database after the field testing segment, 498 organizations remained. The researcher placed index cards numbered 1 – 498 in a receptacle and randomly drew 50. Each index card number corresponded to an organization's placement within the database spreadsheet. The database included 498 organizations (i.e., full population of 508 less the 10 organizations purposefully selected for the field testing phase). Seventeen of 50 (34%) pilot study organizations responded. All respondents were CEOs.

Full Survey Sample

With 60 organizations removed from the total population database after field testing and pilot study segments, the researcher used the same random selection procedure for the remaining 448 organizations, and extracted a sample of 350 organizations in order to generate of response of at least 115 returned surveys, which exceeds the required sample of 96 generated by G*Power software (Faul, Erdfelder, Buchner, & Lang, 2009) for Phase 1–Model 1 correlational analysis, and 94 and 114 for Phase 2–Model 1 and Phase 2–Model 2, respectively. Both Phase 2 models involved multiple linear regression analysis. See Table 5 for detailed G*Power inputs and outputs used for the current study.

G*Power sample sizes were consistent with Bartlett, Kotrlik, and Higgins (2001), which recommended a return sample of 92 for a population size of 400, and 96 for a population size of 500, assuming continuous data, alpha = .05, and margin of error = .03 (p. 48). The size of the target population for the full survey ($N = 448$) fell nearly at the midpoint between 400 and 500; consequently, the targeted return rate was set at 94, the midpoint between 92 and 96 (Bartlett et al., 2001, p. 48).

Regarding anticipated response rate, there appeared to be no directly-relevant national survey involving behavioral healthcare organizations from which response rate estimates could be determined. Yet, recent nonprofit studies by Crittenden (2000), Edwards, Mooney, and Heald (2001), Froelich et al. (2000), and Olson (2000), showed an average response rate of 44%, with the lowest rate at 10% (Olson, 2000) and the highest at 70% (Edwards et al., 2001). The (conservatively) anticipated response rate for the current study was 33%, less than the average rate involving nonprofit organizations.

Table 5

*Phase 1 and Phase 2 Models: Determination of Sample Size, per G*Power 3.1.9*

Input	Phase 1–Model 1	Phase 2–Model 1	Phase 2-Model 2
Tail(s)	Two	One	One
Correlation ρ H_1	.3	--	--
Correlation ρ H_0	0	--	--
Effect size f^2	--	.15	.15
α	.05	.05	.05
Power	.85	.80	.80
Total number of predictors	--	5	9
Total sample size	96	92	114

Note. G*Power 3.1.9 (Faul, Erdfelder, Buchner, & Lang, 2009)

Setting

The current cross-sectional, correlational (Phase 1) and explanatory (Phase 2) research addressed factors of resource dependence, institutional pressure, and strategic choice among large, nonprofit CBHOs with revenues greater than \$10 million in the fiscal year 2012 or closest thereto. CBHOs treat the most severely mentally ill in American society. Individuals served by CBHOs often live among the poor and depend on government support for needed services (Mechanic & Rochefort, 1992; Taube et al., 1990). CBHOs within the current study were assumed to depend on government funding to some extent, transferred to them through

government contracts and grants, as well as through third-party Medicaid and Medicare disbursements (Foley et al., 2006; National Institute of Mental Health, 1999). Given this funding climate, CBHOs were expected to regularly intersect with institutional demands of funders and stakeholders, and take strategic action to effectively manage these contingencies.

Instrumentation / Measures

Each CEO/designate received a survey packet which contained an informed consent document, survey, and postage-paid return materials. For each phases (i.e., field testing, pilot study, and full survey), the researcher mailed an engagement notice to each executive, explaining the study and requesting participation (Appendices G, J, and M). All CEOs received a hard-copy survey packet within one week of the engagement notice, as well as a postage-paid envelope for survey return. The informed consent document for each phase (Appendices H, K, and N), distributed with the survey packet, also included closing instructions and the investigator's contact information for questions related to survey content or processes.

Adaptation of Measures

Phase 1 of the design investigated correlational relationships between variables of resource dependence, institutional pressure, strategic choice, and financial performance. Phase 2 models encompassed four discrete multiple linear regression analysis equations (DEBT, MARGIN, ADMIN, and CONCEN) to explain factors contributing to nonprofit financial performance. The research used separate multiple linear regression analyses to promote ease and clarity in following a broad range of original hypotheses (Appendix B) and to clearly show how the CONCEN model excluded all levels of the resource dependence independent variable, given the lack of independence between resource dependence and revenue concentration constructs, as described previously in Chapter 1.

Measures of resource dependence, institutional pressure, and strategic choice must align with contextual factors relevant to CBHOs of interest to the current study. Some level of instrument development and pilot testing was necessary. Appendices I, L, and O contain instruments used for field testing, pilot study, and full survey phases, respectively.

The current research engaged and slightly adapted the Gibbs-Martin revenue heterogeneity index (Bielefeld, 1992a), Institutional Vulnerability Index (Bielefeld, 1992a), and strategic tactics list (Bielefeld, 1992b). Appendices C and E contain adapted Gibbs-Martin and strategic tactic measures, respectively, prepared for the field testing process. Appendices C and E also delineate specific ways each measure conforms to or extends its respective original measure. Financial indicators of equity (DEBT), operating margin (MARGIN), administrative expense (ADMIN), and revenue concentration (CONCEN), as used by Tuckman and Chang (1991), comprised the four measures of financial performance. This section describes each variable, its background and relevance to the design of the current study, and its operationalization within the survey instrument. A subsequent section on validity and reliability thoroughly addresses issues related to instrument development and pilot testing.

Resource dependence.

The first section of the survey instrument measures the resource dependence construct using three discrete measures: Gibbs-Martin revenue heterogeneity index (Bielefeld, 1992a), Government Contract Concentration Indicator (GCCCI), and the Medicaid-Medicare Concentration Indicator (MMCI). The Gibbs-Martin index is a well-established, Herfindahl-type measure of revenue heterogeneity (Bielefeld, 1992a). Many researchers have used Herfindahl-type measures (e.g., Fischer et al., 2007; Greenlee & Trussel, 2000; Hager, 2001; Trussel, 2002; Trussel et al., 2002; Tuckman & Chang, 1991) to assess the depth of revenue heterogeneity

within an organization by assuming equal weights for each possible stream. The index nears 1.0 on the side of complete concentration in one revenue stream, and the lower bound approaches zero. Upper and lower bounds are a function of the number of revenue streams included in the index, and typically, higher index levels reflect greater levels of revenue concentration, whereas lower levels reflect greater levels of revenue heterogeneity (Fischer et al., 2007).

Bielefeld (1992a) used a similar method to calculate the Gibbs-Martin heterogeneity index, which *subtracts* the Herfindahl index from 1.0 to produce a measure that *increases* as revenue heterogeneity increases and *decreases* as revenue heterogeneity decreases.

The [Gibbs-Martin] index was computed by first calculating the proportions of total income which an organisation received from each of the 15 possible income sources. The proportions so obtained could range from 1.0 for an organisation which received all of its income from funders in only one income category to 0.067 for an organization which got equal proportions of its total incomes from each of the 15 income categories. Finally, the sum was subtracted from 1.0 to yield an index that could range from zero (all income from one source) to 0.933 (equal proportions from each source). (Bielefeld, 1992a, pp. 56 - 57)

The current study applied the Gibbs-Martin index because of its intuitive appeal: a larger index reveals the more favorable status of revenue heterogeneity; a lower index reveals a less favorable status of revenue homogeneity (or concentration). Appendix D delineates the content of the Gibbs-Martin revenue heterogeneity index prepared for expert panelist review and feedback in the current study. Appendix D also includes information on the ways the revised Gibbs-Martin conforms to or extends the prior version articulated by Bielefeld (1992a), clarifies revenue

categories (private, public, and self-generated), and offers the calculation methodology for the Gibbs-Martin index.

Many researchers used Herfindahl-type measures (e.g., Greenlee & Trussel, 2000; Hager, 2001; Trussel, 2002; Trussel et al., 2002; Tuckman & Chang, 1991) and considered such indices as valid and reliable measures of revenue heterogeneity. While some may question the reliability of self-reported revenue data, the alternative involves using the IRS 990 form, which conflates many revenue categories and makes accurate revenue tracking nearly impossible (Froelich, 1999). The self-report of an executive or his/her fiscal designate will likely produce valid and reliable data, as compared to external interpretation of the IRS 990 submitted by the organization. Many recognized this and as a result, chose the Gibbs-Martin or similar Herfindahl-type index to measure revenue heterogeneity (e.g., Greenlee & Trussel, 2000; Hager, 2001; Trussel, 2002; Trussel et al., 2002; Tuckman & Chang, 1991).

As discussed at length in Chapter 2, the Gibbs-Martin has a core design limitation: the instrument fails to capture the depth of dependence within any given resource category (Lenaghan, 2006). Assessment of organizational dependence on government funding is an important component of the current research; however, alternative approaches to measuring government dependence, such as using dichotomous or categorical variables to describe presence, absence, or level of government funding (e.g., Guo & Acar, 2005; Hager et al., 2004), have already been explained as insufficient. In an attempt to more precisely define the degree to which nonprofits depend on government revenues beyond categorical assignments, such as government funding versus no government funding, the current study integrates two new indicators of dependence, the Government Contract Concentration Indicator (GCCCI) and Medicaid-Medicare Concentration Indicator (MMCI).

The GCCI calculation encompasses *percentage of organizational revenue comprised of government contracts / total number of government contracts*. The GCCI produces a percentage of general dependence, per contract. For example, an organization with 70% of its funding from government sources, allocated across 17 discrete government contracts, has approximately 4.1% dependence per contract ($.70/17 = .0411$). An organization with 70% of funding from government sources, with 9 distinct contracts, has approximately 7.8% dependence per contract ($.70/9 = .0777$). An evident limitation to the GCCI is that the indicator treats all contracts as equal and does not account for *value* differences across contracts. For example, the computation treats two contracts valued at \$350,000 and \$5 million as equivalent in value, even though they are not. CBHOs likely have many local, state, and federal contracts.

Explication of all contracts and their amounts within a survey instrument would be time intensive and adversely affect accuracy and/or return rates. Consequently, the design of the GCCI strives to reach a middle ground between simplistic (e.g., categorical) and more detailed survey options. The specific value (i.e., percentage) of total government contract funding for each organization, extracted from the Gibbs-Martin revenue heterogeneity index, provides the numerator value for the GCCI. A separate survey item requests respondents to specify the number of total active government contracts within an organization, providing the denominator for the GCCI. The GCCI provides an estimate of organizational dependence per contract. Contracts typically span across multiple years; therefore, the current research assumes current-year contract data reflects organizational contract revenue over the span of multiple years.

The computation method used to derive the Medicaid-Medicare Concentration Indicator (MMCI) is similar to that used for the GCCI: *percentage of third-party (non-contract) Medicaid and Medicare revenue / percentage total third-party revenue*. The MMCI provides information

related to organizational dependence on government sources of third-party revenue. Data for the MMCI come directly from the Gibbs-Martin revenue heterogeneity index.

The treatment of revenue heterogeneity as *both* an independent and dependent variable is complicated and warrants further explanation. Studies on nonprofit adaptation, growth, and decline regularly treat revenue homogeneity/heterogeneity as an independent variable (e.g., Bielefeld, 1992a; Bielefeld, 1994; Galaskiewicz & Bielefeld, 1998). Herfindahl-type instruments, including the Gibbs-Martin revenue heterogeneity index, are commonly used to measure level of organizational dependence on particular revenue sources, and treated as independent variables in analyses of organizational sustainability (e.g., Bielefeld, 1992a, 1992b, 1994; Galaskiewicz & Bielefeld, 1998).

Revenue heterogeneity is also an important element of organizational financial health, as measured through the revenue concentration index, another Herfindahl-type instrument used by Greenlee and Trussel (2000), Trussel (2002), Trussel et al. (2002), and Tuckman and Chang (1991). Perhaps the most pervasive application of the revenue concentration index in recent studies encompasses its inclusion as one-of-five financial independent variables in logistical regression analyses used to predict financial vulnerability among nonprofit organizations (Greenlee & Trussel, 2000; Trussel, 2000). These analyses produced the Financial Vulnerability Index (Greenlee & Trussel, 2000; Trussel, 2000; Trussel et al., 2002), which has been used as a correlational (Hodge, 2006; Hodge & Piccolo, 2005) and dependent (Hodge, 2006) variable in studies on nonprofit financial performance.

To summarize, prior studies treat revenue heterogeneity as an independent, correlational, and/or dependent measure, depending on their design and intention. Informed by these studies, the treatment of revenue heterogeneity as a Phase 1 correlational variable (i.e., REDE-HETER),

Phase 2 independent/explanatory variable (i.e., REDE-HETER), and Phase 2 dependent variable (i.e., CONCEN) aligns with prior research. Consistent with Bielefeld (1992a), the Gibbs-Martin revenue heterogeneity index (REDE-HETER) was used as a correlational measure in the first phase of the current study; and consistent with Tuckman and Chang (1991), Greenlee and Trussel (2000), and Trussel (2000), the revenue concentration index (i.e., CONCEN) was used as a dependent measure in the second phase of the study.

Because the Gibbs-Martin revenue heterogeneity index and revenue concentration index are not independent, the first-phase correlational analysis excluded this association. That is, the CONCEN variable was not included among the resource dependence correlations. Furthermore, no independent measures of resource dependence (i.e., REDE-HETER, REDE-GOVCON, or REDE-MM) were included within Phase 2 CONCEN models of nonprofit financial performance. Figure 3 specifically explicates correlational relationships involving resource dependence measures (i.e., Gibbs-Martin, GCCI, and MMCI) within Phase 1.

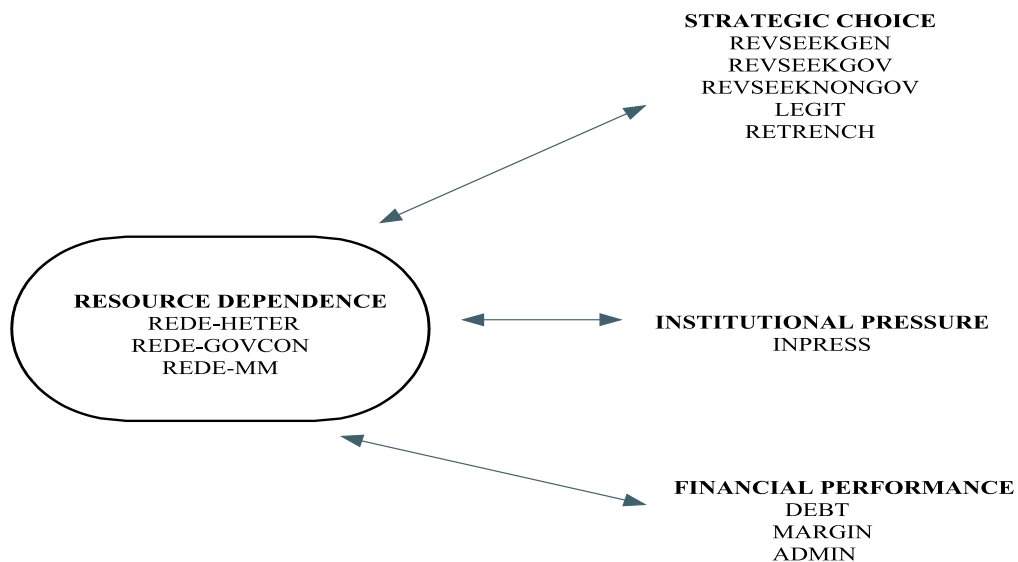


Figure 3. Phase 1 resource dependence correlations.

Figure 4 delineates all potential predictor variables in the CONCEN model in Phase 2. Table 7, detailed later in this chapter, encompasses a summary of all variables within the current study. The final column of Table 7 provides information on how variables operated within Phase 1 and Phase 2 models.

Institutional pressure.

Studies on institutional environments and their effects on organizations reveal the complexity of institutional environments and the manner in which external dominant actors can affect the viability and sustainability of the nonprofit enterprise (Alexander, 2000; Besel & Andreescu, 2003; Bigelow & Stone, 1995). Schneiberg and Clemens (2006) describe how the decision to measure institutional effects within a single industry rests on researchers' judgments concerning categories of relevance for organizations included in the analysis (p. 202). The current study did not measure the *content* of institutional pressure per se, such as specific industry demands for services, staffing arrangements, clinical technologies, outcome measures, or business practices, as examples; but, rather investigated only the *degree* of perceived pressure an organization experiences from stakeholder demands.

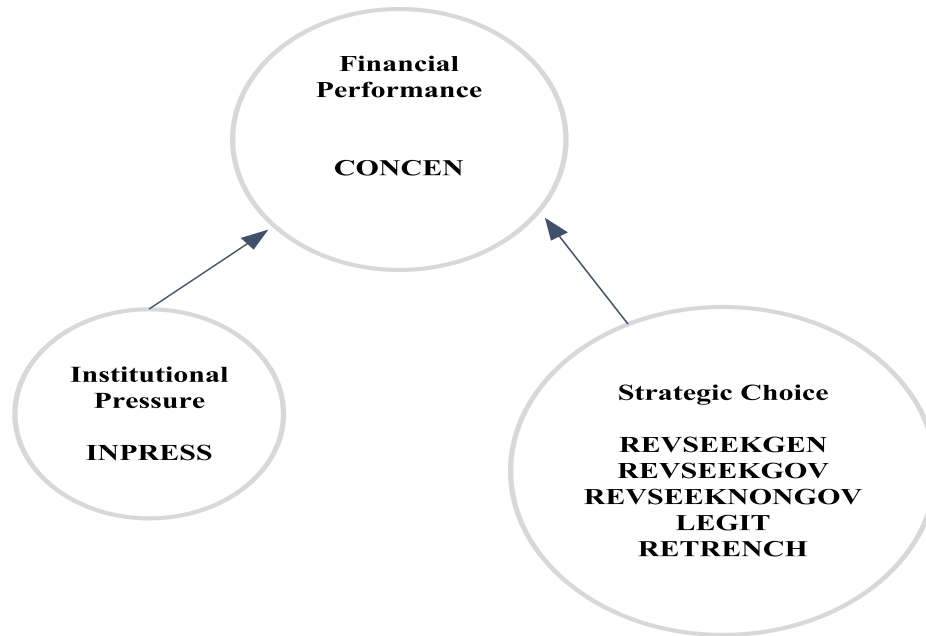


Figure 4. Phase 2 CONCEN model variables.

Bielefeld’s (1992a) Institutional Vulnerability Index was adapted in order to measure institutional pressure experienced by CBHOs. The IVI is an index that measures the influence of particular stakeholders groups on five organizational domains—strategic goals, organizational structure, organizational operations, types of clients served, and types of services/programs offered. Bielefeld (1992a) developed the IVI as part of a longitudinal study of 229 organizations sampled from a population of 1625 nonprofits in the Minneapolis and St. Paul areas of Minnesota. Organizations included among the total population represented diverse nonprofit functional areas, including health/welfare, cultural, educational, recreational, and civic, among others (Bielefeld, 1992a, p. 54).

Because Bielefeld (1992a) developed the IVI across a heterogeneous population of nonprofit organizations, which included health and welfare organizations such as CBHOS, its design broadly addressed a diverse range of nonprofits and could be appropriately adapted for

the current study of CBHOs. Bielefeld's research encompassed interviews with executives/designates in 1980 and 1984. During the 1984 interviews, respondents ranked a list of influential actors in terms of overall importance to the organization and identified the extent to which these actors influenced the organization in terms of its goals, structures, operations, types of services, and types of clients (Bielefeld, 1992a, p. 57). These data comprised two sets of values reflecting stakeholder importance and influence that ultimately combined to form an index of institutional vulnerability.

The importance index allows respondents to record importance for each stakeholder using a range from 0–5. The influence index reflects the total number of organizational parts influenced by each of the institutionally-relevant actors. Actual importance values ranged from 0–5, with a mean of 3.0 and standard deviation of 1.5; influence values ranged from 0–20, with a mean of 3.3 and a standard deviation of 3.8; and the overall mean for the full index was 18.42, with a standard deviation of 9.41, $N = 200$ (Bielefeld, 1992a, pp. 57-58). A significant conceptual difference exists between the adapted index (reflected in Appendix D) and the original index developed by Bielefeld (1992a). This difference requires a detailed explanation.

Notably, Bielefeld (1992a) intentionally separated funding stakeholders from the institutional stakeholders in his analysis. This approach was appropriate and aligned with the following: (a) exploratory intent of the study; (b) heterogeneity of organizations included within the research; and (c) researcher's intention to separately evaluate resource and institutional effects on strategic choice (e.g., boundary spanning, modeling, or engagement in collective community action). The current study applied the IVI across a homogenous population and therefore, with different intent.

The population of large-sized CBHOs exists within a sector where funders seriously shape institutional demands related to organizational goals, structures, operations, services, and strategies (Alexander, 2000; Gronbjerg, 1991; Froelich, 1999). Accordingly, and different from Bielefeld (1992a), who excluded funders from the institutional context, the adapted IVI included funder and payer constituencies, as supported by research related to the powerful role funders or payers assume in healthcare and human service fields (e.g., Alexander, 2000; Durkin et al., 2010; Gronbjerg, 1991; Lamothe & Lamothe, 2009; Sowa, 2008).

Because funders shape and reinforce institutional standards of CBHOs, their exclusion would likely compromise the validity of the institutional measure, and thus, interpretation of findings. During the instrument development (field testing) phase of the current study, a panel of experts from the community behavioral healthcare sector provided data to establish content validity of the IVI. The section on reliability and validity further addresses the development of the IVI, adapted from the original index formulated by Bielefeld (1992a).

Computation of the Institutional Vulnerability Index is straightforward. As designed, the IVI has a restricted range of stakeholders (limited to five). A total score of 50 is possible, derived from a high score of 25 on the importance scale (i.e., the CEO respondent rates each of five stakeholders at the highest level of importance), and a high score of 25 on the influence score (i.e., all five stakeholder groups influence all five categories, including strategic goals, organizational structure, organizational operations, types of services offered, and types of clients served). While Bielefeld (1992a) articulated descriptive measures related to the initial development of the instrument, as cited earlier in this chapter, the study did not convey estimates of reliability because the IVI measure was conceived as a singular index of institutional pressure and not a scale measuring a variety of different constructs.

The original categories comprising the Institutional Vulnerability Index seem to have some level of convergent validity because Bielefeld (1992a) created these categories through a voting and prioritization process across a representative sample of heterogeneous nonprofit organizations. The study did not, however, specifically articulate validity data. Similar to the approach used by Bielefeld (1992a), stakeholder categories included within the instrument development phase of the current study ultimately reflected the most influential stakeholder groups in the community behavioral healthcare sector, as determined by an expert panel. Bielefeld's (1992a) stakeholder groups (i.e., general public, community leaders, media, politicians, and legislative bodies) were included among the full array of (10) choices available to the expert panel during the field testing phase. Appendix E reflects the framework for the IVI and Appendix H contains the specific instrument the expert panel received and responded to. Expert panelists placed each stakeholder group in rank order of importance/influence. From median values calculated for each stakeholder group, those groups ranked in the top five would populate pilot and final forms of the Institutional Vulnerability Index used for the current study.

Strategic choice.

Research on strategic tactics involves specific attention to strategies organizations execute in order to meet resource needs and adapt to institutional demands (Baum & Oliver, 1991; Bielefeld, 1992a, 1992b, 1994; Bigelow & Stone, 1995; Galaskiewicz & Bielefeld, 1998; Galaskiewicz et al., 2006). Many studies seek to distinguish effective and ineffective strategic action under varied environmental conditions (Alexander, 2000; Balser & McClusky, 2005; Bielefeld, 1992b; Galaskiewicz & Bielefeld, 1998; Golensky & Mulder, 2006; Walker & McCarthy, 2010). Across the broad range of literature on strategic adaptation of nonprofit organizations, tactics tend to cluster among four distinct content areas: revenue enhancement,

legitimation, retrenchment, and managerial professionalization. Bielefeld's (1992b, 1994) research directly informs the strategic tactics list used for the research.

Findings from a broad range of contemporary studies support the continued relevance of revenue-seeking, legitimation, and retrenchment strategies originally set forth by Bielefeld's (1992b, 1994) strategic tactics list. Table 6 summarizes prominent studies. Managerial tactics are not specifically included in the current research because of problems with multicollinearity between managerial and political (legitimation) indexes (Galaskiewicz & Bielefeld, 1998). Furthermore, a core assumption associated with examining strategies used by large-sized organizations with annual revenues greater than \$10 million involves the likelihood that such organizations will have managerial tactics in place. To some extent, the researcher assumed that large CBHOs would have managerial practices such as training programs and strategic plans in place, since institutional norms and practices of the sector often require these practices as a condition for accreditation and/or licensing.

Many of these studies used case study analysis or comparative case studies to explore how organizations strategize for sustainability (e.g., Barman, 2002; Bigelow & Stone 1995; Crittenden, 2000; Durkin et al., 2010; Gronbjerg, 1991); while others used focus groups, surveys, or interviews to produce data about how organizations strategize under specific environment conditions, including resource dependence and institutional pressure (e.g., Alexander, 2000; Balser & McClusky, 2005; Bielefeld, 1992a, 1992b, 1994; Golensky & Mulder 2006; Heimovics et al., 1993; Jones, 2006; Townsend & Campbell, 2007). Studies by Bielefeld (1992b, 1994) and Galaskiewicz and Bielefeld (1998) are unique to this body of research in that they developed and used a specific inventory of strategic tactics to gauge the degree to which nonprofits use revenue-seeking, legitimation, and retrenchment strategies and their effects.

Bielefeld's (1992a, 1994) exploratory longitudinal research encompasses a cross section of nonreligious nonprofit organizations to investigate whether particular environmental conditions (high or low resource dependence and institutionalism) affect the strategic choices made by nonprofit organizations. Bielefeld (1992b, 1994) assesses the degree to which nonprofit organizations used new revenue, retrenchment, or legitimation strategies (tactics) as adaptive responses to changes in the external environment. New revenue tactics include actions geared toward generating new income by assessing needs, starting new services, and/or approaching new funders; retrenchment tactics encompassed internally-focused activities designed to maximize organizational efficiencies, such as increasing staff workloads, reducing costs, and raising fees; and legitimation tactics were those geared toward favorably influencing perceptions of influential stakeholders within the sociopolitical environment (Bielefeld, 1994, pp. 29-30).

Table 6

Strategic Tactics: Supporting Literature

Revenue-Seeking	Legitimation	Retrenchment
Alexander (2000) Crittenden (2000)	Alexander (2000) Barman (2002)	Durkin et al. (2010) Golensky & Mulder (2006)
Foster & Fine (2007)	Baum & Oliver (1991)	Galaskiewicz & Bielefeld (1998)
Golensky & DeRuiter (2002)	Durkin et al. (2010)	
Gronbjerg (1991)	Galaskiewicz & Bielefeld (1998)	
Guo & Acar (2005)	Golensky & Mulder (2006)	
Sowa (2008)	Lamothe & Lamothe (2009) ^a Ruef & Scott (1998) Smith & Lipsky (1993) ^a	

^aStudy addresses managing institutional demands associated with government revenue.

Bielefeld (1992b) did not report reliability data for tactic measures of new revenue, legitimation, and retrenchment tactics, but performed factor analysis to successfully confirm revenue-seeking, legitimation, and retrenchment categories. Later, Galaskiewicz and Bielefeld (1998) computed Cronbach's α for each tactic measure (retrenchment, political, and managerial) within each of four periods included in their study (1980–1984; 1984–1988; 1988–1992; and 1988–1994). The indexes consistently showed high reliability (Galaskiewicz & Bielefeld, 1998, p. 101); yet, the researchers cautioned future users about potential multicollinearity between political (legitimation) and managerial inventories.

Because of this observed limitation in Galaskiewicz and Bielefeld (1998), the current research extracted only from Bielefeld (1992b), using revenue-seeking, retrenchment, and legitimation strategies, with modest adaptation to more directly align with the behavioral healthcare sector. Furthermore, the revenue-seeking category was of particular interest to the current study. Revenue-seeking was broadened to distinguish between tactics aimed at cultivating government revenue sources (a technique not yet performed in preceding studies), and more generalized revenue-seeking actions. Appendix F delineates all preliminary items in the strategic tactics list. Field testing and pilot study phases of the current study contained strategies to evaluate the instrument before wide-scale application within the full survey portion of the current research.

Financial performance.

The current study recognized prior empirical testing of Tuckman and Chang's (1991) financial indicators of equity (DEBT), operating margin (MARGIN), administrative cost (ADMIN), and revenue concentration (CONCEN), given their consistent application as discrete measures of financial performance (e.g., Brown, 2005; Hager, 2001; Hairston, 1985; Hall, 1982;

Ritchie & Kolodinsky, 2003; Siciliano, 1996) and as composite elements of the Financial Vulnerability Index (Greenlee & Trussel, 2000; Hodge, 2006; Hodge & Piccolo, 2005; Trussel et al., 2002). Consequently, while some acknowledge financial assessment as a relatively new area of nonprofit study (Trussel et al., 2002), the current study assumes a sufficient level of empirical use of financial measures in related studies, thereby justifying inclusion of the Tuckman and Chang (1991) measures as proxies for organizational effectiveness, and ultimately, organizational survival. Appendix G defines the indicators and formulas for the Tuckman and Chang (1991) measures and data sources for each measure.

Limitations and recommendations from related studies informed the selection of particular data sources for financial measures within the current study, and thus enhanced reliability and validity of financial data. Consistent with recommendations by Ritchie and Kolodinsky (2003), the current study used financial data from the three most current fiscal years. In most cases, this included data from Internal Revenue Service 990 (IRS 990) forms for fiscal years' 2010, 2011, and 2012, or closest thereto. Equity (DEBT) and operating margin (MARGIN) ratios came directly from IRS 990 data averaged over three years. In some cases, fiscal year 2013 data may be available and would be used as the most recent year's data.

Researchers articulate some concern related to the accuracy and reliability of IRS 990 data (Hager, 2001; Froelich et al., 2000; Hodge, 2006; Trussel, 2002). Issues about the lack of representation in IRS databases of organizations with less than \$25,000 in revenues, conveyed by Hager (2001), do not apply to the current study, since all involved organizations have revenues greater than \$10 million must file an IRS 990. Other concerns related to the IRS 990 involve organizational failure to file the form and/or submit incomplete data within the form (Hager, 2001). Despite these issues, many consider the IRS 990 as a reliable source of data for basic

information on the income statement and balance sheet, including total income, total expenses, total assets, and total liabilities (Froelich et al., 2000), which are core elements of the DEBT and MARGIN measures used for the current study. Furthermore, research shows a high level of compliance and accuracy among health and human service organizations, which include the behavioral healthcare sector (Froelich et al., 2000, p. 250).

IRS 990 data related to distinct revenue sources and administrative expense are far more difficult to interpret. IRS 990 data used to produce estimates of revenue concentration tend to be unreliable because organizations classify revenues differently (Hager, 2001; Gronbjerg, 1991). Another problem with IRS 990 data involves under-reporting of government revenue (Froelich, 1999; Froelich et al., 2000; Hager, 2001; Gronbjerg, 1991). Given these identified issues with the validity and reliability of revenue source data extracted from the IRS 990, the current study replicates a methodological technique used by Bielefeld (1992a), which enables respondents to classify revenues instead of using the researcher to interpret and extract data from the IRS 990. Respondents were asked to classify revenues, which will likely minimize misinterpretation and misclassification of data related to revenue concentration (CONCEN).

A second concern related to reliability of IRS 990 data pertains to the accuracy of administrative costs. Administrative (ADMIN) expense is difficult to extract from the IRS 990 because there is little standardization of reporting, which can foster accounting manipulation (Trussel, 2002). Trussel (2002) omitted administrative expense from his research because of these issues. Rather than omit the measure, the instrument prompts respondents to answer a single question related to their organization's administrative overhead. As an administrator in the behavioral healthcare sector for nearly 20 years, the researcher assumed most executives

would know or could apprehend the percentage of organizational expenditures that comprise administrative expense. The ADMIN measure encompassed this self-reported information.

Summary of Variables

The current study involves fourteen distinct variables. This section briefly explains data assumptions articulated in Table 7. First, the revenue heterogeneity (REDE-HETER) variable involves ratio data: the Gibbs-Martin calculation ranges from 0 to 1, with values closest to zero reflecting a homogenous revenue structure and values closest to one reflecting a heterogeneous revenue structure. Second, resource dependence measures of Government Contract Concentration (REDE-GOVCON) and Medicaid-Medicare Concentration (REDE-MM) involve ratio data because both each of their associated measures (e.g., GCCI and MMCI) have meaningful zero points. Lower values reflect lower levels of dependence on government contracts and Medicaid–Medicare reimbursement. Higher values reflect higher levels of dependence.

Third, the measure for institutional pressure (INPRESS)—the IVI— produces interval data because the composite value, generated from adding together two distinct indexes (the importance index which can produce a score up to 25, and the influence index, which can also produce a score up to 25) produces a range of values from 0 (no pressure) – 50 (extreme pressure). Appendix E describes the calculation in detail. Measures of strategic choice—OVERALL_REVSEEK, REVSEEKGEN, REVSEEKGOV, REVSEEKNONGOV, LEGIT, and RETRENCH—encompass ratio data because the value from each involves the sum of selected (checked) responses. Consequently, each strategy calculation has a meaningful zero point. Finally, financial measures—DEBT, MARGIN, ADMIN, and CONCEN—involve ratio data.

Table 7

Summary of Variables

Construct	Variable	Label	Measure	Data	Type
Resource Dependence	Revenue Heterogeneity	REDE-HETER	Gibbs-Martin ^b	Ratio	Phase 1: Correlational, except with CONCEN Phase 2: Independent, except CONCEN model
Resource Dependence	Government Contract Concentration	REDE-GOVCON	GCCI	Ratio	Phase 1: Correlational, except with CONCEN Phase 2: Independent, except CONCEN model
Resource Dependence	Medicaid-Medicare Concentration	REDE-MM	MMCI	Ratio	Phase 1: Correlational, except with CONCEN Phase 2: Independent, except CONCEN model
Institutional Pressure	Institutional Pressure	INPRESS	IVI ^b	Interval	Phase 1: Correlational Phase 2: Independent
Strategic Choice	Overall Revenue-Seeking	OVERALL_REVSEEK	Strategic tactics list ^c	Ratio	Phase 1: Correlational Phase 2: Independent
Strategic Choice	Revenue-Seeking, General	REVSEEKGEN	Strategic tactics list ^c	Ratio	Phase 1: Correlational Phase 2: Independent
Strategic Choice	Revenue-Seeking, Government	REVSEEKGOV	Strategic tactics list	Ratio	Phase 1: Correlational Phase 2: Independent
Strategic Choice	Revenue-Seeking, Non-Government	REVSEEKNONGOV	Strategic tactics list	Ratio	Phase 1: Correlational Phase 2: Independent
Strategic Choice	Legitimation	LEGIT	Strategic tactics list ^c	Ratio	Phase 1: Correlational Phase 2: Independent
Strategic Choice	Retrenchment	RETRENCH	Strategic tactics list ^c	Ratio	Phase 1: Correlational Phase 2: Independent
Financial Performance	Equity Ratio	DEBT	Equity ratio ^a	Ratio	Phase 1: Correlational Phase 2: Dependent

Construct	Variable	Label	Measure	Data	Type
Financial Performance	Administrative Expense	ADMIN	Administrative expense ^a	Ratio	Phase 1: Correlational Phase 2: Dependent
Financial Performance	Revenue Concentration	CONCEN	Revenue concentration index ^a	Ratio	Phase 1: Correlational, except REDE-HETER, REDE-GOVCON, & REDE-MM Phase 2: Dependent

^aTuckman and Chang (1991); ^bBielefeld (1992a); ^cBielefeld (1992b)

Data Collection

The current study used two primary sources of data: IRS 990s, publicly available from GuideStar.org (www.guidestar.org) or the National Center for Charitable Statistics (www.nccs.urban.org); and surveys collected through Federal Express (field testing/instrument development phase only), and the United States Postal Service (pilot study and full survey phases only). Preparatory processes included mailed or emailed engagement notices to field testing panelists and pilot study and full survey participants. Materials for field testing, pilot study, and full survey phases are located within Appendices G–O. Mailed engagement notices for each phase informed potential participants about the research and its purpose, confirmed mailing information and return procedures, and solidified participant involvement. All organizations randomly-selected for the pilot study and full survey, received the survey packet designed for their respective phase of the research process.

In a comprehensive study on response rates for mail surveys of nonprofit organizations, Hager, Wilson, Pollak, and Rooney (2003) found that use of Federal Express (versus standard mail) enhanced response rates. The researcher used Federal Express for the field testing phase of the current research. Federal Express was too costly for pilot testing and full survey phases. Consequently, the researcher used large 10 X 13 open-end envelopes, as a strategy (in lieu of Federal Express) to attract attention to the survey. Self-addressed stamped catalogue envelopes were also included in the return packet.

Respondent CEO contact information was verified during the development of the CBHO population database, by using data collected from GuideStar, the organization's web site, or through direct phone contact with the organization. Follow-up email reminders and/or phone calls to CEOs occurred for all non-responding organizations before, on, or after the 14th day from

the mailing date of the full survey. The researcher swiftly responded to the needs of participant CEOs and/or designates, which on two cases included sending another survey using e-mail. On or after the 28th day from the initial mailing, the researcher mailed new surveys to all non-responding organizations so that data analysis could begin on or after the 40th day from original mailing. Organizations that declined participation at any point of this process were not contacted or pressured in any way to participate.

Data Analysis

The current study involved three core phases of data analysis. The first phase examined data offered by panel experts from the field testing process. The second phase encompassed a preliminary analysis of data collected during the pilot study of the survey instrument to establish reliability of the strategic tactics list adapted for the CBHO population, and overall feasibility of the instrument. The third and last phase involved the full range of correlational and multiple linear regression analyses conducted from data collected during the survey process. Figure 5 details the core analytic processes for each of the three phases.

Validity and Reliability

With the exception of the Government Contract Concentration Indicator (GCCCI) and the Medicaid-Medicare Concentration Indicator (MMCI), all measures used for the current research came from prior studies. Earlier sections of this chapter, which described measures from supporting studies related to each discrete variable, clarified relevant limitations related to the reliability and/or validity of each measure. Table 8 summarizes these issues.

Internal Validity and Instrument Development

The current research engaged a two-tiered preliminary process to establish content validity of the current survey instrument and its reliability. The first tier involved field testing

the instrument among a panel of experts from the community behavioral healthcare sector. Field testing was especially relevant to identify key CBHO stakeholder groups to populate the IVI and to confirm strategic tactics for each strategic tactic list (i.e., OVERALL_REVSEEK; REVSEEKGEN; REVSEEKGOV; REVSEEKNONGOV; LEGIT; and RETRENCH). The second tier involved a pilot study to produce reliability estimates for the strategic tactics list and to offer feedback related to the overall feasibility of the instrument.

Figure 5

Summary of Analytic Procedures per Phase

Phase 1: Field Testing	<ul style="list-style-type: none"> • Resource dependence: assess qualitative feedback on comprehensiveness of revenue sources that comprised the Gibbs-Martin index and their feasibility • Resource dependence: assess qualitative feedback on ease of reporting the total number of government contracts held by the CBHO. • Institutional Vulnerability Index: established content validity from rank-order assessment of institutional stakeholders with greatest level of importance/influence on CBHO organizational goals, structures, operations, services, and clients served. The median placement for each stakeholder group was calculated, and stakeholder groups ranked in the top five comprised the Institutional Vulnerability Index. • Strategic tactics list: used content validity ratios (CVRs) to shed light on validity of strategic tactics. • Financial measures: assessed feedback related to relative ease with which a CEO would be able to identify percentage of organizational administrative (overhead) cost. • General perceptions of instrumentation: assessed overall clarity and feasibility of instrument.
Phase 2: Pilot Study	<ul style="list-style-type: none"> • Computed Cronbach's α for strategic tactics list. • Assessed response rate to adjust engagement strategy, if indicated. • Reviewed/integrated feedback related to general clarity, ease, and feasibility of instrument.
Phase 3: Full Survey	<ul style="list-style-type: none"> • Phase 1: performed assumption-testing analysis and conducted correlational analysis. • Phase 2: performed assumption-testing analysis and performed multiple linear regression analyses for DEBT, MARGIN, CONCEN, and ADMIN models.

Because the study treated executive perceptions as a proxy for organizational status, and the survey encompassed core executive functions related to operational management (e.g., resource and strategic management), each field testing expert met the following three criteria: (a) worked within an organization included among the top (total revenue) quartile of organizations in the target population distribution: organizations with greater success, as measured by organizational revenues, were assumed to have higher-level strategic expertise; (b) performed as the CEO, COO, or other executive-level position responsible for strategy planning and execution; and (c) served in an executive-level position for at least five years, a timeframe assumed by the researcher as adequate level of experience required to obtain and manage resources, as well as to address the demands of multiple stakeholder groups.

Slocumb and Cole (1991) emphasized how each expert panel member must be offered specific information and direction related to their input and opinion (p. 192). Informational materials distributed to expert panelists included the following: (a) reasons supporting their selection as a member of the expert panel; (b) information about the purpose and intended use of the instrument; (c) outcome of the instrument; (d) conceptual definitions of the constructs of interest within the study, supported by a concise review of pertinent literature; and (e) specific instructions related to rating items and offering feedback about the quality of the survey (Slocumb & Cole, 1991, p. 193). Appendices G, H, and I contain materials related to the composition of the expert panel and materials distributed to each member.

Two specific survey measures require content validation: Institutional Vulnerability Index and strategy tactics list. Relevant institutional stakeholder groups within the original Institutional Vulnerability Index, as defined by Bielefeld (1992a), came from a broad and heterogeneous population of nonprofit organizations. By design, Bielefeld (1992a) chose to not

include any stakeholder group likely to affect the organization through direct financial or legal controls. As mentioned earlier, the current study departed from Bielefeld's (1992a) original intention and design because funders and regulators within the behavioral healthcare sector influence and shape the institutional norms and standards that affect CBHOs.

Chapter 2 offered a thorough analysis of the institutional power funders and regulators exercise on the community behavioral healthcare sector. During the field testing phase, expert panelists received a list of ten potential stakeholder groups: five stakeholder groups (i.e., general public, community leaders, media, politicians, and legislative bodies) came directly from Bielefeld (1992a). The researcher added five stakeholders based on direct experience in the behavioral healthcare field and supported by related literature (e.g., Alexander, 2000; Herman & Renz, 1999; Sowa, 2008). These sector-specific stakeholder groups included the following: (a) accrediting or licensing bodies (e.g., JCAHO, CARF, COA); (b) clients and/or family members; (c) competitor organizations; (d) funders and payers; and (e) government-based (e.g., SAMHSA) or professional trade organizations (e.g., NCCBH) that disseminate practice standards throughout the behavioral healthcare sector.

Panelists were asked to rate each stakeholder in order of importance, from most important to least important. The researcher calculated median values for each stakeholder group with the intention to use the highest-rated five groups to populate the Institutional Vulnerability Index. A critical feature of the Institutional Vulnerability Index, as specified by Bielefeld (1992a), was the restriction of its range to include only the top five stakeholder groups that most powerfully influence organizational goals, structures, operations, programs, and clients-served.

Table 8

Summary of Validity and Reliability of Survey Elements

Construct	Variable	Label	Measure	Validity and Reliability
Resource Dependence	Revenue Heterogeneity	REDE-HETER	Gibbs-Martin	<ul style="list-style-type: none"> Validity and reliability of self-reported sources of revenue (Bielefeld, 1992a; Froelich, 1999; Froelich et al., 2000)
Resource Dependence	Government Contract Concentration	REDE-GOVCON	GCCI	<ul style="list-style-type: none"> Nonprofit dependence on government sources previously measured in terms of categorical variables (Guo & Acar, 2005; Hager, Galaskiewicz, & Larsen, 2004). The GCCI and MMCI are new indicators of nonprofit dependence on government funding.
	Medicaid-Medicare Concentration	REDE-MM	MMCI	
Institutional Pressure	Institutional Pressure	INPRESS	Institutional Vulnerability Index	<ul style="list-style-type: none"> Validity of stakeholder groups established by Bielefeld (1992a). Current study establishes validity of CBHO stakeholder groups through field testing process. Reliability is not applicable.
Strategic Choice	Overall Revenue-Seeking	OVERALL_REVSEEK	Strategic tactics list	<ul style="list-style-type: none"> Bielefeld (1992a): factor analysis to produce three discrete tactic categories of revenue-seeking, legitimation, and retrenchment. Galaskiewicz and Bielefeld (1998) performed factor analysis to establish four categories, revealing some multicollinearity between managerial and other strategic tactics. Cronbach's α revealed strong reliability. Current study extracts directly from Bielefeld (1992a), adds different types of revenue-seeking strategies, and includes modified elements. Content Validity Ratios (from field testing data) and Content Validity Ratios and Cronbach's α from pilot and full survey phases were used to establish validity and reliability.
	Revenue-Seeking, General	REVSEEKGEN		
	Revenue-Seeking, Government	REVSEEKGOV		
	Revenue-Seeking, Non-Government	REVSEEKNONGOV		
	Legitimation	LEGIT		
	Retrenchment	RETRENCH		

Construct	Variable	Label	Measure	Validity and Reliability
Financial Performance	Equity Ratio	DEBT	Equity ratio	<ul style="list-style-type: none"> • Ratios commonly used as indicators of nonprofit financial performance (Greenlee & Trussel, 2000; Tuckman & Chang, 1991) • Use of IRS 990 data for DEBT and MARGIN ratios deemed reliable and valid (Froelich et al., 2000) • Self-reported data for ADMIN and CONCEN deemed reliable and valid (Bielefeld, 1992a; Gronbjerg, 1991; Hager, 2001). This supports accuracy and reliability of self-reported revenue sources and administrative expense.
	Operating Margin	MARGIN	Operating margin	
	Revenue Concentration	CONCEN	Revenue concentration index	
	Administrative Expense	ADMIN	Administrative expense ratio	

The second validation area pertained to the strategic tactics list. The original list of tactics needed to be adapted to the homogenous population of CBHOs. Lawshe, as cited in Cohen, Montague, Nathanson, and Swerdlik (1988) suggested a method for establishing content validity using the content validity ratio or CVR. The CVR is appropriate for any situation requiring a panel of experts to render some judgment (Cohen, Montague, Nathanson, & Swerdlik, 1988, p. 127). As applied to the strategic tactics list, each panel expert identified strategic tactics as *commonly used* or *not commonly used* by nonprofit CBHOs in the last three to five years.

According to Lawshe (as cited in Cohen, Montague, Nathanson, & Swerdlik, 1988) any item has some degree of content validity if more than 50% of panelists perceive the item as commonly used. The CVR calculation included the following elements: $CVR = n_e - N/2 / N/2$, with n_e = number of panelists who rated the item as commonly used (or essential), and N = number of panelists (p. 127). With a panel of 10 experts, a CVR value of .62 is required for significance at the .05 level; the item then becomes a part of the final survey (Lawshe, as cited in Cohen, Montague, Nathanson, & Swerdlik, 1988, p.128).

In the event 10 field testing responses failed to materialize, the final instrument should include all tactics assessed as commonly used by at least 50% of expert panelists. To evaluate reliability of the strategic tactics list, the researcher used an approach consistent with Galaskiewicz and Bielefeld (1998) by calculating Cronbach's α during the pilot study to verify reliability of items within each of the following tactic lists: overall revenue-seeking (OVERALL_REVSEEK); revenue-seeking-general (REVSEEKGEN), revenue-seeking-government (REVSEEKGOV), revenue-seeking-nongovernment (REVSEEKNONGOV); legitimation (LEGIT); and retrenchment (RETRENCH).

During field testing, panel experts also offered specific feedback pertaining to the resource dependence measure. They evaluated potential categories for the Gibbs-Martin revenue heterogeneity index, offered feedback on new resource dependence measures (i.e., Government Contract Concentration Indicator [GCCCI] and Medicaid-Medicare Concentration Indicator [MMCI]). Panelists also offered comments related to the instrument's completeness and clarity, and reported the level of ease with which a CEO or designate (e.g., CFO) could complete required items. Finally, the researcher asked for panelists to provide additional recommendation related to survey design and content. Field testing, pilot study, and full survey phases of the study used Federal Express or the United States Postal Service for distribution and return. All responses were confidential.

Reliability and Pilot Study

Many researchers offer recommendations for pilot study sample size, especially when the intention is to test the feasibility of a new instrument. Sample size recommendations include 10 – 20 (Isaac & Michael, 1995), 10 – 30 (van Belle, 2002), 30 (Johanson & Brooks, 2010), and 25 – 40 (Hertzog, 2008). Furthermore, the pilot sample must be representative of the population to prevent unbiased estimates (Johanson & Brooks, 2010). Guided by these recommendations, the research used simple random sampling of 50 organizations without replacement to enlist pilot study responses from at least 10 organizations.

The pilot study addressed the following issues related to methodology and instrumentation. First, the pilot study provided initial reliability data related to the strategic tactics list (Bielefeld, 1992b, 1994). As described in a preceding section, the strategic tactics list was adapted to better align with particularities associated with the community behavioral healthcare sector and to extend the revenue seeking tactics to distinguish among tactics related to

pursuing general, government, and non-government revenue sources. Second, pilot study participants examined clarity and ease of items. Items designed to measure the resource dependence construct, such as those included in the Gibbs-Martin index, GCCI, and MMCI were of particular interest. The GCCI and MMCI were new measures designed to combine with the Gibbs-Martin revenue heterogeneity index (Bielefeld, 1992a) to reveal a more complete picture of organizational dependence on government funding. The ease with which participants could identify the following were relevant: (a) the number of government contracts held by the organization; (b) the percentage of total organizational revenue from (non-Medicaid/non-Medicare) third-party commercial reimbursement; (c) the percentage of total organizational revenue from Medicaid and/or Medicare sources; and (d) the percentage of administrative expense allocated by the organization. Third, the response rate from the pilot study provided a way to gauge the anticipated response rate for the study survey. Fourth and last, pilot study respondents offered general feedback on any feature of the survey's feasibility.

External Validity

The research addressed a narrow nonprofit sector comprised of community behavioral healthcare organizations. Consequently, findings from the study generalize only to large nonprofit CBHOs with revenues greater than \$10 million. Despite this design limitation, the research sought to shed light on the specific effects of resource dependence, institutional pressure and strategic choice on financial performance of large-sized CBHOs. Furthermore, large-sized organizations within similar sectors, such as those offering more generalized human and social services and programs designed to promote child welfare/advocacy or a broad-range of services to persons with developmental disabilities, may likely observe strong environmental and organizational parallels with the target population of CBHOs used for this study. These sectors,

in particular, also seem to strongly rely on government contracts and other sources of public funding and encounter similar institutional pressures. Consequently, methods designed for the narrow sector of large-size CBHOs may be easily replicated across other sectors with similar resource dependence, institutional, and strategic features. Finally, findings related to how CBHOs survive and thrive within a complex environment will likely be of interest to similarly-structured organizational fields.

Ethical Considerations

Ethical considerations for the current research centered on managing the confidentiality of data obtained through the mailed survey process. The probability and magnitude of a breach of survey records are low, given current methods for the safety and security of data and the low-level sensitivity of questions within the survey document. CEOs must accurately reflect their perceptions about sources and degree of institutional pressure, diversification of revenue, and strategies executed by their organizations. Among these measures, CEOs may perceive sources and degree of institutional pressure as perhaps the most sensitive, given strong institutional norms emphasizing the value of input from clients and families, as well as the preferences of funders. Executives may have concern about reporting sources and levels of influence that contravene such institutional norms. Consequently, documentation of informed consent for the survey detailed the risks and benefits to the survey process and highlighted the range of protections to facilitate and safeguard the honest and accurate perceptions of CEOs related to key factors affecting nonprofit organizational sustainability. The researcher assured all participants, including field testing panelists, complete confidentiality and accomplished this by coding all responses. The central file that links an organization's code with its name is maintained in a separately-secured, password-protected electronic file.

The informed consent process detailed risk and benefits to the current research, and communicated a range of procedures in order to facilitate the anonymity of survey responses and to protect the confidentiality of survey documents and data. Surveys were distributed and returned through Federal Express (field testing) and the United States Postal Service (pilot study and full survey). Each survey document was coded, with code and organization linked only in a separately maintained electronic database, intended for response tracking only. The design included a re-mailing of surveys on or after the 28th day from original mailing; consequently, the researcher distinguished responding from non-responding organizations in order to accomplish this. Organizations were identified only by their assigned code defined within the SPSS database, maintained for data storage and statistical analysis. Code lists and data files were stored in separate secure locations, with electronic files further protected by a unique password known only to the researcher. Finally, the reporting of data collected from surveys was in aggregate form only. There was no opportunity to convey identifiers within the content of the study.

CHAPTER 4. RESULTS

Introduction

This chapter conveys results associated with 24 hypotheses (see Appendix C) designed to address the following overarching and supporting research questions pertaining to the financial performance of large-sized Community Behavioral Healthcare Organizations (CBHOs) with revenues greater than \$10 million: Do resource dependence, institutional pressure, and strategic choice (revenue-seeking, retrenchment, and/or legitimation) affect financial performance of large, nonprofit CBHOs?

1. Do type and level of resource dependence affect the degree of perceived institutional pressure of large, nonprofit CBHOs?
2. Do type and level of resource dependence affect strategic choices of large, nonprofit CBHOs?
3. Does degree of institutional pressure affect strategic choices of large nonprofit CBHOs?

The study involved two discrete analytic phases and three models. Phase 1–Model 1 explored relationships between variables of resource dependence, institutional pressure, strategic choice, and financial performance. Phase 2–Model 1 and Phase 2–Model 2 investigated the degree to which resource dependence, institutional pressure, and strategic choice explained variation in organizational financial performance. Phase 1 used correlational analysis and Phase 2 used multiple linear regression analysis.

The original research design proposed 3 models and 14 variables (see Table 1 in Chapter 1); however, the final design retained 2 models (i.e., Phase 1–Model 1 and Phase 2–Model 1) and 8 variables (i.e., REDE-HETER; INPRESS; OVERALL_REVSEEK; LEGIT; RETRENCH; DEBT; CONCEN; and ADMIN). Expanded resource dependence variables (i.e., REDE-GOVCON; REDE-MM) did not satisfy necessary assumptions for correlational analysis and multiple linear regression analysis. Expanded revenue-seeking strategy variables (i.e., REVSEEKGOV; REVSEEKGEN; and REVSEEKNONGOV) did not yield satisfactory reliability estimates. Finally, operating margin (MARGIN), a measure of financial performance, did not satisfy assumptions. Results pertaining to the reliability of expanded revenue-seeking measures (i.e., REVSEEKGEN; REVSEEKGOV; and REVSEEKNONGOV) and the degree to which data satisfied assumptions required for correlational and multiple linear regression are among analyses discussed later in this chapter.

Figure 1 in Chapter 1 broadly described proposed Phase 1–Model 1 correlational relationships. Figure 6 shows actual variables retained for Phase 1–Model 1 correlational analysis. Figure 2 in the first chapter described proposed Phase 2–Model 1 and Phase 2–Model 2, respectively. Figure 7 shows the retained Phase 2–Model 1, with one modification. Operating Margin (MARGIN) failed to satisfy assumptions for multiple linear regression analysis and was not included as a dependent variable in the final iteration of Phase 2–Model 1. Phase 2–Model 1 retained DEBT, CONCEN, and ADMIN as dependent variables.

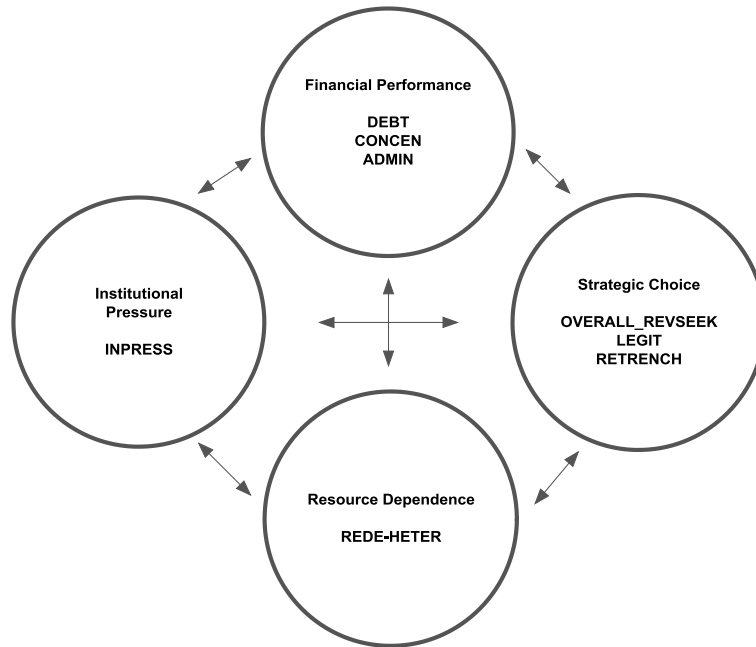


Figure 6. Phase 1–Model 1: Correlational variables of resource dependence, institutional pressure, strategic choice, and financial performance.

The proposed Phase 2–Model 2 included *expanded* resource dependence variables (i.e., REDE-GOVCON and REDE-MM) and *expanded* revenue-seeking strategic tactics (i.e., REVSEEKGEN; REVSEEKGOV; and REVSEEKNONGOV). Expanded resource dependence variables REDE-GOVCON and REDE-MM failed to satisfy assumptions for multiple linear regression analysis. Expanded revenue-seeking strategic tactics (i.e., REVSEEKGEN; REVSEEKGOV; and REVSEEKNONGOV) did not yield acceptable reliability estimates. Consequently, expanded resource dependence variables and expanded revenue-seeking tactics were not appropriate for Phase 2–Model 2. Final analyses included Phase 1–Model 1 (correlational analysis) and Phase 2–Model 1 (multiple linear regression analysis), modified as described previously. Final analyses excluded Phase 2–Model 2 (multiple linear regression analysis with expanded resource dependence and expanded revenue-seeking variables). Table 9

summarizes the final models and variables accepted or not accepted to test hypotheses listed in Appendix C.

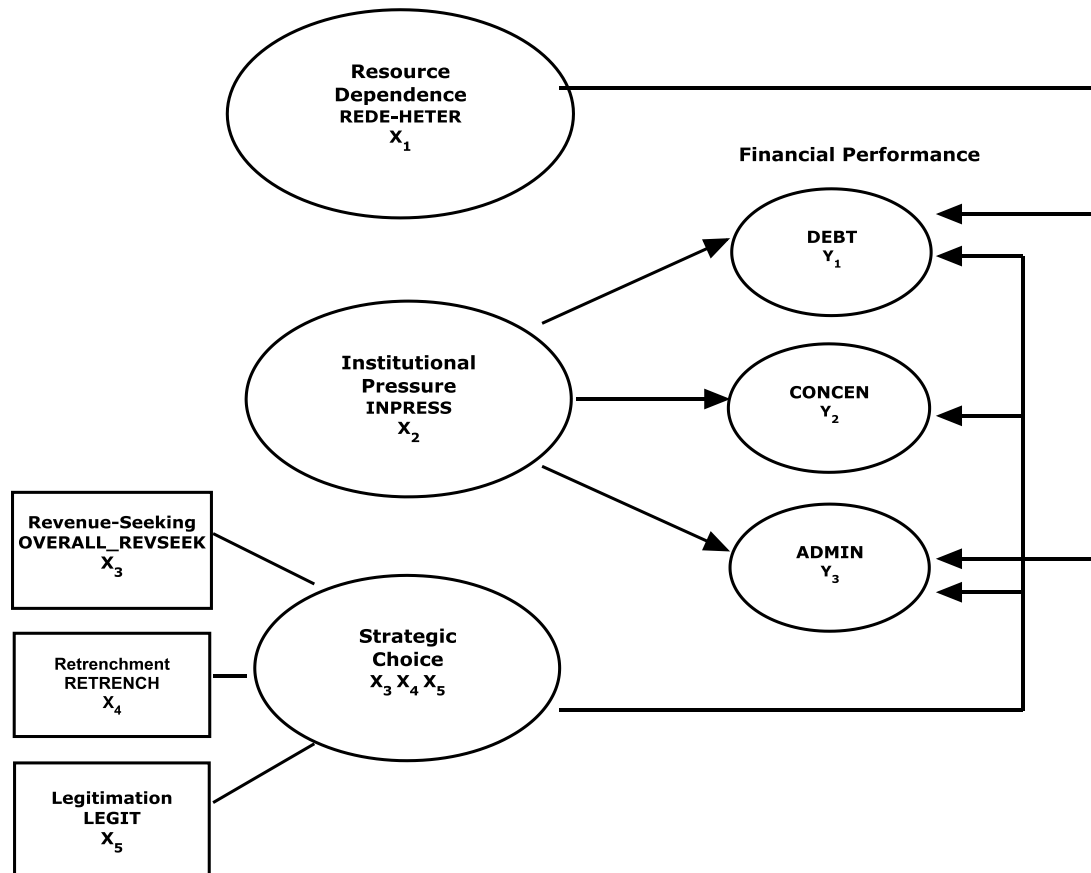


Figure 7. Phase 2-Model 1: Variables accepted for DEBT, CONCEN, and ADMIN multiple linear regression models.

This chapter has four discrete sections to organize the many steps required to execute Phase 1-Model 1 and Phase 2-Model 1. Section 1 describes data pertaining to the population and samples used for field testing, pilot study, and full survey segments of the research, as well as information on the methods used to collect data for the study. Section 2 includes field testing results, as well as pilot testing and full survey reliability estimates for the strategic tactics list, adapted from Bielefeld (1992b). Section 3 includes results from a broad range of analyses conducted to test assumptions required for correlational and multiple linear regression analysis

procedures. Section 3 also explains modifications made to the original research design based on insufficient reliability estimates and assumptions not adequately satisfied. Section 4 contains data related to hypothesis testing for all hypotheses articulated in Appendix C.

Table 9

Summary of Variables and Models Accepted or Not Accepted for Hypothesis Testing

Variable	Phase 1–Model 1 ^c		Phase 2–Model 1 ^d		Phase 2–Model 2 ^e	
	Proposed	Final	Proposed	Final	Proposed	Final
REDE-HETER	Yes	Yes	Yes	Yes	Yes	Yes
REDE-GOVCON	Yes	No ^a	No	No	Yes	No ^a
REDE-MM	Yes	No ^a	No	No	Yes	No ^a
INPRESS	Yes	Yes	Yes	Yes	Yes	Yes
OVERALL_REVSEEK	Yes	Yes	Yes	Yes	No	No
REVSEEKGEN	Yes	No ^b	No	No	Yes	No ^b
REVSEEKGOV	Yes	No ^b	No	No	Yes	No ^b
REVSEEKNONGOV	Yes	No ^b	No	No	Yes	No ^b
DEBT	Yes	Yes	Yes	Yes	Yes	Yes
MARGIN	Yes	No ^a	Yes	No ^a	Yes	No ^a
CONCEN	Yes	Yes	Yes	Yes	Yes	Yes
ADMIN	Yes	Yes	Yes	Yes	Yes	Yes

^a Variable did not satisfy assumption of normality required for correlational analysis.

^b Variable did not produce acceptable reliability estimate.

^c Correlational model—excluded REDE-GOVCON, REDE-MM, REVSEEKGEN, REVSEEKGOV, REVSEEKNONGOV, and MARGIN.

^d Multiple Linear Regression model—excluded MARGIN.

^e Model not used. Variables introduced in Phase 2–Model 2 (i.e., REDE-GOVCON; REDE-MM; MARGIN; REVSEEKGEN; REVSEEKGOV; and REVSEEKNONGOV) failed to meet assumptions or produce acceptable reliability estimates.

Description of Population and Sample

Population

The population included all nonprofit CBHOs in the United States of America with revenues \geq \$10 million in fiscal year 2012, or the IRS filing year closest to 2013. The United

States' government uses the National Taxonomy of Exempt Entities (NTEE) classification system to group tax-exempt entities by similarity of purpose, activity, type, and major function (Wing et al., 2008, pp. 3-4). The NTEE system includes 26 categories to appropriately classify nonprofit organizations by primary purpose. CBHOs fall within the *health* category, under sub-category *mental health* (F), and/or within the *human service* (P) category.

Using GuideStar (www.guidestar.org), a web-based database of nonprofit organizations, only organizations within the identified mental health and human services categories, and also with revenues \geq \$10 in the most recent fiscal year (i.e., FY 2012 or FY 2013, if submitted), comprised the final population. The GuideStar database included financial reporting forms (i.e., IRS 990) for the nonprofit organizations of interest to this study. IRS 990 data offered financial information used to identify to CBHOs organizations with revenues greater than \$10 million. Specifically, the population encompassed organizations within the following categories and with revenues \geq \$10 million:

- F22 (Alcohol and Drug Treatment);
- F30 (Mental Health Treatment);
- F32 (Community Mental Health Centers);
- F33 (Group and Residential Treatment);
- F53 (Eating Disorders Treatment);
- F54 (Gambling Disorders Treatment);
- F70 (Mental Health Disorders);
- F99 (Mental Health and Crisis Intervention, not otherwise classified); and

- P99 (Human Service and Multipurpose Organization, not otherwise classified), if the P99 organization primarily offered behavioral healthcare services, as reflected in its mission and vision statements.

The population excluded mental health hospitals because their strategic issues differed from that of community-based nonprofit, behavioral healthcare organizations. The population consisted of 508 organizations.

Samples

The study utilized three separate samples for field testing, pilot study, and full survey segments of the study, with each sample derived by using the selection-without-replacement sampling technique. The field testing sample included 10 organizations. The pilot testing sample included 50 organizations. The full survey sample included 350 organizations.

Field testing sample.

Expert panelists for the field testing segment fulfilled the following criteria:

- worked within an organization included among the top (total revenue) quartile of organizations in the target population distribution;
- performed as the CEO, and thus, responsible for strategic planning and execution; and
- served in an executive-level position for at least five years; a timeframe assumed to be an adequate level of experience required to obtain and manage resources, as well as to address the demands of multiple stakeholder groups.

A fundamental assumption was that experienced CEOs, who led organizations at the highest revenue echelon in the community behavioral healthcare sector, possessed strategic expertise to review, comment on, and improve the proposed survey instrument.

CEOs ($N = 10$) from California, Illinois, Massachusetts, New York, Pennsylvania, Tennessee, and Utah received field testing packets. Four CEOs from California, Illinois, and

Tennessee responded, one CEO from California declined, and five did not respond. All CEO respondents represented organizations with FY 20–2 minimum annual revenue of \$50 million. The mean annual revenue from responding organizations was \$77 million, and the range extended from \$54 million to \$152 million.

Pilot study sample.

With 10 organizations removed from the total population database after the field testing segment, 498 organizations remained. The researcher placed index cards numbered 1 – 498 in a receptacle and randomly drew 50. Each index card number corresponded to an organization’s placement within the database spreadsheet. Seventeen of 50 (34%) organizations responded. All pilot study respondents were CEOs.

Full survey sample.

With 60 organizations removed from the total population database after field testing and pilot study segments, the researcher used the same random selection procedure for the remaining 448 organizations, and extracted a sample of 350 organizations in order to generate at least 114 returned surveys, consistent with an estimated 33% response rate. This estimate aligned with required sample size numbers produced by using G*Power software (Faul, Erdfelder, Buchner, & Lang, 2009), as described earlier in Chapter 3. G*Power sample size estimates were 94 for Phase 1–Model 1, 96 for Phase 2–Model 2, and 114 for Phase 2–Model 2. See Table 5.

One hundred (30%) organizations responded. Two additional mailings and/or personal telephone follow-up occurred to produce this outcome. Of the 100 responses, 98 came directly from CEOs, one came from an executive-level employee designated by the CEO, and one reflected a collective process completed by the CEO and other members of her team.

The researcher also received 10 non-usable surveys: two CEOs were not interested and indicated this in their returned packet; one packet was unopened and returned; one CEO indicated his organization did not satisfy eligibility criteria and indicated this in his response; and six packets pertained to organizations with inaccurate mailing address information the researcher could not clarify or correct. There were no missing data from field testing or pilot study segments; however, there were missing or unclear data points in seven of 100 full survey responses; but, four were successfully completed by contacting the organization directly for missing information. Three surveys remained incomplete, leaving 97 organizations with complete data.

During the final review of the sample, two responses were submitted by campus-based organizations. After confirmation, the final data set excluded these two responses because they did not reflect the study's target population of community-based organizations. The final full survey data set included 95 CBHOs. The response rate was adequate for the two models used for hypothesis testing, as described in Chapter 3 (see Table 5).

Data Results

Data were coded and tabulated using SPSS 22.0. This section provides results from field testing, pilot study, and full survey segments of the research. Field testing expert panelists, as described previously, provided content to adapt Bielefeld's (1992a) Gibbs-Martin revenue heterogeneity index and Institutional Vulnerability Index (IVI), and Bielefeld's (1992b) strategic tactics list.

Bielefeld originally developed the Gibbs-Martin, IVI, and strategic tactics list for a heterogeneous population of nonprofit organizations. For this study, revenue sources (for the Gibbs-Martin revenue heterogeneity index), institutional stakeholders (for the IVI), and strategic

tactics (for the strategic tactics list) had to conceptually align with the nonprofit community behavioral healthcare sector. Expert panelists in field testing offered this information and other qualitative recommendations to strengthen the clarity of the survey instrument.

Pilot study participants tested the survey instrument, which included the adapted Gibbs-Martin revenue heterogeneity index, IVI, and strategic tactics list. Pilot study descriptive statistics and analysis of histograms and Q-Q plots revealed normal and non-normal distributions and offered preliminary evidence of potential data limitations pertaining to the full survey process. Finally, the pilot study phase included an analysis of reliability estimates for the adapted strategic tactics list in order to provide preliminary estimates on the internal consistency of the five strategic tactic domains of interest: overall revenue-seeking (OVERALL_REVSEEK); general revenue-seeking (REVSEEKGEN); government revenue-seeking (REVSEEKGOV); non-government revenue-seeking (REVSEEKNONGOV); legitimation (LEGIT); and retrenchment (RETRENCH). OVERALL_REVSEEK, LEGIT, and RETRENCH were adapted from Bielefeld (1992b); whereas, REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV reflected an attempt by the study to extend Bielefeld's work by exploring specific types of revenue-generating activity pursued by CBHOs.

Full study data enabled final conclusions on basic parametric assumptions required for correlational analysis and multiple linear regression analysis, and reliability estimates for the adapted strategic tactics list. As mentioned earlier in this chapter, analyses pertaining to testing assumptions revealed problems with expanded variables of resource dependence (i.e., REDEGOVCON; REDE-MM) and financial performance (MARGIN). Reliability analysis also revealed unsatisfactory estimates for the expended revenue-seeking tactics (i.e., REVSEEKGEN; REVSEEKGOV; REVSEEKNONGOV). Ultimately, final correlational and multiple linear

regression models did not include the following: REDE-REVCON; REDE-MM; REVSEEKGEN; REVSEEKGOV; REVSEEKNONGOV; and MARGIN. Viable hypotheses decreased from 48 (see Appendix B) to 24 (see Appendix C).

Field Testing Results

During field testing, expert CEO panelists from four organizations at the highest revenue echelon among CBHOs across the United States offered feedback related to content validity of the survey instrument. Field testing expert panelists confirmed revenue categories for the Gibbs-Martin revenue heterogeneity index, adapted from Bielefeld (1992a). Expert panelists also helped to identify institutional stakeholders for the IVI, adapted from Bielefeld (1992a), to ensure the measure appropriately reflected the community behavioral healthcare institutional environment. Finally, field testing panelists selected particular strategic tactics to formulate a strategic tactics list, adapted from Bielefeld (1992b), by choosing tactics understood as *commonly used* by CBHOs within the last five years to promote viable and sustainable organizations. Expert panelists conveyed their impressions of the instrument's clarity and offered recommendations to improve the instrument (Appendix H).

Expert panelists contributed to the adapted Gibbs-Martin revenue heterogeneity by using the index to record the proportion of organizational revenue in each category. Appendix D describes the adapted Gibbs-Martin revenue heterogeneity index and its calculation formula. Two panelists offered minor suggestions to clarify definitions of revenue categories. All panelists indicated the Gibbs-Martin index was clear and easy to use.

To adapt the IVI, panelists reviewed a list of 10 potential institutional stakeholders and ranked stakeholders in ascending order of their influence on CBHO organizational strategy, operations, structure, programs, and clients-served. Consequently, panelists ranked the most

influential stakeholder as “1” and the least influential stakeholder as “10.” Five stakeholders on the list came from Bielefeld’s (1992a) research of a heterogeneous population of nonprofit organizations, and five stakeholders came from the researcher’s direct experience in the community behavioral healthcare sector and knowledge of the sector’s influential stakeholders.

Using Bielefeld’s (1992a) methodology and to retain the five highest median-ranked institutional stakeholders for the IVI, the field testing process ultimately produced six stakeholder groups. Three median rankings tied at 5.5. Table 10 shows median values, with an asterisk denoting stakeholders retained for the IVI for both pilot study and full survey parts of the research process.

By retaining six (instead of five) stakeholders, the range of potential IVI values increased (from 0 – 50) to 0 – 60. The IVI provided an organizational index for each organization comprised from a summed importance score (0 – 30) and influence score (0 – 30). Consequently, an organization with an IVI value closer to 60 experienced a high level of institutional pressure and an organization with an IVI value closer to 0 experienced a low level of institutional pressure. Appendix E shows the final IVI and its computation.

Table 10

Field Testing: Median Values for Institutional Vulnerability Index by Expert Panel

Institutional Stakeholder Group	Median Values
Funders	1.5*
Community Leaders	3.5*
Legislative Bodies (local, state, federal)	4.5*
Competitor Organizations	5.5*
Politicians	5.5*
Government-Based (e.g., SAMHSA) or Professional Trade Organizations	5.5*
Accrediting and/or Licensing Bodies (e.g., JCAHO, CARF, COA)	6.5
Media	7.0

Institutional Stakeholder Group	Median Values
Clients and/or Family Members	7.0
General Public	8.5

Note. *Highest median values: institutional stakeholders selected for the IVI.

Related to the adapted strategic tactics list, expert panelists also selected strategic tactics *commonly used* among nonprofit CBHOs within the last five years to promote organizational viability and sustainability. From a list of 32 strategic tactics adapted from Bielefeld (1992b), panelists selected tactics commonly used by CBHOs to promote organizational viability and sustainability. The adaptation of strategies to reflect tactics commonly used within the community behavioral healthcare sector was important to the study.

Lawshe, as cited in Cohen, Montague, Nathanson, and Swerdlik (1988) suggested a method for establishing content validity using the content validity ratio or CVR, defined earlier in Chapter 3. The CVR is appropriate for any situation requiring a panel of experts to render some judgment (Cohen, Montague, Nathanson, & Swerdlik, 1988, p. 127). As applied to the strategic tactics list, each panel expert identified strategic tactics as commonly used by nonprofit CBHOs in the last five years.

According to Lawshe (as cited in Cohen, Montague, Nathanson, & Swerdlik, 1988) any item has some degree of content validity if more than 50% of panelists perceive the item as commonly used. With a panel of 10 experts, a $CVR = .62, p < .05$ would justify the item's inclusion in the final measure (Lawshe, as cited in Cohen, Montague, Nathanson, & Swerdlik, 1988, p.128). Ten field testing responses did not materialize during the field testing phase. Given this result, the final instrument retained all tactics assessed as commonly used by at least

50% of expert panelists, a strategy also deemed as accepted by Lawshe. See Table 11 for the percentage of expert agreement on tactics commonly used by CBHOs. Appendix F includes the full description for each strategic tactic.

During field testing, panelists also provided specific feedback pertaining to the resource dependence measure and offered additional comments on the instrument’s content and clarity. Regarding the resource dependence measure, expert panelists evaluated potential categories for the Gibbs-Martin revenue heterogeneity index (Bielefeld, 1992a), and gave feedback on expanded resource dependence measures proposed by the researcher (e.g., GCCI and MMCI). Expert panelists communicated their impressions of these measures and considered the Gibbs-Martin revenue heterogeneity index, GCCI, and MMCI items as clearly defined. See Appendix I and Appendix J for the pilot study and full survey instruments, respectively.

Table 11

Field Testing: Percentage of Expert Agreement for Strategic Tactics

Strategy	Tactic	Agreement (%)
REVSEEKGEN*	Carried out assessment of community needs to develop new services.	75
REVSEEKGEN*	Carried out market studies to develop new services.	50
REVSEEKGEN*	Set up earned income (social enterprise) venture related to mission.	50
REVSEEKGEN*	Adjusted services to generate new (non-government) revenues.	100
REVSEEKGOV*	Started new service/program through local/state government contract.	100
REVSEEKGOV*	Started new service/program through federal government contract.	75
REVSEEKGOV*	Started new service/program that relies on Medicaid-Medicare.	100
REVSEEKGOV*	Approached local, state, +/-or federal government for contract funding.	100
REVSEEKGOV*	Submitted proposal for local, state, +/-or federal contract funding.	100
REVSEEKNONGOV*	Started/supported new service/program through commercial funding.	75
REVSEEKNONGOV*	Started/supported new service/program through donative funding.	50
REVSEEKNONGOV*	Approached new donative/philanthropic source of funding.	75
REVSEEKNONGOV*	Approached new commercial source of funding.	75
REVSEEKNONGOV*	Submitted proposal for commercial, private, or donative funding.	100
LEGIT	Sought endorsements/recommendations from industry elites.	50

Strategy	Tactic	Agreement (%)
LEGIT	Contributed to community causes.	50
LEGIT	Engaged in lobbying efforts or other forms of political advocacy.	75
LEGIT	Adapted services to funder preferences and/or priorities.	100
LEGIT	Collaborated with funder(s) on industry-related committees/projects.	100
LEGIT	Sought funding from prominent individual or corporate source.	50
LEGIT	Led or provided industry-related training to public/competitors.	50
LEGIT	Published work related to services or presented at conference.	75
LEGIT	Tried to make services more relevant through marketing etc.	75
RETRENCH	Increased staff workload.	100
RETRENCH	Increased use of volunteers or internships.	100
RETRENCH	Increased use of part-time staff.	50
RETRENCH	Delayed or did not fill vacancies.	75
RETRENCH	Reduced administrative support or staff.	75
RETRENCH	Eliminated services or programs.	100
RETRENCH	Instituted pay freezes or reductions to pay/benefits or workweek.	100
RETRENCH	Reduced service delivery staff or service delivery to clients.	75
RETRENCH	Reduced staff training.	50

Note. *Item also joined with other items with * to comprise OVERALL_REVSEEK variable in Phase 1–Model 1 (correlational analysis) and Phase2–Model 1 (multiple linear regression analysis).

Pilot Study and Full Survey Assumption Testing

Z-skew coefficients were calculated to assess for skewness related to each variable by dividing skew coefficients by the skew standard error (0.550); z-kurtosis coefficients for each variable were calculated by dividing kurtosis coefficients by the kurtosis standard error (1.063). Duncan (1997) indicated that z-skew and z-kurtosis coefficients exceeding the critical value of ± 2.00 ($p < .05$) may indicate non-normal distributions. Based on the evaluation of the z-skew coefficients produced for the 14 variables of interest to the research, the following yielded skew coefficients beyond the critical value of ± 2.00 : REDE-MM; REVSEEKGOV; MARGIN; and CONCEN. Furthermore, REDE-GOVCON had a z-kurtosis critical value of 2.63, which

suggested the distribution's kurtosis differed from a normal distribution.

Table 12

Pilot Study: Descriptive Statistics (N = 17)

Variable	Minimum	Maximum	M	SD	Skew	Z Skew	Kurtosis	Z Kurtosis
REDE-HETER	.02	.68	.42	.18	-.71	-1.30	.45	.42
REDE-GOVCON	.60	20.00	5.05	5.25	1.68	3.05	2.81	*2.63
REDE-MM	.00	100.00	74.02	35.95	-1.29	*-2.34	.22	.21
INPRESS	20.00	52.00	31.56	8.27	.94	1.71	.61	.57
OVERALL_REVSEEK	.21	1.00	.61	.22	-.05	-.09	-.31	-.29
REVSEEKGEN	.00	1.00	.40	.27	.62	1.13	.28	.26
REVSEEKGOV	.40	1.00	.84	.17	-1.24	*-2.25	2.01	1.88
REVSEEKNONGOV	.00	1.00	.56	.34	-.38	-.68	-.59	-.56
LEGIT	.33	1.00	.71	.25	-.08	-.14	-1.40	-1.31
RETRENCH	.00	1.00	.58	.31	-.44	-.80	-.99	-.93
DEBT	.01	.88	.37	.24	.54	.99	-.27	-.25
MARGIN	-.12	11.29	3.41	3.31	1.61	2.93*	1.94	1.81
CONCEN	.32	.98	.58	.18	.73	1.33	.45	.42
ADMIN	7.40	30.00	14.88	6.80	1.43	2.60*	1.21	1.13

Note. N = 17; Std. Error Skew = .550; Std. Error Kurtosis = 1.063

* $p < .05$. Reject null that distribution is normal. Data are likely skewed or kurtotic, as applicable.

Table 13 includes descriptive data for the full survey segment of the research. To examine if full survey distributions were skewed and/or kurtotic, skew coefficients were divided by the skew standard error (0.247), producing a z-skew coefficient for each variable. Kurtosis coefficients were divided by the kurtosis standard error (.490) to produce a z-kurtosis coefficient for each variable. Based on data detailed in Table 13, the following independent variables were retained for multiple linear regression analysis assumption testing: REDE-HETER, INPRESS, OVERALL_REVSEEK, LEGIT, and RETRENCH. REDE-HETER and LEGIT. These variables produced z-skew coefficients modestly above the critical value of ± 2.00 ($p < .05$); but,

yielded kurtosis values consistent with a normal distribution. These distributions closely approached normality and were carried forward for further assumption testing.

Table 13

Full Survey: Descriptive Statistics (N = 95)

Variable	Minimum	Maximum	<i>M</i>	<i>SD</i>	Skew	Z Skew	Kurtosis	Z Kurtosis
REDE-HETER	.02	.74	.43	.19	-.54	-2.21**†	-.69	-1.41
REDE-GOVCON	.00	45.00	3.54	7.13	4.03	16.32*	19.20	39.18*
REDE-MM	.00	100.00	68.05	36.42	-.97	-3.94*	-.571	-1.17
INPRESS	12.00	54.00	33.20	7.20	.11	.45	.76	1.55
OVERALL_REVSEEK	.07	1.00	.61	.21	-.29	-1.15	-.40	-.81
REVSEEKGEN	.00	1.00	.52	.27	.07	.28	-.58	-1.17
REVSEEKGOV	.00	1.00	.79	.23	-1.22	-4.94*	1.53	3.12*
REVSEEKNONGOV	.00	1.00.	.51	.35	-.08	-.32	-1.29	-2.63**†
LEGIT	.00	1.00	.68	.25	-.65	-2.64**†	-.19	-.33
RETRENCH	.00	1.00.	.50	.28	-.06	-.26	-.94	-1.93
DEBT	-.03	1.49	.39	.32	1.19	4.83*	1.24	2.52*
MARGIN	-.11	3.8	.13	.54	5.37	21.49*	29.74	60.69*
CONCEN	.26	.98	.57	.19	.53	2.15**†	-.71	-1.45
ADMIN	.05	.23	.12	.04	.52	2.10**†	.20	.40

Note. *N* = 95; Std. Error Skew = .247; Std. Error Kurtosis = .490

**p* < .05. Reject null that distribution is normal. Data are likely skewed or kurtotic, as applicable.

† Approached normality; retained for reliability analysis and multiple linear regression model assumption testing.

Specific resource dependence independent variables—REDE-GOVCON and REDE-MM—produced *z*-skew values of 16.32 and -3.94, and *z*-kurtosis values of 39.18 and -1.17, respectively. The proposed Phase 2–Model 2 considered these variables together as part of an effort to extend Bielefeld’s (1992a) conceptualization of the resource dependence construct. Bielefeld assessed resource dependence in terms of revenue heterogeneity (REDE-HETER) only, an approach replicated in this study’s Phase 2–Model 1. Phase 2–Model 2 proposed to explore the nature of *government funding* dependencies (i.e., REDE-GOVCON and REDE-MM); but,

distributions for both variables when considered together, did not meet the normality assumption. Consequently, REDE-GOVCON and REDE-MM were excluded from further analysis.

Specific revenue-seeking independent variables (i.e., REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV) produced a mix of values that satisfied or nearly satisfied the normality assumption. REVSEEKGEN values reflected a normal distribution. REVSEEKGOV produced z -skew (-4.94) and z -kurtosis (3.12) coefficients modestly above the critical value of ± 2.00 ($p < .05$). Finally, REVSEEKNONGOV produced a z -skew coefficient (-.32) consistent with a normal distribution, and a z -kurtosis coefficient (-2.63) slightly above the critical value of ± 2.00 ($p < .05$).

Similar to the treatment of the expanded resource dependence construct as described above, the proposed Phase 2–Model 2 considered specific strategic revenue-seeking tactics (i.e., REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV) together, as part of an effort to extend Bielefeld’s (1992a) conceptualization of overall organizational revenue-seeking activity. Bielefeld assessed overall revenue seeking (OVERALL_REVSEEK) only, an approach replicated in this study’s Phase 2–Model 1. Phase 2–Model 2, by design, proposed to explore the nature of specific revenue-seeking strategies (REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV). Overall, revenue-seeking strategic tactic distributions approached normality and the variables were retained for reliability analysis.

Among the four dependent variables (i.e., DEBT, MARGIN, ADMIN, and CONCEN), MARGIN values were not normally distributed and the variable was excluded from future analyses. CONCEN, ADMIN, and DEBT yielded mixed z -skew and kurtosis values and approached normality. These variables were retained for further assumption testing.

Pilot Study and Full Survey Reliability Estimates

A key effort integral to the study was to adapt Bielefeld's (1992b) strategic tactics list. Bielefeld had originally formulated the strategic tactics list from a heterogeneous population of nonprofit organizations. This research adapted the list to the homogenous population of CBHOs. Table 14 conveys pilot study and full survey reliability estimates produced from the Kuder-Richardson 20 (*KR20*). The *KR20* is an appropriate reliability estimate for dichotomous measures.

From a list of 32 strategic tactics pertaining to CBHOs, pilot study respondents selected all strategies commonly used by CBHOs to promote organizational viability and sustainability. Strategies not selected (by pilot study participants) received a code of 0; strategies selected (by pilot study participants) received a code of 1. Customarily, *KR20* values greater than .70 are considered as adequate reliability estimates, and values greater than .80 are considered as optimal estimates (Salkind, 2010). The following variables yielded acceptable pilot study *KR20* values: OVERALL_REVSEEK; REVSEEKNONGOV; LEGIT; and RETRENCH. All variables were retained for full survey reliability analysis to determine whether pilot study reliability results remained consistent with findings from the full survey sample of 95 CBHOs.

Full survey reliability estimates for overall revenue-seeking (OVERALL_REVSEEK) and retrenchment (RETRENCH) exceeded .70 and were accepted for multiple linear regression assumption testing without further scrutiny. General revenue-seeking (REVSEEKGEN) and government revenue-seeking (REVSEEKGOV) did not exceed .70 and were not retained. Non-government revenue-seeking was significant ($\alpha = .71, p < .05$), but was not retained because its relevance to the study's design depended on

REVSEEKGEN and REVSEEKGOV variables, which were not retained.

Table 14

Strategic Tactics List: Kuder-Richardson 20 Reliability Estimates

Variable	Number of Items	KR20 Estimates	
		Pilot Study (<i>N</i> = 17)	Full Survey (<i>N</i> = 95)
OVERALL_REVSEEK	14	.77*	.72*
REVSEEKGEN	4	.37	.42
REVSEEKGOV	4	.16	.63
REVSEEKNONGOV	5	.75*	.71*
LEGIT	8	.77*	.66
RETRENCH	9	.84*	.75*

**p* < .05.

Specific revenue-seeking variables (i.e., REVSEEKGEN, REVSEEKGOV, REVSEEKNONGOV) were proposed as part of the research design in order to assess whether organizations activated specific revenue-seeking strategies; and if so, whether use of particular strategies affected financial performance of CBHOs. In order for Phase 2–Model 2 to operate as designed, all three *specific* revenue variables—REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV—must produce significant reliability estimates. This did not occur and as a result, specific revenue-seeking variables—REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV—were excluded from Phase 2-Model 2.

The final strategic tactic in question—legitimation (LEGIT)—approached significance. Bielefeld’s (1992b) original research included revenue-seeking, legitimation, and retrenchment. In an effort to preserve the integrity of Bielefeld’s (1992b) original structure and to extend the original measure to a specific non-profit population of CBHOs, legitimation was retained for

Phase 1–Model 1 and Phase 2–Model 1 because its reliability estimate $\alpha = .66$ neared the desired $\alpha = .70$.

To summarize, OVERALL_REVSEEK, LEGIT, and RETRENCH were the strategic tactic variables retained for additional analysis. Specific revenue-seeking strategic variables (i.e., REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV) were not retained because they did not yield reliable Kuder-Richardson 20 estimates and/or fulfill the intent of the study's design. Overall, Figure 6 and Figure 7 shown earlier in this chapter delineated variables retained for Phase 1–Model 1 (correlational) and Phase 2–Model 1 (multiple linear regression) analyses. Final analyses excluded Phase 2–Model 2 because resource dependence variables (i.e., REDEGOVCON; REDE-MM) and strategic revenue-seeking tactics (i.e., REVSEEKGEN; REVSEEKGOV; REVSEEKNONGOV) failed to satisfy assumptions and/or produce acceptable reliability estimates.

Summary of the Results

Prior to testing hypotheses related to Phase 1–Model 1 and Phase 2–Model 1, the following assumptions for multiple linear regression analysis were tested across dependent variables of DEBT, ADMIN, and CONCEN: linearity, homoscedasticity, independence of residuals, multicollinearity, normality, and presence of outliers. Table 15 details the procedures and outcomes pertaining to assumption testing processes.

Data screening, reliability analysis, and assumption testing for multiple linear regression analysis revealed the following eight variables appropriate for Phase 1–Model 1 and Phase 2–Model 1 hypothesis testing: resource dependence (REDE-HETER); institutional pressure (INPRESS); strategic tactics of overall revenue-seeking (OVERALL_REVSEEK), legitimation

(LEGIT), and retrenchment (RETRENCH); and financial performance as measured by debt ratio (DEBT), revenue concentration (CONCEN), and administrative expense (ADMIN).

Table 15

Full Survey: Assumption Testing for Multiple Linear Regression Analysis

Assumption	Technique Used	Phase 2–Model 1 Assumption Met or Not Met		
		DEBT	CONCEN	ADMIN
Normality ^a	Histogram of standardized residual and normal P-P plot of regression standardized residual. Histograms revealed normal distributions.	Met	Met	Met
Independence of Observations	For DEBT and ADMIN models, Durbin-Watson (d) statistic must have been > upper critical value of 1.619. No statistical evidence of autocorrelation. DEBT and ADMIN models encompassed 95 observations, 5 predictors, at $p < .01$ (Savin & White, 1977). For CONCEN model, d must have been > upper critical value of 1.597. No statistical evidence of autocorrelation. CONCEN model was based on 95 observations, 4 predictors, at $p < .01$.	$d = 1.80$ Met	$d = 1.64$ Met	$d = 2.04$ Met
Linearity ^a	Scatterplots of studentized residuals against unstandardized predicted values were examined to assess whether they formed horizontal band; scatterplots of each independent variable and dependent variables were also examined for linearity.	Met	Met	Met
Homoscedasticity ^a	Scatterplots of studentized residuals against unstandardized predicted values were examined to assess if equal for all values of the predicted dependent variable. Scatterplots displayed data in accordance with assumption of homoscedasticity.	Met	Met	Met
Multicollinearity ^b	Correlations were examined to ensure < .70. Correlations > .70 indicated collinearity. All correlations were < .70.	Met	Met	Met
Outliers	Data were examined for significant outliers or influential points. There were no significant outliers or influential points.	Met	Met	Met

Full Survey Hypothesis Testing: Correlational Analysis

The first cluster of hypotheses explored relationships between the resource dependence variable of revenue heterogeneity (REDE-HETER) and the following: institutional pressure (INPRESS); and strategic tactics of overall revenue-seeking (OVERALL_REVSEEK), legitimation (LEGIT), and retrenchment (RETRENCH). Table 16 details outcomes for H₀₁ – H₀₄.

Table 16

Results for H₀₁ – H₀₄

	Hypothesis	Pearson <i>r</i>	Status of Hypothesis
H ₀₁	Among large-sized CBHOs, there is no statistically significant relationship between resource dependence (REDE-HETER) and institutional pressure (INPRESS).	.07	Fail to reject
H ₀₂	Among large-sized CBHOs, there is no statistically significant relationship between resource dependence (REDE-HETER) and an overall revenue-seeking (OVERALL_REVSEEK) strategy.	.18*	Reject
H ₀₃	Among large-sized CBHOs, there is no statistically significant relationship between resource dependence (REDE_HETER) and a legitimation (LEGIT) strategy.	.08	Fail to reject
H ₀₄	Among large-sized CBHOs, there is no statistically significant relationship between resource dependence (REDE-HETER) and a retrenchment (RETRENCH) strategy.	.08	Fail to reject

**p* < .05.

The second cluster of hypotheses explored relationships between institutional pressure and strategic tactics of overall revenue-seeking, legitimation, and retrenchment. Table 17 details the null hypothesis, Pearson *r* coefficient, assessment of significance, and disposition of the null hypothesis for H₀₅ – H₀₇. The final group of correlational hypotheses pertained to financial variables of debt (DEBT), revenue concentration (CONCEN), and administrative expense (ADMIN) and their respective relationships with resource dependence, institutional pressure, and

strategic tactics (i.e., OVERALL_REVSEEK, LEGIT, and RETRENCH). Table 18 details the null hypothesis, Pearson r coefficient, assessment of significance, and disposition of the null hypothesis for H₀8 - H₀21.

Table 17

Results for H₀5 – H₀7

	Hypothesis	Pearson r	Status of Hypothesis
H ₀ 5	Among large-sized CBHOs, there is no statistically significant relationship between institutional pressure (INPRESS) and an overall revenue-seeking (OVERALL_REVSEEK) strategy.	.36**	Reject
H ₀ 6	Among large-sized CBHOs, there is no statistically significant relationship between institutional pressure (INPRESS) and a legitimation (LEGIT) strategy.	.47**	Reject
H ₀ 7	Among large-sized CBHOs, there is no statistically significant relationship between institutional pressure (INPRESS) and a retrenchment (RETRENCH) strategy.	.13	Fail to reject

** $p < .01$.

Table 18

Results for H₀8 – H₀21

	Hypothesis	Pearson r	Status of Hypothesis
H ₀ 8	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (DEBT) and resource dependence (REDE-HETER).	.18*	Reject
H ₀ 9	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and resource dependence (REDE-HETER).	.14	Fail to reject
H ₀ 10	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (DEBT) and institutional pressure (INPRESS).	.11	Fail to reject

	Hypothesis	Pearson <i>r</i>	Status of Hypothesis
H ₀ 11	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and institutional pressure (INPRESS).	-.08	Fail to reject
H ₀ 12	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and institutional pressure (INPRESS).	.14	Fail to reject
H ₀ 13	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (DEBT) and an overall revenue-seeking (OVERALL_REVSEEK) strategy.	-.07	Fail to reject
H ₀ 14	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (DEBT) and a legitimation (LEGIT) strategy.	-.14	Fail to reject
H ₀ 15	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (DEBT) and a retrenchment (RETRENCH) strategy.	-.11	Fail to reject
H ₀ 16	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and an overall revenue-seeking (OVERALL_REVSEEK) strategy.	-.28*	Reject
H ₀ 17	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and a legitimation (LEGIT) strategy.	-.08	Fail to reject
H ₀ 18	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and a retrenchment (RETRENCH) strategy.	.08	Fail to reject
H ₀ 19	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and an overall revenue-seeking (OVERALL_REVSEEK) strategy.	.01	Fail to reject
H ₀ 20	Among large-sized CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and a legitimation (LEGIT) strategy.	.06	Fail to reject
H ₀ 21	Among large-sized CBHOs, there is no statistically significant relationship financial performance (ADMIN) and a retrenchment (RETRENCH) strategy.	-.09	Fail to reject

* $p < .05$.

Hypothesis Testing: Multiple Linear Regression Analysis

The following hypotheses guided three distinct multiple linear regression models:

H₀22: Among large-sized CBHOs, there is no significant relationship between financial

performance (DEBT) and resource dependence (REDE-HETER), institutional pressure (INPRESS), and strategic tactics (OVERALL_REVSEEK; LEGIT; and RETRENCH).

H₀23: Among large-sized CBHOs, there is no significant relationship between financial performance (CONCEN) and institutional pressure (INPRESS), and strategic tactics (OVERALL_REVSEEK; LEGIT; and RETRENCH).

H₀24: Among large-sized CBHOs, there is no significant relationship between financial performance (ADMIN) and resource dependence (REDE-HETER), institutional pressure (INPRESS), and strategic tactics (OVERALL_REVSEEK; LEGIT; and RETRENCH).

Table 19 conveys descriptive statistics for the DEBT, CONCEN, and ADMIN multiple linear regression models.

Table 19

Descriptive Statistics for Multiple Linear Regression Models: DEBT, CONCEN, and ADMIN

Variable	Mean	Std. Deviation
REDE-HETER	.43	.19
INPRESS	33.20	7.20
OVERALL_REVSEEK	.61	.21
LEGIT	.68	.25
RETRENCH	.50	.28
DEBT	.38	.30
CONCEN	.57	.19
ADMIN	.12	.04

Note. N = 95. Dependent variables include DEBT, CONCEN, and ADMIN. All others are independent variables.

Tables 20, 21 and 21 provide model summaries for DEBT, CONCEN, and ADMIN models, respectively.

Table 20

Model Summary Generated from Multiple Linear Regression Analysis for DEBT Model (Hypothesis 22)

Model	<i>R</i>	<i>R</i> Square	Std. Error	<i>F</i>	Sig. (<i>p</i>)
DEBT	.36	.13	.29	2.6*	.03
	Unstandardized Coefficients		Standardized Coefficients		
Variables	β	Std. Error	Beta	<i>t</i>	Sig. (<i>p</i>)
(Constant)	.19	.16	.23	1.17	.25
REDE-HETER	.37	.17	.23	2.16*	.03
INPRESS	.00	.01	.07	.64	.52
OVERALL_REVSEEK	-.45	.20	-.32	-2.3*	.02
LEGIT	.40	.17	.33	2.35*	.02
RETRENCH	-.12	.12	-.12	-.10	.30

* $p < .05$.

The DEBT model was significant ($R^2 = .13$, $F(5, 89) = 2.6$, $p < .05$) and offered strong evidence to reject null Hypothesis 22: Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT), and resource dependence (REDE-HETER), institutional pressure (INPRESS), and strategic choice (OVERALL_REVSEEK; LEGIT; RETRENCH). The DEBT model explained 13% of the variance in the debt ratio. Three independent variables—REDE-HETER, OVERALL_REVSEEK, and LEGIT—were significant at $p < .05$.

Table 21

Model Summary Generated from Multiple Linear Regression Analysis for CONCEN Model (Hypothesis 23)

Model	<i>R</i>	<i>R</i> Square	Std. Error	<i>F</i>	Sig. (<i>p</i>)
CONCEN	.35	.12	.18	3.16*	.04
	Unstandardized Coefficients		Standardized Coefficients		
Variables	β	Std. Error	Beta	<i>t</i>	Sig. (<i>p</i>)
(Constant)	.68	.09	--	7.34	.00
INPRESS	7.99	.00	.00	.03	.99
OVERALL_REVSEEK	-.37	.11	-.42	3.23*	.00
LEGIT	.08	.11	.15	.76	.45
RETRENCH	.13	.07	.19	1.78	.08

* $p < .05$.

The CONCEN model was significant ($R^2 = .13$, $F(4, 90) = 3.16$, $p < .05$) and offered strong evidence to reject null Hypothesis 23: Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN), and institutional pressure (INPRESS) and strategic choice (OVERALL_REVSEEK; LEGIT; RETRENCH). The CONCEN model explained 12.3% of the variance in organizational revenue concentration. One independent variable—OVERALL_REVSEEK—was significant, $t = -3.23$, $p < .05$. RETRENCH approached significance, $t = 1.78$, $p < .07$.

The ADMIN multiple linear regression model (see Table 23) was not significant. Null Hypothesis 24 was not rejected.

Table 22

Model Summary Generated from Multiple Linear Regression Analysis for ADMIN Model (Hypothesis 24)

Model	<i>R</i>	<i>R</i> Square	Std. Error	<i>F</i>	Sig. (<i>p</i>)
ADMIN	.22	.05	.04	.93	.47
	Unstandardized Coefficients		Standardized Coefficients		
Variables	β	Std. Error	Beta	<i>T</i>	Sig. (<i>p</i>)
(Constant)	.08	.02	--	4.73	.00
REDE-HETER	.03	.02	.13	1.16	.25
INPRESS	.00	.00	.14	1.19	.24
OVERALL_REVSEEK	-.02	.03	-.09	-.62	.54
LEGIT	.01	.02	.08	.57	.57
RETRENCH	-.01	.02	-.10	-.84	.41

Conclusion

The study examined variables of resource dependence, institutional pressure, strategic choice, and financial performance, their inter-relationships, and effect on nonprofit financial performance of large-sized CBHOs. Proposed expanded resource dependence measures—MMCI and GCCI—failed assumption-testing. Proposed expanded revenue-seeking strategic tactics—REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV—failed reliability analysis. Number of hypotheses decreased from 48 (Appendix B) to 24 (Appendix C) upon completion of data screening, assumption-testing, and reliability analysis phases of the research.

Measures adapted from Bielefeld's (1992a, 1992b, 1994) original research on nonprofit resource dependence (REDE-HETER), institutional pressure (INPRESS), and strategic choice (OVERALL_REVSEEK, LEGIT, and RETRENCH) were successfully adapted to the community behavioral healthcare sector and used to explore 24 hypotheses, as described in Appendix C. Among 24 hypotheses and their associated correlational analyses, five null hypotheses were rejected. Significant correlations occurred between the following: resource dependence and an overall revenue-seeking strategy (H₀2); institutional pressure and an overall revenue-seeking strategy (H₀5); institutional pressure and an overall revenue-seeking strategy (H₀6); financial performance—as measured by a debt ratio—and resource dependence (H₀8); and financial performance—as measured by revenue concentration—and an overall revenue-seeking strategy (H₀16).

Finally, two multiple linear regression models—DEBT and CONCEN—were significant, leading to the rejection of H₀22 and H₀23. Resource dependence, overall revenue-seeking strategy, and legitimation strategy emerged as statistically significant independent variables in the DEBT model. Overall revenue-seeking emerged as a statistically significant independent variable in the CONCEN model. The ADMIN model was not significant and null Hypothesis H₀24 was not rejected.

Chapter 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

The study reflected an effort to extend prior research on factors that affect the sustainability of a heterogeneous population of nonprofit organizations (e.g., Bielefeld, 1992a, 1992b, 1994; Froelich et al., 2000; Hager, 2001) to the homogenous nonprofit sector of community-based behavioral healthcare organizations (CBHOs). Factors from prior studies included resource dependence (REDE-HETER), institutional pressure (INPRESS), and strategic tactics of overall revenue-seeking (OVERALL_REVSEEK), legitimation (LEGIT), and retrenchment (RETRENCH). By design, the study first adapted measures of resource dependence and institutional pressure from Bielefeld (1992a), and strategic tactics from Bielefeld (1992b, 1994), and then applied these adapted measures to the homogenous population of CBHOs.

The research also used indicators of financial performance as previously introduced by Tuckman and Chang (1991), including debt ratio (DEBT), revenue concentration (CONCEN), and administrative expense (ADMIN). Organized in six discrete sections—introduction, summary of results, discussion of results, limitations of the study, and recommendations for future research—this chapter offers a synthesis of the study’s results, as well as recommendations to guide future research on the viability of nonprofit CBHOs and other homogenous nonprofit sectors.

Introduction

The purpose of the research was to reveal findings related to the sustainability of large-sized, nonprofit CBHOs with revenues greater than \$10 million. Specifically, the study explored whether statistically significant relationships existed between variables of resource dependence, institutional pressure, strategic choice, and financial performance; as well as whether resource dependence, institutional pressure, and/or strategic choice explained variance in financial performance of CBHOs with statistical significance. The study’s hypotheses were tested by using survey data from 95 CEOs. The research engaged two specific analytic phases—correlational (Phase 1–Model 1) and explanatory (Phase 2–Model 1)—in order to investigate the central and ancillary research questions and their associated hypotheses, as modified and summarized in Table 23.

Table 23
Summary of Research Questions and Hypotheses

Hypothesis	Research Question
H ₀ 1	Do type and level of resource dependence affect the degree of perceived institutional pressure of large, nonprofit CBHOs?
H ₀ 2 – H ₀ 4	Do type and level of resource dependence affect strategic choices of large, nonprofit CBHOs?
H ₀ 5 – H ₀ 7	Does degree of institutional pressure affect strategic choices of large nonprofit CBHOs?
H ₀ 8 – H ₀ 24	Do resource dependence, institutional pressure, and strategic choice (revenue-seeking, retrenchment, and/or legitimation) affect financial performance of large, nonprofit CBHOs?

Summary of Results

The research encompassed four sets of results. This section provides detail related to four discrete sections of results. The first set of results involved efforts made within the study to

adapt measures of resource dependence, institutional pressure, and strategic tactics, originally introduced by Bielefeld (1992a, 1992b, 1994), in order to align the measures to the homogenous sector of CBHOs across the United States. The first set of results also captured an effort to *extend* the conceptualization of resource dependence beyond revenue-heterogeneity—as measured by the Gibbs-Martin revenue heterogeneity index—and to *extend* the conceptualization of revenue-seeking strategies to encompass greater specificity on *types* of revenue-seeking tactics used by CBHOs.

The second set of results pertained to reliability analysis for the adapted strategic tactics list. The third set involved assumption testing of the financial variables, which operated as both correlational (Phase 1–Model 1) and dependent (Phase 2–Model 1) variables within the study. The fourth set of results encompassed findings from Phase 1–Model 1 and Phase 2–Model 1 hypothesis testing.

Summary of Results: Adapting and Extending Measures of Resource Dependence, Institutional Pressure, and Strategic Tactics

The study endeavored to adapt the Gibbs-Martin revenue heterogeneity index (Bielefeld, 1992a), the Institutional Vulnerability Index (Bielefeld, 1992a), and the strategic tactics list (Bielefeld, 1992b). The study also attempted to extend the conceptualization of resource dependence to include two indicators of organizational dependence on government funding, and to extend revenue-seeking strategic tactics to more specifically distinguish among general, government-focused, and non-government-focused revenue-seeking strategies. The extended resource dependence indicators included the Government Contract Concentration Indicator (GCCCI) and the Medicaid-Medicare Concentration Indicator (MMCI). The extended revenue-

seeking strategies included revenue-seeking general (REVSEEKGEN), revenue-seeking government (REVSEEKGOV), and revenue-seeking non-government (REVSEEKNONGOV). This section summarizes results from all actions engaged to adapt and extend measures pertaining to resource dependence, institutional pressure, and strategic tactics.

Adapting and extending measures of resource dependence.

Field testing expert panelists affirmed the revenue categories for the adapted Gibbs-Martin revenue heterogeneity index and pilot study participants further confirmed the applicability of categories to the nonprofit community behavioral healthcare sector. Expert panelists and pilot study participants offered minor comments to enhance the clarity of Gibbs-Martin categories. Appendix D shows the adapted Gibbs-Martin revenue-heterogeneity index. Gibbs-Martin heterogeneity values ranged from 0 through 1. Values closer to 0 indicated homogenous (non-diversified) funding within the organization. Values closer to 1 indicated heterogeneous (or diversified) funding. The Gibbs-Martin revenue heterogeneity index was successfully adapted to the homogenous sector of nonprofit CBHOs.

The effort to extend the resource dependence construct to include two indicators of dependence on government funding was not successful. Distributions for the Government Contract Concentration Indicator (REDE-GOVCON) and the Medicaid-Medicare Concentration Indicator (REDE-MM) did not meet the assumption of normality. One aim of the study was to explore relationships—if they existed—between organizational dependence on government sources of funding and perceptions of institutional pressure, strategic choices, and financial performance. These foci were integrated into Phase 1–Model 1 correlational analyses and Phase 2–Model 2 multiple linear regression analyses; however, REDE-GOVCON and REDE-MM

were dropped from the study and were not included among Phase 1–Model 1 correlations and not included as variables in Phase 2–Model 2.

Adapting the Institutional Vulnerability Index.

The Institutional Vulnerability Index was successfully adapted to the community behavioral healthcare sector by using a ranking technique asserted by Bielefeld (1992a). Bielefeld (1992a) suggested including the five top-ranked stakeholders as institutional stakeholders with the most influence on organizational structure and strategy. Five stakeholders on the (full) list came from Bielefeld’s (1992a) research of a heterogeneous population of nonprofit organizations, and five stakeholders came from the researcher’s direct experience in the community behavioral healthcare sector and corresponding knowledge of the sector’s influential stakeholders.

Six stakeholder groups (of the 10 possible groups) emerged from the field testing segment of the study. Three stakeholders were retained from Bielefeld (1992a)—legislative bodies, community leaders, and politicians—and three were unique to the community behavioral healthcare sector (i.e., government-based professional trade organizations, funders and payers, and competitor organizations).

Potential IVI values ranged from 0 through 60. The IVI was successfully adapted to provide an organizational index for each organization, derived from a summed importance score (0-30) and influence score (0-30). An organization with an IVI value closer to 60 experienced a high level of perceived institutional pressure, and an organization with an IVI closer to 0 experienced a low level of perceived institutional pressure. IVI means for pilot and full study segments of the study (with standard deviations in parentheses) were 31.56 (8.27) and 33.20

(7.20), respectively. The range of values for the pilot study extended from 20 to 52. The range of values for the full survey extended from 12 to 54. Stakeholder groups *not* selected by expert panelists included the following: accrediting/licensing bodies; media; clients and families; and the general public.

Adapting the strategic tactics list.

Finally, the strategic tactics list (Bielefeld, 1992b, 1994) was successfully adapted to the nonprofit community behavioral healthcare sector. Appendix F details the adapted strategic tactics list and methods used to retain, consolidate, or modify Bielefeld's (1992b, 1994) original tactics. The research also proposed to extend revenue-seeking tactics by more specifically measuring and distinguishing among general, government, and non-government revenue-seeking tactics; but, this outcome did not materialize. This section conveys key processes related to adapting the strategic tactics list.

During the field testing segment of the research, expert panelists selected strategic tactics *commonly used* by nonprofit CBHOs within the last three-to-five years in order to promote organizational viability and sustainability. The research proposed to engage the Content Validation Ratio (CVR) technique suggested by Lawshe et al. (1988), to establish content validity of strategic tactics; however, the required number of responses failed to materialize and an alternative method, also suggested by Lawshe et al. (1988), was used to affirm content validity. In instances where fewer than 10 responses are available, items selected by at least 50% of expert panelists can be considered as having content validity and appropriate for instrumentation. Among 32 total tactics, 100% of expert panelists agreed on 12 tactics, 75% of panelists agreed on 11 tactics, and 50% agreed on 9 tactics. All proposed tactics were selected

by at least 50% of panelists and as such, comprised the strategic tactics list used for pilot study and full survey segments of the study.

Summary of Results: Reliability of the Strategic Tactics List

To evaluate reliability of the strategic tactics list, Kuder-Richardson 20 (*KR20*) values were calculated for each of the following strategic tactic: overall revenue-seeking (*OVERALL_REVSEEK*); revenue-seeking general (*REVSEEKGEN*); revenue-seeking government (*REVSEEKGOV*); revenue-seeking non-government (*REVSEEKNONGOV*); legitimation (*LEGIT*); and retrenchment (*RETRECH*). The *KR20* is an appropriate reliability estimate for dichotomous measures.

Tactics replicated from Bielefeld (1992b)—overall revenue-seeking, (*OVERALL_REVSEEK*), legitimation (*LEGIT*), and retrenchment (*RETRENCH*)—were successfully adapted and retained for Phase 1–Model 1 correlational analyses and Phase 2–Model 1 multiple linear regression analyses (i.e., *DEBT*, *CONCEN*, and *ADMIN* models). Extended tactics (i.e., *REVSEEKGEN*, *REVSEEKGOV*, and *REVSEEKNONGOV*) did not produce acceptable reliability values and were not retained for Phase 1–Model 1 correlational analyses and Phase 2–Model 2 multiple linear regression analyses (i.e., *DEBT*, *CONCEN*, and *ADMIN* models). This section summarizes the results related to adapting the strategic tactics list.

During pilot and full survey segments of the research, strategies not selected by participants received a code of 0, and strategies selected by participants received a code of 1. Customarily, *KR20* values greater than .70 are adequate reliability estimates, and values greater than .80 are optimal estimates (Salkind, 2010). Table 14 in Chapter 4 detailed *KR20* values for each strategic tactic for pilot study ($N = 17$) and full survey ($N = 95$) segments of the research.

In the full study segment of the research, *KR20* values for overall revenue-seeking (OVERALL_REVSEEK), legitimation (LEGIT), and retrenchment (RETRENCH) were .72, .66, and .75, respectively, $p < .05$. While the legitimation *KR20* statistic did not meet the .70 recommended value, the legitimation tactic was retained for the following reasons: the legitimation statistic closely approximated the recommended value; the *KR20* statistic for legitimation in the pilot study phase was .77 (above the recommended value); and the importance of the legitimation tactic was instrumental to the overall study. Full survey *KR20* values for extended tactics of REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV were .42, .63, and .75, respectively. By design, extended tactics accepted for the study if and only if all three were successfully differentiated from the OVERALL_REVSEEK construct. This did not occur and the extended tactics were not included among Phase1–Model 1 correlations and within Phase 2–Model 2 regression analyses (DEBT, CONCEN, and ADMIN).

Summary of Results: Financial Variables

Consistent with Tuckman and Chang (1991), the following financial variables were included as Phase 1–Model 1 correlational variables, and as Phase 2–Model 1 and Phase 2–Model 2 dependent variables: debt ratio (DEBT), operating margin (MARGIN), revenue concentration (CONCEN), and administrative expense (ADMIN). DEBT, CONCEN, and ADMIN were normally distributed and satisfied all assumptions for multiple linear regression analysis. MARGIN did not satisfy the normality assumption and was not retained for further multiple linear regression assumption testing. Final financial variables included DEBT, CONCEN, and ADMIN. MARGIN was eliminated from Phase 1–Model 1 correlations and Phase 2–Model 1 and Phase 2–Model 2 multiple linear regression analyses.

Summary of Results: Hypothesis Testing

The original design included the following three models to test 48 hypotheses delineated in Appendix B: Phase 1–Model 1; Phase 2–Model 1; and Phase 2–Model 2. Extended resource dependence variables (i.e., Resource Dependence - Government Contract Concentration Indicator (REDE-GOVCON) and Resource Dependence - Medicaid-Medicare Concentration Indicator (REDE-MM) did not satisfy the normality assumption. Extended revenue-seeking strategic tactics—REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV—produced inadequate *KR20* reliability values. These variables—REDE-GOVCON, REDE-MM, REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV—were specific to Phase 2–Model 2 and distinguished this model from Phase 2–Model 1.

After assumption testing and reliability analysis, several changes to the proposed research occurred. These changes involved the following: elimination of six variables (REDE-GOVCON; REDE-MM; REVSEEKGEN; REVSEEKGOV; REVSEEKNONGOV; MARGIN); removal of Phase 2–Model 2; and reduction of the number of hypotheses from 48 to 24. Two research questions were amended slightly to reflect a singular resource dependence variable (REDE-HETER) in contrast to the three proposed (i.e., REDE-HETER; REDE-GOVCON; REDE-MM). Table 24 details these minor language adjustments. This section conveys results pertaining to Phase 1–Model 1 and Phase 2–Model 1 hypotheses testing.

Phase 1–Model 1 hypothesis testing.

Regarding the first research question and H₀₁, there was no statistically significant relationship between resource dependence (REDE-HETER) and institutional pressure (INPRESS). For the second research question, which encompassed H₀₂ – H₀₄, there was a statistically significant relationship between resource dependence and an overall revenue-seeking

strategy ($r = .18, p < .05$); but, not between resource dependence and legitimation or retrenchment. The third research question and associated null hypotheses (H₀₅ – H₀₇) explored relationships between institutional pressure and strategic tactics engaged by nonprofit CBHOs. Relationships between institutional pressure and an overall revenue-seeking strategy (H₀₅) and a legitimation strategy (H₀₆) revealed Pearson r coefficients of .36 and .47, respectively, both significant at $p < .01$; yet the relationship between institutional pressure and a retrenchment strategy (H₀₇) was not significant.

Table 24

Revised Research Questions

Hypothesis	Original Research Question	Revised Research Question
H ₀₁	Do type and level of resource dependence affect the degree of perceived institutional pressure of large, nonprofit CBHOs?	Does resource dependence (revenue heterogeneity) affect the degree of perceived institutional pressure of large, nonprofit CBHOs?
H ₀₂ – H ₀₄	Do type and level of resource dependence affect strategic choices of large, nonprofit CBHOs?	Does resource dependence (revenue heterogeneity) affect strategic choices of large, nonprofit CBHOs?
H ₀₅ – H ₀₇	Does degree of institutional pressure affect strategic choices of large nonprofit CBHOs?	Does degree of institutional pressure affect strategic choices of large nonprofit CBHOs?
H ₀₈ – H ₀₂₄	Do resource dependence, institutional pressure, and strategic choice (revenue-seeking, retrenchment, and/or legitimation) affect financial performance of large, nonprofit CBHOs?	Do resource dependence, institutional pressure, and strategic choice (revenue-seeking, retrenchment, and/or legitimation) affect financial performance of large, nonprofit CBHOs?

The final set of correlations (H₀₈ – H₀₂₁) explored relationships between financial measures (DEBT, CONCEN, and ADMIN) and resource dependence (REDE-HETER), institutional pressure (INPRESS), and strategic tactics (i.e., OVERALL_REVSEEK; LEGIT;

and RETRENCH). DEBT and REDE-HETER ($r = .18$) and CONCEN and OVERALL_REVSEEK ($r = -.28$) were significant at $p < .05$. To summarize, 5 of 21 Phase 1–Model 1 correlations were statistically significant. Null Hypotheses H₀₂, H₀₅, H₀₆, H₀₈, and H₀₁₆ were rejected.

Phase 2–Model 1 hypothesis testing.

Phase 2–Model 1 encompassed three multiple linear regression models: DEBT, CONCEN, and ADMIN. The DEBT model was significant ($R^2 = .13$, $F(5, 89) = 2.6$, $p < .05$) and H₀₂₂ was rejected. Three independent variables—REDE-HETER, OVERALL_REVSEEK, and LEGIT—were significant at $p < .05$. The CONCEN model was also significant ($R^2 = .13$, $F(4, 90) = 3.16$, $p < .05$) and H₀₂₃ was rejected. One independent variable—OVERALL_REVSEEK—was significant, $t = -3.23$, $p < .05$. The ADMIN model was not significant and H₀₂₄ was not rejected.

Discussion of Results

Three core areas of interest emerged from the results of the study. The first area of interest pertained to variables dropped from the study after assumption testing and reliability analysis. These variables included Resource Dependence–Government Contract Concentration (REDE-GOVCON), Resource Dependence–Medicaid-Medicare Concentration (REDE-MM), Operating Margin (MARGIN), and three revenue-seeking strategic tactics—general (REVSEEKGEN), government (REVSEEKGOV), and non-government (REVSEEKNONGOV). The second area of interest pertained to significant and non-significant correlations derived from Phase 1–Model 1 analyses. The third and final area of interest encompassed findings from Phase 2–Model 1 multiple linear regression analysis and variables that explained, with statistical significance, variance in financial performance as measured by organizational debt ratio and

organizational revenue concentration. This section offers details pertaining to these three areas of interest.

Variables Deemed Appropriate and not Appropriate for the Study

The study endeavored to extend Bielefeld's (1992a, 1992b, 1994) prior research on resource dependence, institutional, and strategic factors that led to the sustainability of nonprofit organizations. Efforts undertaken by this research to adapt Bielefeld's (1992a) Gibbs-Martin revenue heterogeneity index, Institutional Vulnerability Index (1992a), and strategic tactics list (1992b, 1994) to a homogenous population of nonprofit CBHOs were successful. Variables related to resource dependence (i.e., REDE-GOVCON; REDE-MM), revenue-seeking tactics (i.e., REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV), and financial performance (MARGIN) were not deemed appropriate for correlational and multiple linear regression models.

Efforts undertaken to extend the resource dependence construct to more specifically assess dependence on government sources by developing the Government Contract Concentration Indicator (GCCCI) and Medicaid-Medicare Concentration Indicator (MMCI) were not successful. Neither of these measures satisfied the normality assumption; yet, after more careful examination of data for the GCCCI and MMCI, the non-normality of their distributions made greater sense.

Past studies measured non-profit dependence on government sources and accomplished this through dichotomous assignment—government or non-government—(Frumkin & Kim, 2002; Hager et al., 2004), and tri-level categorization—no funding, 1 to 2 government streams, or 3 or more government streams—(Guo & Acar, 2005). This research endeavored to shed light on the impact of government funding on perceptions of institutional pressure, strategic choices

made by CBHOs, and overall financial performance. The research attempted to accomplish this by developing more specific measures of government dependence.

Typically, nonprofit CBHOs depend on government revenue in two distinct ways: government contracts, which can be local, county, state, or federal; and Medicaid-Medicare reimbursement. The formulation of the GCCI and MCCI reflected an effort to capture these dependencies beyond previously-tried categorical representations of dependence. The distribution of values for the GCCI skewed significantly to the right. The distribution of values for the MMCI skewed significantly to the left (See Figure 8).

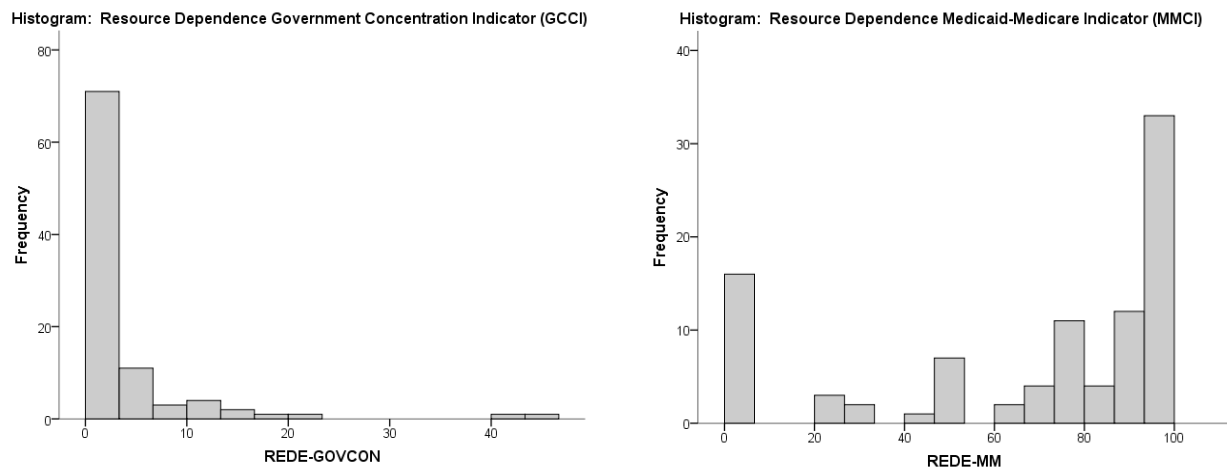


Figure 8. Histograms for extended resource dependence variables GCCI and MMCI. GCCI units reflect percentage of dependence per government contract. Lower GCCI values reflected less overall (per contract) dependence; higher GCCI values reflected more (per contract) dependence. The greater the per contract dependence, the less diversified contract revenue was within the organization. MCCI units reflected percentage of organizational third-party revenue comprised of Medicaid or Medicare. Lower MMCI values reflected less dependence on Medicaid-Medicare. Higher MVVI values reflected more dependence on Medicaid-Medicare.

After careful scrutiny, the skewed distributions of REDE-GOVCON and RED-MM revealed the homogeneous quality of the nonprofit behavioral healthcare sector. CBHOs

typically rely on government contracts to serve populations with serious mental health and addiction challenges. Large-sized CBHOs specialize in this type of service. As a result, right-skewed REDE-GOVCON made sense for the CBHO sector of interest. Large-sized CBHOs often have many government contracts and this generated lower GCCI values.

As designed, the GCCI calculation encompassed *percentage of organizational revenue comprised of government contracts / total number of government contracts* and produced a percentage of general dependence, per contract. For example, an organization with 70% of its funding from government sources, allocated across 50 discrete government contracts would have approximately 1.4% dependence per contract ($.70/50 = .014$). An organization with 70% of funding from government sources, with 20 distinct contracts, would have approximately 3.5% dependence per contract ($.70/20 = .035$).

The GCCI values indicated that 48% of CBHOs ($N = 46$) had less than 1% dependence per contract, reflecting diversified contract revenues. Another 20% ($N = 20$) generated GCCI values between 1% and 3%. While the GCCI did not generate a normal distribution of values, the indicator did reveal support for the assumption that CBHOs have strong reliance on government contracts. The GCCI also revealed that organizations generally diversified their contract revenue as a financial risk management strategy. For example, in the event a government contract ends, the organization can generally buffer overall financial impact with other contract revenue.

Medicaid-Medicare Concentration Indicator values indicated a similar pattern. MMCI values skewed to the left. The computation method used to derive the Medicaid-Medicare Concentration Indicator (MMCI) was similar to that used for the GCCI: *percentage of third-party (non-contract) Medicaid and Medicare revenue / percentage total third-party revenue*.

The MMCI provided information related to organizational dependence on government sources of third-party revenue. MMCI values had a potential range from 0 (the organization had no percentage of third-party revenue from Medicaid-Medicare) to 100 (all of the organization's third-party revenue was derived from Medicaid-Medicare). While the MMCI did not generate a normal distribution of values, the indicator did reveal support for the assumption that CBHOs have strong reliance on Medicaid and Medicare. The mean value for the MMCI was 68% and the median was 84%.

To summarize, the GCCI or MCCI distributions were not normally distributed. As a result, these variables were not appropriate for the correlational and multiple linear regression models used for the study. Despite this, the GCCI and MCCI offered valuable information on CBHO reliance on government contracts, diversification of contract revenue across multiple contracts, and dependence on Medicaid and Medicare for third-party revenue. These data supported a fundamental assumption of the research that nonprofit CBHOs relied on government sources of revenue for sustainability.

The research also attempted to extend revenue-seeking strategic tactics to encompass general revenue-seeking (REVSEEKGEN), government revenue-seeking (REVSEEKGOV), and non-government revenue-seeking (REVSEEKNONGOV). Definitions for these tactics were specified in Chapter 1. The original intent of Phase 1–Model 1 correlations was to explore relationships between particular resource dependencies, institutional pressure, and strategic tactics, including variables adapted from Bielefeld (1992a, 1992b, 1994) and new relationships through expanded variables of resource dependence and revenue-seeking tactics. The original intent of Phase 2–Model 2 was to offer specific explanations on how particular resource dependencies, institutional pressure, and strategic tactics affected financial performance of

nonprofit CBHOs, including variables adapted from Bielefeld (1992a, 1992b, 1994) and new variables developed by expanding resource dependence and revenue-seeking variables.

As mentioned earlier, extended resource dependence variables of REDE-GOVCON and REDE-MM did not satisfy the normality assumption. Extended strategic tactics, REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV did not produce acceptable reliability estimates as a group. Normality and reliability of data were necessary to activate specific correlations involving these variables in Phase 1–Model 1 and to engage Phase 2-Model 2.

Kuder-Richardson 20 values for REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV were .42, .63, and .71, respectively. Perhaps the reliability of these tactics lists could be improved by increasing the number of elements within each list. REVSEEKGEN had four items, and REVSEEKGOV and REVSEEKNONGOV each had five. OVERALL_REVSEEK, LEGIT, and RETRENCH tactics adapted from Bielefeld (1992b, 1994) had 14, 9, and 9 elements, respectively, and their reliability estimates were acceptable.

Finally, while four financial variables were proposed (i.e., DEBT, MARGIN, CONCEN, and ADMIN), MARGIN values were not normally distributed. Similar to the extended resource dependence variables of REDE-GOVCON and REDE-MM, the homogeneous quality of the study's population affected the MARGIN variable. Tuckman and Chang (1991) piloted the use of DEBT, MARGIN, CONCEN, and ADMIN on a heterogeneous population of 4,730 nonprofit organizations (p. 445) and produced a broad range of values.

The values in this study, however, reflected a restricted range. Most nonprofit CBHOs realized very small operating margins. This is typical for a sector that depends significantly on government sources of funding. In fact, 53% ($N = 50$) of organizations had operating margins

between -.01 and +.01 percent. Still another 20% of organizations ($N = 20$) had margins no larger than $\pm .03\%$. Figure 9 shows how the distribution of MARGIN values skewed significantly to the right. Because MARGIN values were not normally distributed and the range was restricted, MARGIN was eliminated from Phase 1–Model 1 and Phase 2–Model 1 analyses.

Before addressing notable results from Phase 1–Model 1 correlations and Phase 2–Model 2 multiple linear regression analyses, a brief overview of the manner in which financial variables were used within the study to distinguish financial performance of nonprofit organizations is clarified here. Tuckman and Chang (1991) used four indicators of financial performance to assess financial vulnerability of nonprofit organizations: debt ratio; operating margin; revenue heterogeneity or concentration; and administration expense (overhead). The lowest quintile of each distribution was used by Tuckman and Chang (1991) to identify financially *at risk* organizations (i.e., all organizations in the lowest quintile for one measure) and *severely at risk* organizations (i.e., all organizations in the lowest quintile for at least two measures).

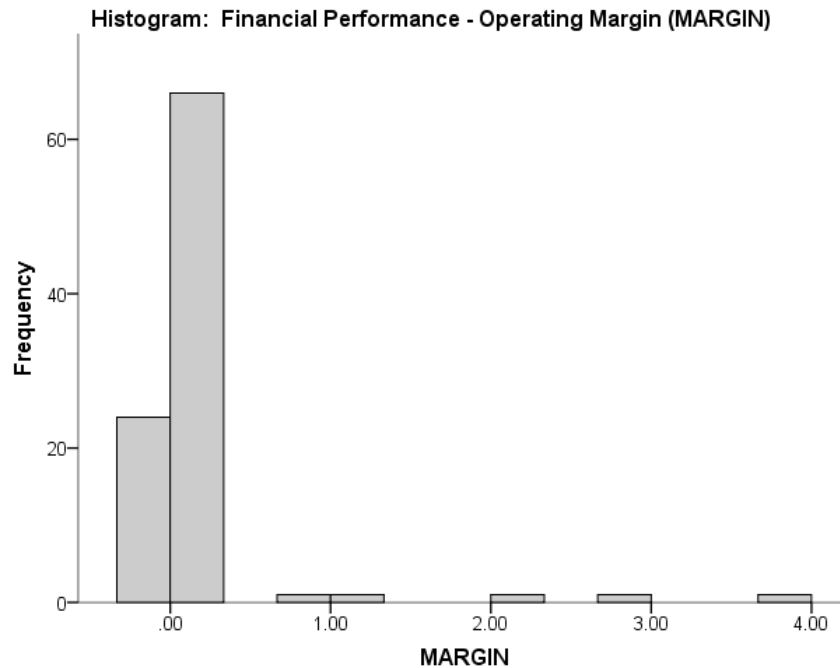


Figure 9. Operating margin for large-sized nonprofit CBHOs.

The current study also used debt ratio, operating margin, revenue heterogeneity or concentration, and administrative expense, consistent with Tuckman and Chang (1991); yet, did not apply the classification methodology. In order to avoid premature or inaccurate labeling of nonprofit CBHOs as financially vulnerable, this research used financial variables (i.e., DEBT, CONCEN, and ADMIN) as individual correlational variables in Phase 1–Model 1 and as dependent variables in Phase 2–Model 1 multiple linear regression analysis, an approach intended to offer information on how each financial measure performed when applied to CBHOs.

This rationale was based on the notion that Tuckman and Chang (1991) discrete measures should be first tested to assess how they perform in relation to CBHOs before applying these indicators to classify (or label) organizations as financially vulnerable. Use of financial measures to describe nonprofit performance is relatively new to nonprofit effectiveness studies

and somewhat controversial because determinations of nonprofit impact are often subjectively derived (Cho, 2007; Herman & Renz, 2004; Rojas, 2000). Accurate financial measures and interpretation of financial measures were important to this sector-specific analysis. As mentioned above, this conservative approach revealed a valuable finding: the MARGIN variable did not satisfy the normality assumption and was not included among the financial measures for Phase 1–Model 1 and Phase 2–Model 1.

Significant and Non-significant Correlations

Five of 21 correlations were significant. The correlations were consistent with resource dependence (Bielefeld, 1992a; Gronbjerg, 1991; Pfeffer & Salancik, 2003), institutional (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Ruef & Scott, 1998; Selznick, 1947, 1957, 1996), and strategic choice (Child, 1972; Lawrence & Lorsch, 1967) theories. The following correlations were statistically significant: resource dependence–revenue heterogeneity and a revenue-seeking strategy; institutional pressure and a revenue-seeking strategy; institutional pressure and a legitimation strategy; resource dependence–revenue heterogeneity and financial performance (as measured by a debt ratio); and a revenue-seeking strategy and financial performance (as measured by revenue concentration).

Resource dependence correlations.

Higher Gibbs-Martin values, which reflected the resource dependence–revenue heterogeneity (REDE-HETER) construct, indicated greater revenue heterogeneity (i.e., revenue diversification). Therefore, the positive relationship between resource dependence and an organization’s focus on a revenue-seeking strategy (OVERALL_REVSEEK) reflected how organizations with diversified revenue also focused on revenue-seeking strategic activities.

Resource dependence and the other two strategic tactics—legitimation and retrenchment—were not significantly correlated.

Legitimation (LEGIT) tactics involved actions taken by an organization to conform to, as well as shape, specific norms that influence stakeholders. Retrenchment tactics (RETRENCH) included activities related to reducing internal costs in order to offset diseconomies of actual or potential loss of funding (Bielefeld, 1992b, p.390). Neither of these strategic choices directly correlated with resource dependence.

Institutional pressure correlations.

The following relationships were significant: institutional pressure (INPRESS) and a revenue-seeking strategy (OVERALL_REVSEEK); and institutional pressure and a legitimation (LEGIT) strategy. The institutional environment of nonprofit CBHOs, as operationalized by the Institutional Vulnerability Index (IVI), included the following primary stakeholder groups: government-based and professional trade organizations; funders and payers; legislative bodies; community leaders; politicians; and competitor organizations. Significant relationships between institutional pressure and revenue-seeking and legitimation strategies revealed the integrated relationship that occurs between the institutional environment and the types of revenues (i.e., services) a nonprofit CBHO pursues, as well the prevalence of legitimizing tactics among CBHOs that perceive high levels of institutional influence. Interestingly, significant correlations did not emerge for INPRESS and RETRENCH.

The non-significant correlation between INPRESS and RETRENCH suggested that to some extent, a buffering effect exists between the institutional environment and particular internal organizational operational processes and decisions, consistent with institutional theory (Meyer & Rowan, 1977; Thompson, 1967). Institutional theory highlights particular

organizational actions—*visible* to institutional stakeholders—designed to promote the organization’s normative, regulative, and cognitive legitimacy within the social order of a given field (DiMaggio & Powell, 1983; Oliver, 1991; Ruef & Scott, 1998). Significant correlations between INPRESS and OVERALL_REVSEEK and INPRESS, and INPRESS and LEGIT, were consistent with resource dependence, institutional, and strategic choice theories.

In the community behavioral healthcare sector, institutional stakeholders often influence the types of services offered by a CBHO and/or the clients served by the organization. This is especially true of government-related and insurance entities, who are primary funders of community behavioral healthcare services. The linkage between institutional pressure and a revenue-seeking strategy reflected this particular connection that exists between CBHO and institutional stakeholder.

Furthermore, CBHOs often choose to pursue a wide range of legitimation strategies in order to enhance their visibility to institutional stakeholders, especially those stakeholders who influence or finance their services. Legitimation tactics of focus within the research included the following: adapted services to funder preferences and priorities; collaborated with funder(s) on industry-related committees or projects; and led or provided industry-related training to the public and/or competitor organizations, among several others detailed in Appendix F. Thus, the correlation between institutional pressure and a legitimation strategy reflected the power of legitimating tactics in the community behavioral healthcare institutional environment.

Institutional pressure did not affect internal management strategies.

Management strategies, such as such as freezing positions, adding to employee work responsibilities, and other retrenchment strategies engaged by organizations to improve financial performance, typically occur within the privacy of the organization and are not visible to

institutional stakeholders. As a result, the non-significant relationship between institutional pressure and a retrenchment strategy reflected the discontinuity between internal management decisions and the influencing external environment. Consistent with resource dependence, institutional, and strategic choice theories, these correlations highlighted the impact institutional pressures had on external-facing strategies (i.e., revenue-seeking and legitimation), but not on internal-facing retrenchment strategies.

Financial performance correlations.

There were two significant correlations involving financial performance: resource dependence-revenue heterogeneity and financial performance, as measured by a debt ratio; and a revenue-seeking strategy and financial performance, as measured by revenue concentration. The calculation for debt ratio encompassed assets – liabilities / total revenues. Higher values indicated a greater proportion of organizational equity in terms of organizational size (revenues). Higher values indicated better financial performance. The calculation for revenue concentration involved a Herfindahl-type index (Bielefeld, 1992a; Fisher et al., 2007; Tuckman & Chang, 1991). The Herfindahl measure captured the depth of revenue heterogeneity within an organization by assuming equal weights for each possible stream. The index neared 1.0 on the side of revenue concentration (revenue homogeneity), and the lower bound approached zero, indicating revenue diversification. Appendix G includes more detail on the Herfindahl-type index used within the study and its calculation. Lower CONCEN values indicated revenue diversification, a favorable indicator of optimal organizational financial performance.

Resource dependence-revenue heterogeneity (REDE-HETER) and DEBT were positively correlated ($r = .18, p < .05$). An overall revenue-seeking strategy (OVERALL_REVSEEK) and CONCEN were negatively correlated ($r = -.28, p < .05$). Organizations with diverse revenue

sources (REDE-HETER) had higher financial performance, as measured by DEBT.

Organizations with heterogeneous funding (CONCEN) also pursued revenue-seeking strategies (OVERALL_REVSEEK). The next section discusses financial performance (Phase 2–Model 1) in greater detail.

Explaining Financial Performance: Significant Variables

Among three Phase 2–Model 1 multiple linear regression models—DEBT, CONCEN, and ADMIN—two models (i.e., DEBT and CONCEN) produced significant results. The DEBT model was significant ($R^2 = .13$, $F(5, 89) = 2.6$, $p < .05$) and H_{022} was rejected. Three independent variables—REDE-HETER, OVERALL_REVSEEK, and LEGIT—were significant at $p < .05$. The regression equation was $DEBT = .19 + .37*(REDE-HETER) - .45*(OVERALL_REVSEEK) + .40*(LEGIT)$.

The CONCEN model was also significant ($R^2 = .12$, $F(4, 90) = 3.16$, $p < .05$) and H_{023} was rejected. One independent variable—OVERALL_REVSEEK—was significant, $t = -3.23$, $p < .01$. The regression equation was $CONCEN = .68 + -.37*(OVERALL_REVSEEK)$. The ADMIN model was not significant and H_{024} was not rejected.

Phase 2–Model 1 findings suggested true interconnected systems affecting nonprofit CBHO financial performance. Resource dependence ($t = 2.12$, $p < .05$) and strategies of revenue-seeking ($t = 2.35$, $p < .05$) and legitimation ($t = -2.3$, $p < .05$) explained 13% of variance in financial performance (i.e., DEBT). As mentioned above, an overall revenue-seeking strategy was significant at $p < .01$ in the CONCEN model. Retrenchment *approached* significance in the CONCEN model ($t = 1.80$, $p < .07$), which suggested the value of retrenchment strategies to positive financial performance, as indicated by revenue heterogeneity, measured by a Herfindahl-type index. The ADMIN model was not significant.

Limitations of the Study

There are three limitations to the research. First, the study used a systems model and a limited set of influencing variables. Second, financial measures were engaged as a proxy for organizational effectiveness. Third, the study involved a homogenous population of CBHOs and this limits the generalization of findings to only this population. This section reviews each of these limitations in detail.

Systems Model of the Effectiveness of Community Behavioral Healthcare Organizations

By design, the study used a systems model and included variables of resource dependence, institutional pressure, and strategic choice to evaluate the effectiveness of nonprofit CBHOs. Measures of financial performance served as a proxy for organizational effectiveness. By definition, the systems model engaged for the study delimited variables to a discrete number of elements among the many possible existing elements within the broader system (Arbner & Bjerke, 1997).

This type of modeling reflected real systems associated with CBHOs in order to examine how CBHOs interacted with the influencing environment, as well as ways CBHOs activated particular strategic choices to promote competitive advantage. Delimitation of elements within the articulated systems model—resource dependence, institutional pressure, and organizational strategic choice—magnified the relevance of these selected variables on financial performance. By design the study excluded a diverse range of other variables not consistent with the study's underlying theoretical framework.

Consequently, alternative plausible explanations for financial performance (or organizational effectiveness) of CBHOs existed. These alternative explanations would include a broad range of variables *not addressed* within the scope of the model used for the study and

inconsistent with the underlying theoretical framework of resource dependence, institutional, strategic choice, and organizational effectiveness theories. The emergence of resource dependence, institutional pressure, and legitimation in the DEBT model (of financial performance), offered some support for the “inevitable interaction” described by Arbnor and Bjerke (1997, p. 112) as a requisite quality for inclusion of variables in any systems model designed to reflect a particular context (p. 112). The statistical significance of these factors suggested, to some extent, legitimate relationships existed between the independent and dependent variables in the study.

Financial Measurement as Proxy for Organizational Effectiveness

The second limitation pertained to the use of financial measures as a proxy for organizational effectiveness and ultimately, for organizational survival. Studies on nonprofit organizational effectiveness offer a broad range of criteria and models (Rojas, 2000). Application of financial measures within the systems model used for this study exposes the research to some level of legitimate criticism. Models did not attend to other forms of organizational effectiveness relevant to nonprofit survivability. Others acknowledged the broad range of potential indicators of organizational effectiveness (Herman & Renz, 1999; 2004); yet, these works also were vulnerable to criticism for subjective and qualitative definitions of effectiveness, such as fulfillment of mission and stakeholder perceptions of performance, which relied on subjective impressions on constituent-based criteria (Herman & Renz, 2004).

The difficulty in assessing nonprofit effectiveness or performance overall continues to challenge scholars and practitioners; but, use of financial indicators as measures of organizational effectiveness appear at increased frequency in the literature (e.g., Greenlee & Trussel, 2000; Hager, 2001; Hodge & Piccolo, 2005; Ritchie & Kolodinsky, 2003; Tinkelman &

Donabedian, 2007; Trussel, 2002). Financial measures are relevant to organizations seeking information related to organizational viability, and to funders who want to allocate their dollars wisely (Hager, 2001). In line with this trend and rationale, this study applied financial measures of organizational performance as correlational and dependent variables in order to evaluate how they operated, when applied to CBHOs, as well as to provide measureable indicators of organizational effectiveness in a sector where these determinations often come from diverse constituencies. After all, without financial performance, other measures of effectiveness may not even be relevant. CBHOs need to survive first, in order to enhance or improve their effectiveness in other ways.

Generalization of Findings

The final limitation pertained to examining a relatively homogenous population of CBHOs for the study and how generalization of results was limited to the population of community behavioral healthcare organizations with revenues greater than \$10 million. Although findings were narrowly generalizable to large nonprofit CBHOs, the study strengthened understanding of the effects of resource dependence, institutional pressure and strategic choice on CBHO financial performance and offered a structure for other researchers to follow to examine other nonprofit sectors with strong resource dependencies and institutionalized values, beliefs, norms, expectations, standards, and regulations.

Implications and Recommendations for Future Research

Findings from the study revealed eight core implications to inform continued study of nonprofit CBHOs, and guide nonprofit CBHO planning and decision-making, especially amidst increasingly complex and uncertain increasing times. First, results provided evidence of the difficult financial challenges facing contemporary CBHOs. Operating margin (MARGIN) data

from the study were not useable because the distribution of values violated the normality assumption. Despite this, these data reflected the financial struggle common to the sector, as reflected by a preponderance of narrow margins across CBHOs.

Second, distributions for *extended* resource dependence variables proposed within the study to measure CBHO dependence on government sources of revenue also violated the normality assumption and revealed homogenous values across the sector. The sector had a high level of dependence on government sources. These sources included Medicaid, Medicare, and government contracts.

Third, extended revenue-seeking strategic variables were not reliable as a grouping (REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV). This result offered an opportunity for future exploration, especially given the dependence of CBHOs on government funding and the value of revenue-seeking strategies. These two findings were prominent in this research.

Fourth, a significant relationship between resource heterogeneity and an overall revenue seeking strategy, and institutional pressure and an overall revenue-seeking strategy, highlighted the impact of the resource/institutional environment on revenue-seeking strategies engaged by nonprofit CBHOs. Fifth, the significant relationship between institutional pressure and an overall legitimation strategy suggested the strong connection between the institutional environment and legitimating strategies activated by nonprofit CBHOs to enhance their prominence within a sector with strong institutionalized values and practices. Sixth, organizations with the strong performance (as measured by DEBT margin) also pursued heterogeneous funding sources.

Furthermore, revenue heterogeneity (REDE-HETER), combined with a revenue-seeking strategy (OVERALL_REVSEEK) and a legitimation strategy (LEGIT), explained variance in financial performance, as measured by organizational debt ratio (DEBT). Seventh, overall revenue-seeking (OVERALL_REVSEEK) was the only factor contributing to variance in revenue heterogeneity of CBHOs, as reflected in the CONCEN model. Eighth and last, no variables affected financial performance as measured by administrative expense (ADMIN), which should ignite some interest in whether or not administrative expense is a meaningful indicator of nonprofit CBHO financial performance, as suggested by Tuckman and Chang (1991).

Tuckman and Chang's (1991) seminal work investigated a heterogeneous nonprofit population and ADMIN was a distinguishing financial variable. Idiosyncratic features unique to a homogenous population may affect the applicability of the ADMIN measure. This section briefly describes these eight implications and concludes with recommendations for future investigation.

Implications of the Study

Financial data related to the MARGIN variable offered support for the challenges facing contemporary CBHOs: margins skewed to the right and revealed slim (and in some cases, negative) operating margins among large-sized nonprofit CBHOs. Narrow operating margins shed some light on the financial challenges encountered by the non-profit CBHOs in the study. Narrow margins among CBHOs also supported the need to explore viable strategic tactics that distinguish between successful and unsuccessful CBHOs. A recommendation for future research, discussed in the next section, addresses the potential to use financial data to categorize and compare CBHOs based on the classification method offered by Tuckman and Chang (1991).

Distributions for extended resource dependence variables proposed within the study to measure CBHO dependence on government sources of revenue violated the normality assumption and revealed homogeneity across the sector. The sector had a high level of dependence on Medicaid, Medicare, and government contracts. Consequently, the assumption that that CBHOs as a nonprofit sector depend on government funding seems to be reasonable. This assumption gives credibility to the need for defining and distinguishing among general, government, and non-government revenue-seeking strategies engaged by CBHOs to promote financial performance and organizational viability—an original intention of this study.

The effort undertaken by this research to extended revenue-seeking strategic variables was not successful. The grouping of extended revenue-seeking variables—REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV—were not reliable. The importance of revenue-seeking lends support for a recommendation described below to more specifically distinguish among types of CBHO revenue-seeking activity.

Next, a significant relationship emerged between resource heterogeneity (REDE-HETER) and an overall revenue-seeking strategy (OVERALL_REVSEEK), and institutional pressure (INPRESS) and an overall revenue-seeking strategy (OVERALL_REVSEEK). These relationships showed the connections that existed in the CBHO sector among the resource and institutional environment. These findings also highlighted the value of an organizational revenue-seeking strategy, and suggested that nonprofit organizations able to build and sustain relationships with institutional and resource stakeholders may have knowledge of funding opportunities, and possess a unique capacity to successfully shape services to align with the values and expectations of the institutional environment. Adapting services to meet the

specifications of funders can be instrumental to securing resources from these funders (Alexander, 2000; Gronbjerg, 1991; Lamothe & Lamothe, 2009).

The relationship between institutional pressure (INPRESS) and organizational use of a legitimation strategy (LEGIT) suggested a strong connection between the institutional environment and legitimating strategies activated by nonprofit CBHOs to enhance prominence within a sector with strong institutionalized values and practices. As mentioned above and below, organizations that engaged with their institutional environment through revenue-seeking and legitimating strategies, appeared to understand and connect with the influencing environment and generated more positive financial outcomes, as indicated in DEBT and CONCEN multiple linear regression models.

Organizations with the strong performance (as measured by DEBT) had diversified revenues and less dependence on particular funders (REDE-HETER). Furthermore, revenue heterogeneity (REDE-HETER), a revenue-seeking strategy (OVERALL_REVSEEK), and a legitimation strategy (LEGIT), explained 13% of variance in financial performance, as measured by organizational debt ratio (DEBT). The DEBT model (Phase 2-Model 1) exemplified how these variables linearly related to organizational debt ratio. Institutional pressure was *not* significant in DEBT, CONCEN, or ADMIN models. This was surprising, especially given significant correlational relationships between INPRESS and OVERALL_REVSEEK and LEGIT. A possible interpretation of this finding was that perhaps institutional pressure indirectly affected financial performance through its relationship to OVERALL_REVSEEK and LEGIT strategies.

Overall revenue-seeking (OVERALL_REVSEEK) was the only factor that contributed to variance in revenue heterogeneity of CBHOs, as reflected in the CONCEN model. The

relationship of OVERALL_REVSEEK to CONCEN was negative. The direction of this relationship indicated that as OVERALL_REVSEEK decreased, CONCEN increased; and as OVERALL_REVSEEK increased, CONCEN decreased. Greater use of revenue-seeking strategies significantly correlated with revenue heterogeneity (diversification); lower use of revenue-seeking strategies significantly associated with revenue homogeneity (concentration). These findings aligned with resource dependence theory, which asserts that the most sustainable organizations are those best equipped to establish and maintain consistent exchanges with the supporting environment, and build organizational power and legitimacy over time (Bielefeld, 1992a).

The ADMIN model of financial performance was not significant. This finding revealed the need for future assessment of whether or not administrative expense is a meaningful indicator of nonprofit CBHO financial performance, as suggested by Tuckman and Chang (1991). While this study used Tuckman and Chang's (1991) measures of financial performance (i.e., DEBT, MARGIN, CONCEN, and ADMIN), the research did not replicate the classification methodology used by Tuckman and Chang to categorize the financial vulnerability of organizations. The decision to *not* follow the categorization methodology was intentional because of uncertainty about the validity of DEBT, MARGIN, CONCEN, and ADMIN measures when applied to a homogenous nonprofit population, such as the population of CBHOs.

As described earlier, MARGIN skewed significantly to the right and violated the assumption of normality. ADMIN satisfied assumptions, but yielded no significant relationships with correlational or explanatory variables. This produced some question about the ADMIN measure's appropriateness as applied to CBHOs. A notable and influencing factor to Tuckman and Chang's (1991) seminal work was that their research examined a heterogeneous nonprofit

population, and ADMIN was a distinguishing financial variable across a broad range of nonprofits. Because entities that pay CBHOs for services, such as local, state, and federal government systems, often *dictate* or *restrict* administrative expense in nonprofit behavioral healthcare organizations, there exists reason to explore further whether ADMIN truly distinguishes financial performance among CBHOs. Early evidence from this study indicated that ADMIN may not serve as a valid indicator of financial performance.

Recommendations for Future Investigation

A significant contribution of this research was the extent to which the study successfully adapted Bielefeld's (1992a, 1992b, 1994) measures of resource dependence (i.e., Gibbs-Martin Revenue Heterogeneity Index), institutional pressure (i.e., Institutional Vulnerability Index), and strategic choice (i.e., strategic tactics list) to a homogenous population of nonprofit CBHOs. Any future effort that applies these measures will enhance their credibility. Even though extended variables of resource dependence, measured through the Medicaid-Medicare Concentration Indicator (MMCI) and Government Contract Concentration Indicator (GCCCI) did not produce normally distributed data appropriate for the proposed models, these distributions revealed a high level of CBHO dependence on Medicaid, Medicare, and Government Contracts. This will be helpful to future studies on CBHOs. Future studies can assume large-sized CBHOs are highly dependent on government funding.

The Institutional Vulnerability Index (Bielefeld, 1992a) was successful adapted to reflect institutional stakeholders with the greatest level influence on nonprofit CBHOs (See Appendix E). Consensus procedures suggested by Lawshe, as cited in Cohen et al. (1988), established content validity. Reliability estimates were not required because the IVI is an index of institutional vulnerability and not a scale (see Appendix E). The validity of the IVI, as applied to

CBHOs, can be strengthened through future research that replicates processes from this study, to include Content Validity Ratios (CVRs) as proposed by Lawshe, as cited in Cohen et al. (1988). The field testing response rate was insufficient to calculate CVRs for this research and therefore used an alternative consensus method. Obtaining CVRs for CBHO stakeholder groups (in a separate effort) would lend additional quantitative support for the adapted IVI.

Strategic tactics—OVERALL_REVSEEK, LEGIT, and RETRENCH—adapted from Bielefeld (1992b), were deemed acceptable for the study. Legitimation *KR20* estimates approached acceptability, with $r = .77, p < .05$ in the pilot study, and $r = .66, p < .05$ in the full survey. Other tactics—OVERALL_REVSEEK and RETRENCH—produced acceptable estimates. Additional use of strategic tactics lists for CBHOs will lend additional data regarding the reliability of the adapted OVERALL_REVSEEK, LEGIT, and RETRENCH measures.

Extended revenue-seeking tactics (i.e., REVSEEKGEN, REVSEEKGOV, and REVSEEKNONGOV) were also explored in the research; yet, did not produce sufficient *KR20* reliability estimates. Additional research on these tactics lists could offer valuable information regarding CBHO sustainability. CBHOs had strong dependencies on government sources of revenue, and revenue-seeking strategies were significant in DEBT and CONCEN models.

Greater scrutiny of different *types* of revenue-seeking activity would extend the work of this research and provide usable data to CBHO organizations competing in an increasingly complex and uncertain environment. The REVSEEKGEN tactic list was comprised of four items; REVSEEKGOV included five items; and REVSEEKNONGOV also included five items. Additional attention to developing more robust and substantive, valid, and reliable revenue-seeking strategic tactic measures would benefit nonprofit scholarship as well as guide strategic activities of nonprofit CBHOs.

Finally, the research meaningfully contributed to the body of work on nonprofit effectiveness through its attempt to apply financial measurement as a proxy for organizational effectiveness. Using Tuckman and Chang (1991) measures of debt ratio (DEBT), operating margin (MARGIN), revenue concentration (CONCEN), and administrative expense (ADMIN), the study generated results that suggested DEBT and CONCEN as appropriate financial measures to distinguish financial performance of CBHOs. Administrative expense was questionable and requires additional exploration.

Future research on viability of nonprofit CBHOs could engage Tuckman and Chang's (1991) classification system using DEBT and CONCEN, and perhaps organizational size as the third classifying indicator. Organizational size was cited as an indicator of financial performance in nonprofit studies (e.g., Besel, & Andreescu, 2003; Bielefeld, 1994; Greenlee, et al., 2002; Trussel, 2002); but, was not used in this research because of the intent of the study to remain consistent with measures used by Tuckman and Chang (1991). Thus, future studies could engage the classification system used previously by Tuckman and Chang (1991), but use DEBT, CONCEN, and organizational size to appropriately classify CBHOs. With this approach, organizations would be classified as *significantly financially vulnerable*, *financially vulnerable*, and *non-vulnerable* and then compared on degree of perceived institutional pressure, resource dependence, and strategic choices. This type of study would examine the same variables (as in the current study) but examine differences across the three classifications.

Conclusion

The research offered significant contribution to the body of research on resource dependence, institutional pressure, strategic choice, and financial performance of nonprofit organizations. The study successfully adapted measures originally proposed by Bielefeld

(1992a, 1992b, 1994), resurrecting the Gibbs-Martin revenue heterogeneity index, Institutional Vulnerability Index, and strategic tactics list through an effort to adapt these measures to a homogenous population of large-sized nonprofit community behavioral healthcare organizations (CBHOs).

The study included exploration of the effects of government dependence with greater specificity than prior categorical representations of dependence; however, expanded resource dependence measures—Government Contract Concentration and Medicaid-Medicare Concentration Indicator—did not yield normal distributions. Although not usable in the proposed models, data from these indicators revealed strong dependence on government revenue by CBHOs.

The study also attempted to expand on the revenue-seeking strategic list by more specifically distinguishing between types of revenue-seeking activity. Three revenue-seeking categories were proposed, based on Bielefeld (1992b, 1994)—general, government, and non-government—but did not produce acceptable *KR20* estimates. Additional work on these measures may hold the potential to successfully distinguish among different revenue strategies. Given the increased complexity of the CBHOs funding environment, additional exploration on strategic tactics would likely benefit CBHO planning and decision-making.

Regarding the four organizing research questions, modified slightly after the proposed expanded resource dependence and strategic tactics variables did not materialize, the following results were observed. There was no significant relationship between institutional pressure and resource dependence (Q1). There was a significant relationship between resource dependence (revenue heterogeneity) and an overall revenue-seeking strategy, but not between resource dependence and legitimation or retrenchment strategies (Q3). Institutional pressure positively

correlated with an overall revenue-seeking strategy and a legitimation strategy; institutional pressure was not associated with a retrenchment strategy (Q4). Finally, resource dependence, an overall revenue-seeking strategy, and a legitimation strategy were significant explanatory variables in the model of financial performance, as measured by debt ratio; an overall revenue-seeking strategy was significant in the model of financial performance, as measured by revenue concentration (Q4).

REFERENCES

- Alexander, J. (2000). Adaptive strategies of nonprofit human service organizations in an era of devolution and new public management. *Nonprofit Management and Leadership, 10*(3), 287-303. Retrieved from Business Source Complete database.
- Aldrich, H. E. (1979). *Organizations and environments*. Englewood, NJ: Prentice-Hall.
- Alford, R. R., & Friedland, R. (1985). *Powers of theory: capitalism, the state, and democracy*. Cambridge, MA: Cambridge University Press.
- Arbnor, I., & Bjerke, B. (1997). *Methodology for creating business knowledge* (2nd ed.). Thousand Oaks, CA: Sage.
- Ashworth, R., Boyne, G., & Delbridge, R. (2007). Escape from the iron cage? Organizational change and isomorphic pressures in the public sector. *Journal of Public Administration Research & Theory, 19*(1), 165-187. doi:10.1093/jopart/mum038
- Bacharach, S. B., & Lawler, E. J. (1981). Power and tactics in bargaining. *Industrial and Labor Relations Review, 34*(2), 219-233. Retrieved from Business Source Complete database.
- Balser, D., & McClusky, J. (2005). Managing stakeholder relationships and nonprofit organizational effectiveness. *Nonprofit Management and Leadership, 15*(3), 295-315. Retrieved from Business Source Complete database.
- Barman, E. A. (2002). Asserting difference: The strategic response of nonprofit organizations to competition. *Social Forces, 80*(4), 1191-1222. Retrieved from Business Source Complete database.
- Barnard, C. I. (1938). *The functions of the executive*. Cambridge, MA: Harvard University Press.
- Bartlett, J. E., II, Kotrlik, J. W., & Higgins, C. C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal, 19*(1), 43-50. Retrieved from ABI/INFORM Global database.
- Baum, J. A., & Oliver, C. (1991). Institutional linkages and organizational mortality. *Administrative Science Quarterly, 36*(2), 187-219. Retrieved from Business Source Complete database.
- Begun, J. W., & Kaissi, A. A. (2004). Uncertainty in health care environments: Myth or reality? *Health Care Management Review, 29*(1), 31-39. Retrieved from Journals@OvidNursing

Full Text Collection Plus database.

- Berger, P. L., & Luckmann, T. (1967). *The social construction of reality*. New York, NY: Doubleday.
- Besel, K. W. (2000). *Factors that impact the survival of nonprofit organizations: The case of the original Indiana youth service bureaus* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3000475)
- Besel, K., & Andreescu, V. (2003). The role of county-based funders in sustaining nonprofits within rural and urbanized counties. *Nonprofit Management & Leadership*, 13(3), 253-266. Retrieved from Business Source Complete database.
- Bielefeld, W. (1992a). Nonprofit funding environment relations: Theory and application. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 3(1), 48-70. Retrieved from ABI/INFORM Global database.
- Bielefeld, W. (1992b). Funding uncertainty and nonprofit strategies in the 1980s. *Nonprofit Management and Leadership*, 2(4), 381-401. Retrieved from Business Source Complete database.
- Bielefeld, W. (1994). What affects nonprofit survival? *Nonprofit Management and Leadership*, 5(1), 19-36. Retrieved from Business Source Complete database.
- Bigelow, B., & Stone, M. M. (1995). Why don't they do what we want? An exploration of organizational responses to institutional pressures in community health centers. *Public Administration Review*, 55(2), 183-192. Retrieved from Business Source Complete database.
- Bolman, L. G., & Deal, T. E. (1991). *Reframing organizations*. San Francisco, CA: Jossey-Bass.
- Bridgespan Group. (2009). *A year of managing through tough times: November 2009 survey update of nonprofit leaders*. Retrieved from <http://www.bridgespan.org/managing-in-tough-times-survey-update-november-2009.aspx?resource=Articles>
- Broom, L., & Selznick, P. (1955). *Sociology* (2nd ed.). Evanston, IL: Row, Peterson.
- Brown, W. A. (2005). Exploring the association between board and organizational performance in nonprofit organizations. *Nonprofit Management and Leadership*, 15(3), 317-339. Retrieved from Business Source Complete database.
- Burton, R. M., Lauridsen, J., & Obel, B. (2002). Return on assets loss from situational and contingency misfits. *Management Science*, 48(11), 1461-1485. Retrieved from Business Source Complete database.

- Callen, J. L., Klein, A., & Tinkelman, D. (2003). Board composition, committees, and organizational efficiency: The case of nonprofits. *Nonprofit and Voluntary Sector Quarterly*, 32(4), 493-520. doi:10.1177/0899764003257462
- Chait, R., Holland, T., & Taylor, B. (1991). *The effective board of trustees*. New York, NY: MacMillan.
- Chambré, S. M., & Fatt, N. (2002). Beyond liability of newness: Nonprofit organizations in an emerging policy domain. *Nonprofit and Voluntary Sector Quarterly*, 31(4), 502-524. doi:10.1177/0899764002238098
- Chandler, A. D. (1962). *Strategy and structure: Chapters in the history of the American industrial enterprise*. Cambridge, MA: M.I.T. Press.
- Chang, C. F., & Tuckman, H. P. (1994). Revenue diversification among nonprofits. *Voluntas*, 5(3), 273-290. Retrieved from ABI/INFORM Global database.
- Child, J. (1972). Organizational structure, environment, and performance: The role of strategic choice. *Sociology*, 6(1), 1-22. doi:10.1177/003803857200600101
- Cohen, R. J., Montague, P., Nathanson, L. S., & Swerdlik, M. E. (1988). *Psychological testing: An introduction to tests and measurement*. Mountainview, CA: Mayfield.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Crittenden, W. F. (2000). Spinning straw into gold: The tenuous strategy, funding, and financial performance linkage. *Nonprofit and Voluntary Sector Quarterly*, 29(1), 164-182. doi:10.1177/089976400773746383
- Dacin, M. T. (1997). Isomorphism in context: The power and prescription of institutional norms. *Academy of Management Journal*, 40(1), 46-81. doi:10.2307/257020
- Deephouse, D. L., & Suchman, M. C. (2008). Legitimacy in organizational institutionalism. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The Sage Handbook of Organizational Institutionalism* (pp. 49-77). Thousand Oaks, CA: Sage.
- DiMaggio, P. J. (1988). Interest and agency in institutional theory. In L. G. Zucker (Ed.), *Institutional Patterns and Organizations: Culture and Environments* (pp. 3-21). Cambridge, MA: Ballinger.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147-160. Retrieved from SocINDEX with Full Text database.

- Donaldson, L. (2001). *The contingency theory of organizations*. Thousand Oaks, CA: Sage.
- Duncan, C. (1997). *Basic statistics for social research*. New York, NY: Routledge.
- Durkin, E. M., Deutsch, A., & Heinemann, A. W. (2010). Inpatient rehabilitation facilities: Variation in organizational practice in response to prospective payment. *Medical Care Research and Review*, 67(2), 149-172. doi:10.1177/1077558709341064
- Edwards, B., Mooney, L., & Heald, C. (2001). Who is being served? The impact of student volunteering on local community organizations. *Nonprofit and Voluntary Sector Quarterly*, 30(3), 444-461. doi:10.1177/0899764001303004
- Essock, S. M., & Goldman, H. H. (1995). States' embrace of managed mental health care. *Health Affairs*, 14(3), 34-44. Retrieved from Highwire Press database.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlations and regression analyses. *Behavior Research Methods*, 41(4), 1149-1160. doi:10.3758/BRM.41.4.1149
- Fennell, M. L., & Alexander, J. A. (1987). Organizational boundary spanning in institutionalized environments. *Academy of Management Journal*, 30(3), 456-476. doi:10.2307/256009
- Fischer, R. L., Wilsker, A. L., & Young, D. R. (2007). *Exploring the revenue mix of nonprofit organizations - does it relate to publicness?* (Working Paper 07-32). Georgia State University, Andrew Young School of Policy Studies, Department of Public Administration and Urban Studies Program. Retrieved from <http://ayps.gsu.edu/publications/2007/index.htm>
- Foley, D. J., Manderscheid, R. W., Atay, J. E., Maedke, J., Sussman, J., & Cribbs, S. (2006). Highlights of organized mental health services in 2002 and major national and state trends. In R. W. Manderscheid & J. T. Berry (Eds.), *Mental Health, United States 2004*, (pp. 200-236). Rockville, MD: Substance Abuse and Mental Health Administration. Retrieved from SAMHSA website: <http://mentalhealth.samhsa.gov/publications/allpubs/SMA06-4195/default.asp>.
- Foster, W., & Bradach, J. (2005). Should nonprofits seek profits? *Harvard Business Review*, 83(2), 92-100. Retrieved from Business Source Complete database.
- Foster, W., & Fine, G. (2007). How nonprofits get really big. *Stanford Social Innovation Review*, 5(2), 46-55. Retrieved from SocINDEX with Full Text database.
- Frank, R. G., & Goldman, H. H. (1989). Financing the care of the severely mentally ill: Incentives, contracts, and public responsibility. *Journal of Social Issues*, 45(3), 131-144. Retrieved from SocINDEX with Full Text database.

- Froelich, K. A. (1999). Diversification of revenue strategies: Evolving resource dependence in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, 28(3), 246-268. doi:10.1177/0899764099283002
- Froelich, K. A., Knoepfle, T. W., & Pollak, T. H. (2000). Financial measures in nonprofit organization research: Comparing IRS 990 return and audited financial statement data. *Nonprofit and Voluntary Sector Quarterly*, 29(2), 232-254. doi:10.1177/08997640002292002
- Frumkin, P., & Andre-Clark, A. (2000). When missions, markets, and politics collide: Values and strategy in the nonprofit human services. *Nonprofit and Voluntary Sector Quarterly*, 29(1), 141-163. doi:10.1177/089976400773746373
- Frumkin, P., & Galaskiewicz, J. (2004). Institutional isomorphism and public sector organizations. *Journal of Public Administration Research and Theory*, 14(3), 283-307. doi:10.1093/jopart/muh028
- Frumkin, P., & Kim, M. T. (2002). *The effect of government funding on nonprofit administrative efficiency* (Working Paper OPS-10-02). Ash Institute for Democratic Governance and Innovation, Kennedy School of Government. Retrieved from www.innovations.harvard.edu/cache/documents/26/2600.pdf
- Friedland, R., & Alford, R. (1991). Bringing society back in: Symbols, practices, and Institutional contradictions. In W. W. Powell and P. J. DiMaggio (Eds.), *Organizational Analysis* (pp. 232-263). Chicago, IL: University of Chicago Press.
- Galaskiewicz, J., & Bielefeld, W. (1998). *Nonprofit organizations in an age of uncertainty*. New York, NY: Aldine De Gruyter.
- Galaskiewicz, J., Bielefeld, W., & Dowell, M. (2006). Networks and organizational growth: A study of community based nonprofits. *Administrative Science Quarterly*, 51(3), 337-380. Retrieved from Business Source Complete database.
- Galaskiewicz, J., & Wasserman, S. (1989). Mimetic processes within an interorganizational field: An empirical test. *Administrative Science Quarterly*, 34(3), 454-479. Retrieved from Business Source Complete database.
- Galbraith, J. R. (1973). *Designing complex organizations*. Reading, MA: Addison-Wesley.
- Garrow, E. E. (2008). *Receipt of, reliance on, and growth of government revenue among nonprofit human service organizations: What organizational factors determine the distribution of government funds* (Doctoral dissertation). Available from ProQuest Dissertation and Theses database. (UMI No. 3351590)
- Garrow, E., & Hasenfeld, Y. (2010). Theoretical approaches to human service organizations. In

- Y. Hasenfeld (Ed.), *Human Services as Complex Organizations* (2nd ed., pp. 33-57). Thousand Oaks, CA: Sage.
- Ginsberg, A., & Venkatraman, N. (1985). Contingency perspectives of organizational strategy: A Critical review of the empirical research. *Academy of Management Review*, *10*(3), 421-434. doi:10.5465/AMR.1985.4278950
- Glisson, C., & James, C. (2002). The cross-level effects of culture and climate in human service teams. *Journal of Organizational Behavior*, *23*(6), 767-794. doi:10.1002/job.162
- Golensky, M., & DeRuiter, G. L. (2002). The urge to merge: A multiple case study. *Nonprofit Management and Leadership*, *13*(2), 169-186. Retrieved from Business Source Complete database.
- Golensky, M., & Mulder, C. A. (2006). Coping in a constrained economy: Survival strategies of nonprofit human service organizations. *Administration in Social Work*, *30*(3), 5-24. doi:10.1300/J147v30n0302
- Greenlee, J. S., & Trussel, J. M. (2000). Predicting the financial vulnerability of charitable organizations. *Nonprofit Management and Leadership*, *11*(2), 199-210. Retrieved from Business Source Complete database.
- Greenwood, R., & Suddaby, R. (2006). Institutional entrepreneurship in mature fields: The big five accounting firms. *Academy of Management Journal*, *49*(1), 27-48. doi:10.5465/AMJ.2006.20785498
- Greenwood, R., Suddaby, R., & Hinings, C. R. (2002). Theorizing change: The role of Professional associations in the transformation of institutional fields. *Academy of Management Journal*, *45*(1), 58-80. doi:10.2307/3069285
- Gronbjerg, K. A. (1991). How nonprofit human service organizations manage their funding sources: Key findings and policy implications. *Nonprofit Management and Leadership*, *2*(2), 19-175. Retrieved from Business Source Complete database.
- GuideStar (n.d.). GuideStar database. Retrieved from <http://www.guidestar.org/rxg/analyze-nonprofit-data/index.aspx>
- Guo, C., & Acar, M. (2005). Understanding collaboration among nonprofit organizations: Combining resource dependency, institutional, and network perspectives. *Nonprofit and Voluntary Sector Quarterly*, *34*(3), 340-361. doi:10.1177/0899764005275411
- Hager, M. A. (2001). Financial vulnerability among arts organizations: A test of the Tuckman-Chang measures. *Nonprofit and Voluntary Sector Quarterly*, *30*(2), 376-392. doi:10.1177/0899764001302010

- Hager, M. A., Galaskiewicz, J., & Larson, J. A. (2004). Structural embeddedness and the liability of newness among nonprofit organizations. *Public Management Review*, 6(2), 159-188. doi:10.1080/1471903042000189083
- Hager, M. A., Wilson, S., Pollak, T. H., & Rooney, P. M. (2003). Response rates for mail surveys of nonprofit organizations: A review and empirical test. *Nonprofit and Voluntary Sector Quarterly*, 32(2), 252-267. doi:10.1177/0899764003032002005
- Hairston, C. F. (1985). Using ratio analysis for financial accountability. *Social Casework*, 66(2), 76-82. Retrieved from SocINDEX with Full Text database.
- Hall, M. D. (1982). Financial condition: A measure of human service organization performance. *New England Journal of Human Services*, 2(1), 25-34.
- Hansmann, H. (1987). Economic theories of nonprofit organization. In W. W. Powell (Ed.), *The nonprofit sector: A research handbook* (pp. 27-42). New Haven, CT: Yale.
- Hansmann, H. (1989). The two nonprofit sectors: fee for services versus donative organizations. In V. Hodgkinson & R. Lyman (Eds.), *The Future of the Nonprofit Sector* (pp. 91-102). San Francisco: Jossey Bass.
- Hasenfeld, Y. (2000). Social welfare administration and organizational theory. In R. Patti (Ed.), *The handbook of Social Welfare Management* (pp. 89-112). Thousand Oaks, CA: Sage.
- Heimovics, R. D., Herman, R. D., Jurkiewicz, C. J. (1993). Executive leadership and resource dependence in nonprofit organizations: A frame analysis. *Public Administration Review*, 53(5), 419-427. Retrieved from Business Source Complete database.
- Herman, R. D., & Renz, D. O. (1999). Theses on nonprofit organizational effectiveness. *Nonprofit and Voluntary Sector Quarterly*, 28(2), 107-126. doi:10.1177/0899764099282001
- Herman, R. D., & Renz, D. O. (2004). Doing things right: Effectiveness in local nonprofit organizations, a panel study. *Public Administration Review*, 64(6), 694-704. doi:10.1111/j.1540-6210.2004.00416.x
- Hertzog, M. A. (2008). Considerations in determining sample size for pilot studies. *Research in Nursing and Health*, 31, 180-191. Retrieved from CINAHL database.
- Hitt, M. A., & Tyler, B. B. (1991). Strategic decision models: Integrating different perspectives. *Strategic Management Journal*, 12(5), 327-351. Retrieved from Business Source Complete database.
- Hodge, M. M. (2006). *Nonprofit board effectiveness, funding source, and financial vulnerability*

- (Doctoral dissertation). Available from ProQuest Dissertation and Theses database. (UMI No. 3210358)
- Hodge, M. M., & Piccolo, R. F. (2005). Funding source, board involvement techniques, and financial vulnerability in nonprofit organizations: A test of resource dependence. *Nonprofit Management and Leadership, 16*(2), 171-190. Retrieved from Business Source Complete database.
- Holland, T. P., Konick, A., Buffum, W., Smith, M. K., & Petchers, M. (1981). Institutional structure and resident outcomes. *Journal of Health and Social Behavior, 22*, 433-444. Retrieved from SocINDEX with Full Text database.
- Hyde, P. S. (2011, May). *Changes we're facing. Changes we're making*. Paper presented at the National Council of Community Behavioral Healthcare Organizations 41st Mental Health and Addictions Conference, San Diego, CA. Retrieved from <http://store.samhsa.gov/shin/content//SMA11-PHYDE050211/SMA11-PHYDE050211.pdf>
- Isaac, S., & Michael, W. B. (1995). *Handbook in research and evaluation*. San Diego, CA: Educational and Industrial Testing Services.
- Jackall, R. (1988). *Moral mazes: The world of corporate managers*. New York, NY: Oxford University Press.
- Johanson, G. A., & Brooks, G. P. (2010). Initial scale development: Sample size for pilot studies. *Educational and Psychological Measurement, 70*(3), 394-400. doi:10.1177/0013164409355692
- Johnson, D., Dowd, T. J., & Ridgeway, C. L. (2006). Legitimacy as a social process. *Annual Review of Sociology, 32*(1), 53-78. Retrieved from Academic Search Premier database.
- Jones, J. M. (2006). Understanding environmental influence on human service organizations: A study of the influence of managed care in child caring institutions. *Administration in Social Work, 30*(4), 63-90. doi:10.1300/J147v30n04-05
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd ed). New York, NY: Wiley.
- Keating, E. K., Fischer, M., Gordon, T. P., & Greenlee, J. (2005). *Assessing financial vulnerability in the nonprofit sector* (The Hauser Center for Nonprofit Organizations Paper No. 27). Retrieved from the Social Science Research Network website: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=647662
- Keating, E. K., & Frumkin, P. (2003). Reengineering nonprofit financial accountability: Toward a more reliable foundation for regulation. *Public Administration Review, 63*(1), 3-15. Retrieved from Business Source Complete database,

- Krejcie, R. V., Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607-610. Retrieved from Sage Premier 2011 database.
- Kraatz, M. S., & Zajac, E. J. (1996). Exploring the limits of the new institutionalism: The causes and consequences of illegitimate organizational change. *American Sociological Review, 61*(5), 812-836. Retrieved from SocINDEX with Full Text database.
- Lamothe, M., & Lamothe, S. (2009). Beyond the search for competition in social service contracting: Procurement, consolidation, and accountability. *The American Review of Public Administration, 39* (2), 164-188. doi:10.1177/0275074008316557
- Lawrence, T. B. (1999). Institutional strategy. *Journal of Management, 25*(2), 161-188. Retrieved from Business Source Complete database.
- Lawrence, P. R., & Lorsch, J. W. (1967). *Organization and Environment*. Homewood, IL: Irwin.
- Legree, A. (2008). *Government funding and its impact on nonprofit organizations* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3307910)
- Lenaghan, R. F. (2006). *A model of cash flow components and resource dependency as determinants of short-run financial vulnerability in nonprofit organizations* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3205986)
- Lutterman, T., & Gonzalez, O. (2004). The uniform reporting system. In United States Department of Health and Human Services, Substance Abuse and Mental Health Administration, Center for Mental Health Services, *Mental Health, United States 2004* (pp. 65-86). Retrieved from <http://store.samhsa.gov/product/Mental-Health-United-States-2004/SMA06-4195>
- Mark, T. L., Levit, K. R., Vandivort-Warren, R., Buck, J. A., & Coffey, R. M. (2011). Changes in U.S. spending on mental health and substance abuse treatment, 1985-2005, and implications for policy. *Health Affairs, 30*(2), 284-292. doi:10.1377/hlthaff.2010.0765
- Mechanic, D., & Rochefort, D. A. (1992). A policy of inclusion for the mentally ill. *Health Affairs 11*(1), 128-150. Retrieved from <http://content.healthaffairs.org/cgi/reprint/11/1/128>
- Meyer, J. W. (2008). Reflections on institutional theories of organizations. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The Sage Handbook of Organizational Institutionalism* (pp. 790-812). Thousand Oaks, CA: Sage.

- Meyer, J. W., & Rowan, B. (1977). Institutional organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340-363. Retrieved from SocINDEX.
- Meyer, J. W., & Scott, W. R. (2003). *Organizational environments*. Beverly Hills, CA: Sage.
- Miles, R. & Snow, C. (1978). *Organizational strategy, structure, and process*. New York, NY: McGraw-Hill.
- Miller-Millesen, J. L. (2003). Understanding the behavior of nonprofit Boards of Directors: A theory based approach. *Nonprofit and Voluntary Sector*, 32, 521-547. doi:10.1177/0899764003257463
- Mizruchi, M. S., & Fein, L. C. (1999). The social construction of organizational knowledge: A study of the uses of coercive, mimetic, and normative isomorphism. *Administrative Science Quarterly*, 44(4), 653-683. Retrieved from Business Source Complete database.
- Moizer, J., & Tracey, P. (2010). Strategy making in social enterprise: The role of resource allocation and its effects on organizational sustainability. *Systems Research and Behavioral Science*, 27, -252-266. doi:10.1002/sres.1006
- Moore, L. (2001). Legitimation issues in the state-nonprofit relationship. *Nonprofit and Voluntary Sector Quarterly*, 30(4), 707-719. doi:10.1177/0899764001304005
- National Governor's Association, & National Association of State Budget Officers (2011). *Fiscal Survey of the States*. Retrieved from the National Governor's Association website: <http://www.nga.org/files/live/sites/NGA/files/pdf/FSS1111.PDF>
- National Institute of Mental Health (1999). *Mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health. Retrieved from <http://profiles.nlm.nih.gov/ps/retrieve/resourceMetadata/NNBBHS>
- Norušis, M. J. (2008). *SPSS statistical procedures companion*. Upper Saddle River, NJ: Prentice Hall.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16(1), 145-179. doi:10.5465/AMR.1991.4279002
- Oliver, C. (1997). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal*, 18(9), 697-713. Retrieved from Business Source Complete database.

- Olson, D. E. (2000). Agency theory in the not-for-profit sector: Its role at independent colleges. *Nonprofit & Voluntary Sector Quarterly*, 29(2), 280-296. doi:10.1177/0899764000292004
- Oss, M. E., & Hale, C. J. (2009). Looming state budget cuts create new challenges: Provider organizations need anticipatory management strategies and fresh tactics. *Open Minds, The Behavioral Health and Social Service Analyst*, 20(8), 6-7. Retrieved from <http://www.openminds.com/market-intelligence/premium/2009/110109/110109f.htm>
- Parsons, T. (1960). *Structure and process in modern societies*. Glencoe, IL: Free Press.
- Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Stanford, CA: Stanford University Press.
- Pins, S. (2011). *A study of the correlation between nonprofit board member financial contributions and organizational financial sustainability* (Doctoral dissertation). Available from ProQuest Dissertations and & Theses database. (UMI No. 3473397)
- Powell, W. W., & DiMaggio, P. J. (1991). *The new institutionalism in organizational analysis*. Chicago, IL: University of Chicago Press.
- Provan, K. G. (1980). Board power and organizational effectiveness among human service agencies. *Academy of Management Journal*, 23(2), 221-236. doi:10.2307/255428
- Quinn, R., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management Science*, 29(3), 33-51. Retrieved from Business Source Complete database.
- Quinn, K., & Kitchner, M. (2007). Medicaid's role in the many markets for health care. *Health Care Financing Review*, 28(4), 69-82. Retrieved from Business Source Complete database.
- Ray, S. (2004). Environment-strategy performance linkages: A study of Indian firms during economic liberalization. *Vikalpa*, 29(2), 9-23.
- Rhodes, M. L., & Keogan, J. F. (2005). Strategic choice in the nonprofit sector: Modelling dimensions of strategy. *Irish Journal of Management*, 26(1), 122-135. Retrieved from Business Source Complete database.
- Ritchie, W. J., & Eastwood, K. (2006). Executive functional experience and its relationship to the financial performance of nonprofit organizations. *Nonprofit Management and Leadership*, 17(1), 67-82. Retrieved from Business Source Complete database.

- Ritchie, W. J., & Kolodinsky, R. W. (2003). Nonprofit financial performance measurement: An evaluation of new and existing performance measures. *Nonprofit Management and Leadership*, 13(4), 367-381. Retrieved from Business Source Complete database.
- Ritchie, W. J., Kolodinsky, R. W., & Eastwood, K. (2007). Does executive intuition matter?: An empirical analysis of the relationship with nonprofit organization financial performance. *Nonprofit & Voluntary Sector Quarterly*, 36(1), 140-155. doi:10.1177/0899764006293338
- Rodrigues, S., & Child, J. (2003). Co-evolution in an institutionalized environment. *Journal of Management Studies*, 40(8), 2137-2162. doi:10.1046/j.1467-6486.2003.00415.x
- Rojas, R. R. (2000). A review of models for measuring organizational effectiveness among for-profit and nonprofit organizations. *Nonprofit Management and Leadership*, 11(1), 97-104. Retrieved from Business Source Complete database.
- Rowland, D., Garfield, R., Elias, R. (2003). Accomplishments and challenges in Medicaid mental health. *Health Affairs*, 22(5), 73-83. Retrieved from ABI/INFORM Global database.
- Ruef, M., & Scott, W. R., (1998). A multidimensional model of organizational legitimacy: Hospital survival in changing institutional environments. *Administrative Science Quarterly*, 43(4), 877-904. Retrieved from Business Source Complete database.
- Saidel, J. R. (1991). Resource independence: The relationship between state agencies and nonprofit organizations. *Public Administration Review*, 51(6), 543-553. Retrieved from <http://links.jstor.org/sici?sici=0033-3352%28199111%2F12%2951%3A6%3c543%3ARI TRBS%3E2.0.CO%3B2-P>
- Salamon, L. M. (1987). Partners and public service: The scope and theory of public and nonprofit relations. In W. W. Powell (Ed.), *The nonprofit sector: A research handbook* (pp. 99-117). New Haven, CT: Yale University Press.
- Salkind, N. J. (2010). *Encyclopedia of research*. Thousand Oaks, CA: Sage.
- Savas, E. S. (2002). Competition and choice in New York City social services. *Public Administration Review*, 62(1), 82-91. Retrieved from Business Source Complete database.
- Savin, N. E., & White, K. J. (1977). The Durbin-Watson test for serial correlation with extreme sample sizes or many regressors. *Econometrica*, 45(8), 1989-1996. Retrieved from <http://www.jstor.org/discover/10.2307/1914122?uid=3739888&uid=2&uid=4&uid=3739256&sid=21104808426937>

- Scheid, T. L. (2003). Managed care and the rationalization of mental health services. *Journal of Health and Social Behavior*, 44(2), 142-161. Retrieved from SocINDEX with Full Text database.
- Scheid, T. L., & Greenley, J. R. (1997). Evaluations of organizational effectiveness in mental health programs. *Journal of Health and Social Behavior*, 38(4), 403-426. Retrieved from SocINDEX with Full Text database,
- Schmid, H. (1992). Relationship between decentralized authority and other structural properties in human service organizations: Implications for service effectiveness. *Administration in Social Work*, 16(1), 25-39. Retrieved from SocINDEX with Full Text database.
- Schneiberg, M., & Clemens, E. S. (2006). The typical tools for the job: Research strategies in institutional analysis. *Sociological Theory*, 24(3), 195-227. doi:10.1111/j.1467-9558.2006.00288.x
- Sclar, E. D. (2000). *You don't always get what you pay for: The economics of privatization*. Ithica, NY: Cornell University Press.
- Scott, W. R. (1987). The adolescence of institutional theory. *Administrative Science Quarterly*, 32(4), 493-511. Retrieved from Business Source Complete database.
- Scott, W. R. (1995). *Institutions and organizations*. Thousand Oaks, CA: Sage.
- Scott, W. R. (2003). *Organizations and organizing: Rational, natural, and open systems perspectives* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Scott, W. R. (2008). Approaching adulthood: the maturing of institutional theory. *Theory and Society* 37(5), 427-442. doi:10.1007/s11186-008-9067-z
- Selznick, P. (1949). *TVA and the grass roots*. Berkeley, CA: University of California Press.
- Selznick, P. (1957). *Leadership in administration*. Berkeley, CA: University of California Press.
- Selznick, P. (1996). Institutionalism "Old" and "New." *Administrative Science Quarterly*, 41(2), 270-277. Retrieved from Business Source Complete database.
- Siciliano, J. I. (1996). The relationship between board member diversity to organizational performance. *Journal of Business Ethics*, 15(12), 1313-1320. Retrieved from Business Source Complete database.
- Siciliano, J. I. (1997). The relationship between formal planning and performance in nonprofit organizations. *Nonprofit Management and Leadership*, 7(4), 387-403. Retrieved from Business Source Complete database.

- Slocumb, E. M., & Cole, F. L. (1991). A practical approach to content validation. *Applied Nursing Research*, 4(4), 192-195. doi:10.1016/S0897-1897(05)80097-7
- Smith, M. E., & Ganju, V. (2004). The MHSIP mental health quality report: The next generation of performance measures. In the United States Department of Health and Human Services, Substance Abuse and Mental Health Administration, Center for Mental Health Services, *Mental Health, United States 2004* (pp. 57-64). Retrieved from <http://store.samhsa.gov/shin/content/SMA06-4195/SMA06-4195.pdf>
- Smith, S. R., & Lipsky, M. (1993). *Nonprofits for hire: The welfare state in the age of contracting*. Cambridge, MA: Harvard University Press.
- Sowa, J. E. (2009). The collaboration decision in nonprofit organizations: Views from the front line. *Nonprofit and Voluntary Sector Quarterly*, 38(6), 1003-1025. doi:10.1177/0899764008325247
- Stevens, C. E. (2008). *Social entrepreneurship and earned income opportunities: An examination of the importance of institutional factors in predicting entrepreneurial action among nonprofit organizations* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3314713)
- Stone-Romero, E. F. (2009). Implications of research design options for the validity of inferences derived from organizational research. In D. A. Buchanan & A. Bryman (Eds.), *The Sage Handbook of Organizational Research Methods* (pp. 302-327). Thousand Oaks, CA: Sage.
- Stone, M. M., Bigelow, B., Crittenden, W. (1999). Research on strategic management in nonprofit organizations: Synthesis, analysis, and future directions. *Administration and Society*, 31(3), 378-423. Retrieved from ABI/INFORM Global database.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571-610. doi:10.5465/AMR.1995.9508080331
- Swanson, R. A., & Holton, E. F., III (2005). *Research in organizations: Foundations and methods of inquiry*. San Francisco, CA: Berrett-Koehler.
- Taube, C. A., Goldman, H.H., & Salkever, D. (1990). Medicaid coverage for mental illness: Balancing access and costs. *Health Affairs*, 9(1), 5-18. Retrieved from <http://content.healthaffairs.org/cgi/reprint/9/1/5>.
- Thompson, J. D. (1967). *Organizations in action*. New York, NY: McGraw-Hill.
- Thornton, P., & Ocasio, W. (1999). Institutional logics and the historical contingency of power in organizations: Executive succession in the higher education publishing industry, 1958-

1990. *American Journal of Sociology*, 105(3), 801-843. From SocINDEX with Full Text database.
- Thornton, P. H. & Ocasio, W. (2008). Institutional logics. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The Sage Handbook of Organizational Institutionalism* (pp. 99-129). Thousand Oaks, CA: Sage.
- Tinkelman, D., & Donabedian, B. (2007). Street lamps, alleys, ratio analysis, and nonprofit organizations. *Nonprofit Management and Leadership*, 18(1), 5-18. doi:10.1002/nml.168
- Townsend, S. M., & Campbell, R. (2007). Homogeneity in community-based rape prevention programs: Empirical evidence of institutional isomorphism. *Journal of Community Psychology*, 35(3), 376-382. Retrieved from SocINDEX with Full Text database.
- Trochim, W. M. (2006, October 20). The research methods knowledge base (2nd ed.). Retrieved from <http://www.socialresearchmethods.net/bk/>
- Trochim, W. M., & Donnelly, J. P. (2006). *The research methods knowledge base*. Mason, OH: Centage Learning.
- Trussel, J. M. (2002). Revisiting the prediction of financial vulnerability. *Nonprofit Management and Leadership*, 13(1), 17-31. Retrieved from Business Source Complete database.
- Trussel, J., Greenlee, J. S., & Brady, T. (2002). Predicting financial vulnerability in charitable organizations. *CPA Journal*, 72(6), 66-69. Retrieved from ABI/INFORM Global database.
- Tuckman, H. P., & Chang, C. F. (1991). A methodology for measuring the financial vulnerability of charitable nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, 20(4), 445-459. doi:10.1177/089976409102000406
- Twombly, E. C. (2003). What factors affect the entry and exit of nonprofit human service organizations in metropolitan areas? *Nonprofit and Voluntary Sector Quarterly*, 32(2), 211-235. doi:10.1177/0899764003032002003
- United States Department of Health and Human Services (2007). *Administration of Mental Health Services by Medicaid Agencies*. Retrieved from <http://store.samhsa.gov/shin/content//SMA07-4301/SMA07-4301.pdf>
- United States Substance Abuse and Mental Health Administration (n.d.). *CMHS Uniform Reporting System Outcome Tables*. Retrieved from <http://www.samhsa.gov/dataoutcomes/urs/>

- United States Substance Abuse and Mental Health Administration (2010). *2009 CMHS Uniform Reporting System Output Tables*. Retrieved from <http://www.samhsa.gov/dataoutcomes/urs/urs2010.aspx>
- Van Belle, G. (2002). *Statistical rules of thumb*, New York, NY: Wiley.
- Venkatraman, N., & Camillus, J. C. (1984). Exploring the concept of “fit” in strategic management. *Academy of Management Review*, 9(3), 513-525. doi:10.5465/AMR.1984.4279696
- Verdier, J., Barrett, A., Davis, S. (2007). *Administration of Mental Health Services by Medicaid Agencies* (DHHS Pub No. SMA 07-4301). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Walker, E. T., & McCarthy, J. D. (2010). Legitimacy, strategy, and resources in the survival of community-based organizations. *Social Problems*, 57(3), 315-340. doi: 10.1525/sp.2010.57.3.315
- Weber, M. (1968). *Economy and society: An outline of interpretive society*. New York, NY: Bedminister Press.
- Wing, K. T., Pollack, T. H., & Blackwood, A. (2008). *The nonprofit almanac*. Washington, DC: Urban Institute Press.
- Young, D. W. (2005). Strategic decision-making: It’s time for healthcare organizations to get serious. *Healthcare Financial Management*, 59(11), 86-92. Retrieved from ABI/INFORM Global database.
- Yuchtman, E., & Seashore, S. E. (1967). A system approach to organizational effectiveness. *American Sociological Review*, 32(6), 891-903. Retrieved from SocINDEX with Full Text.
- Zimmerman, M. A., & Zeitz, G. J. (2002). Beyond survival: Achieving new venture growth by building legitimacy. *Academy of Management Review*, 27(3), 414-431. doi:10.5465/AMR.2002.7389921
- Zucker, L. G. (1983). Institutional theories of organizations. *Annual Review of Sociology*, 13(1), 443-464. Retrieved from SocINDEX with Full Text database.

APPENDIX A. Statement of Original Work

Academic Honesty Policy

Capella University's Academic Honesty Policy ([3.01.01](#)) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person's ideas or works.

The following standards for original work and definition of *plagiarism* are discussed in the Policy:

Learners are expected to be the sole authors of their work and to acknowledge the authorship of others' work through proper citation and reference. Use of another person's ideas, including another learner's, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)

Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else's ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

Capella University's Research Misconduct Policy ([3.03.06](#)) holds learners accountable for research integrity. What constitutes research misconduct is discussed in the Policy:

Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

Statement of Original Work and Signature

I have read, understood, and abided by Capella University's Academic Honesty Policy ([3.01.01](#)) and Research Misconduct Policy ([3.03.06](#)), including the Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the *APA Publication Manual*.

Learner name
and date

Elizabeth A. Folcarelli

Mentor name
and school

Terry Walker, Ph.D., School of Business and Technology

APPENDIX B. Proposed Hypotheses

First Analytic Phase: Correlational Hypotheses

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H ₀ 1	Among large, nonprofit CBHOs, there is no statistically significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI].	H _A 1	Among large, nonprofit CBHOs, there is a statistically significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI].
H ₀ 2	Among large, nonprofit CBHOs, there is no statistically significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and an overall revenue-seeking strategy [OVERALL_REVSEEK], as measured by an adapted strategic tactic list.	H _A 2	Among large, nonprofit CBHOs, there is a statistically significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and an overall revenue-seeking strategy [OVERALL_REVSEEK], as measured by an adapted strategic tactic list.
H ₀ 3	Among large, nonprofit CBHOs, there is no statistically significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and a general revenue-seeking strategy (REVSEEKGEN), as measured by an adapted strategic tactic list.	H _A 3	Among large, nonprofit CBHOs, there is a statistically significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and a general revenue-seeking strategy (REVSEEKGEN), as measured by an adapted strategic tactic list.

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H ₀ 4	Among large, nonprofit CBHOs, there is no statistically significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and a government revenue-seeking strategy (REVSEEKGOV), as measured by an adapted strategic tactic list.	H _A 4	Among large, nonprofit CBHOs, there is a statistically Significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and a government revenue-seeking strategy (REVSEEKGOV), as measured by an adapted strategic tactic list.
H ₀ 5	Among large, nonprofit CBHOs, there is no statistically significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and a non-government revenue-seeking strategy (REVSEEKNONGOV), as measured by an adapted strategic tactic list.	H _A 5	Among large, nonprofit CBHOs, there is a statistically significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and a non-government revenue-seeking strategy (REVSEEKNONGOV), as measured by an adapted strategic tactic list.
H ₀ 6	Among large, nonprofit CBHOs, there is no statistically significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.	H _A 6	Among large, nonprofit CBHOs, there is a statistically significant relationship between resource dependence as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.
H ₀ 7	Among large, nonprofit CBHOs, there is no statistically significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.	H _A 7	Among large, nonprofit CBHOs, there is a statistically Significant relationship between resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Indicator [MMCI], and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H ₀ 8	Among large, nonprofit CBHOs, there is no statistically significant relationship between institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI], and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.	H _A 8	Among large, nonprofit CBHOs, there is a statistically significant relationship between institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI], and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.
H ₀ 9	Among large, nonprofit CBHOs, there is no statistically significant relationship between institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI], and a general revenue-seeking strategy (REVSEEKGEN), as measured by an adapted strategic tactic list.	H _A 9	Among large, nonprofit CBHOs, there is a statistically significant relationship between institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI], and a general revenue-seeking strategy (REVSEEKGEN), as measured by an adapted strategic tactic list.
H ₀ 10	Among large, nonprofit CBHOs, there is no statistically significant relationship between institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI], and a government revenue-seeking strategy (REVSEEKGOV), as measured by an adapted strategic tactic list.	H _A 10	Among large, nonprofit CBHOs, there is a statistically significant relationship between institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI], a government revenue-seeking strategy (REVSEEKGOV), as measured by an adapted strategic tactic list.
H ₀ 11	Among large, nonprofit CBHOs, there is no statistically significant relationship between institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI], and a non-government revenue-seeking strategy (REVSEEKNONGOV), as measured by an adapted strategic tactic list.	H _A 11	Among large, nonprofit CBHOs, there is a statistically significant relationship between institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI], and a non-government revenue-seeking strategy (REVSEEKNONGOV), as measured by an adapted strategic tactic list.
H ₀ 12	Among large, nonprofit CBHOs, there is no statistically significant relationship between institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI], and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.	H _A 12	Among large, nonprofit CBHOs, there is a statistically significant relationship between institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI], and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H ₀ 13	Among large, nonprofit CBHOs, there is no statistically significant relationship between institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI], and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.	H _A 13	Among large, nonprofit CBHOs, there is a statistically significant relationship between institutional pressure, as measured by an adapted Institutional Vulnerability Index, and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.
H ₀ 14	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Concentration Indicator [MMCI].	H _A 14	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Concentration Indicator [MMCI].
H ₀ 15	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (MARGIN) and resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Concentration Indicator [MMCI].	H _A 15	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (MARGIN) and resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Concentration Indicator [MMCI].
H ₀ 16	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Concentration Indicator [MMCI].	H _A 16	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and resource dependence, as measured by the Gibbs-Martin Heterogeneity Index, Government Concentration Indicator [GCCCI], and Medicaid-Medicare Concentration Indicator [MMCI].
H ₀ 17	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI].	H _A 17	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI].

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H _O 18	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (MARGIN) and institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI].	H _A 18	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (MARGIN) and institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI].
H _O 19	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI].	H _A 19	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (CONCEN) and institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI].
H _O 20	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI].	H _A 20	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and institutional pressure, as measured by an adapted Institutional Vulnerability Index [IVI].
H _O 21	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.	H _A 21	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.
H _O 22	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and a general revenue-seeking strategy (REVSEEKGEN), as measured by an adapted strategic tactic list.	H _A 22	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and a general revenue-seeking strategy (REVSEEKGEN), as measured by an adapted strategic tactic list.

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H _O 23	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and a government revenue-seeking strategy (REVSEEKGOV), as measured by an adapted strategic tactic list.	H _A 23	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and a government revenue-seeking strategy (REVSEEKGOV), as measured by an adapted strategic tactic list.
H _O 24	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and a non-government revenue-seeking strategy (REVSEEKNONGOV), as measured by an adapted strategic tactic list.	H _A 24	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and a non-government revenue-seeking strategy (REVSEEKNONGOV), as measured by an adapted strategic tactic list.
H _O 25	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.	H _A 25	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.
H _O 26	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.	H _A 26	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.
H _O 27	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (MARGIN) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.	H _A 27	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (MARGIN) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.
H _O 28	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (MARGIN) and a general revenue-seeking strategy (REVSEEKGEN), as measured by an adapted strategic tactic list.	H _A 28	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (MARGIN) and a general revenue-seeking strategy (REVSEEKGEN), as measured by an adapted strategic tactic list.

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H _O 29	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (MARGIN) and a government revenue-seeking strategy (REVSEEKGOV), as measured by an adapted strategic tactic list.	H _A 29	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (MARGIN) and a government revenue-seeking strategy (REVSEEKGOV), as measured by an adapted strategic tactic list.
H _O 30	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (MARGIN) and a non-government revenue-seeking strategy (REVSEEKNONGOV), as measured by an adapted strategic tactic list.	H _A 30	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (MARGIN) and a non-government revenue-seeking strategy (REVSEEKNONGOV), as measured by an adapted strategic tactic list.
H _O 31	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (MARGIN) and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.	H _A 31	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (MARGIN) and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.
H _O 32	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (MARGIN) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.	H _A 32	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (MARGIN) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.
H _O 33	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.	H _A 33	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (CONCEN) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.
H _O 34	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and a general revenue-seeking strategy (REVSEEKGEN), as measured by an adapted strategic tactic list.	H _A 34	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (CONCEN) and a general revenue-seeking strategy (REVSEEKGEN), as measured by an adapted strategic tactic list.

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H ₀ 35	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and a government revenue-seeking strategy (REVSEEKGOV), as measured by an adapted strategic tactic list.	H _A 35	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (CONCEN) and a government revenue-seeking strategy (REVSEEKGOV), as measured by an adapted strategic tactic list.
H ₀ 36	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and a non-government revenue-seeking strategy (REVSEEKNONGOV), as measured by an adapted strategic tactic list.	H _A 36	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (CONCEN) and a non-government revenue-seeking strategy (REVSEEKNONGOV), as measured by an adapted strategic tactic list.
H ₀ 37	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.	H _A 37	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (CONCEN) and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.
H ₀ 38	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.	H _A 38	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (CONCEN) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.
H ₀ 39	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.	H _A 39	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.
H ₀ 40	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and a general revenue-seeking strategy (REVSEEKGEN), as measured by an adapted strategic tactic list.	H _A 40	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and a general revenue-seeking strategy (REVSEEKGEN), as measured by an adapted strategic tactic list.

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H ₀ 41	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and a government revenue-seeking strategy (REVSEEKGOV), as measured by an adapted strategic tactic list.	H _A 41	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and a government revenue-seeking strategy (REVSEEKGOV), as measured by an adapted strategic tactic list.
H ₀ 42	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and a non-government revenue-seeking strategy (REVSEEKNONGOV), as measured by an adapted strategic tactic list.	H _A 42	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and a non-government revenue-seeking strategy (REVSEEKNONGOV), as measured by an adapted strategic tactic list.
H ₀ 43	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.	H _A 43	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.
H ₀ 44	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.	H _A 44	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.

Second Analytic Phase: Multiple Linear Regression Analysis Hypotheses

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H ₀ 45	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and resource dependence, institutional pressure, and strategic choice.	H _A 45	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and resource dependence, institutional pressure, and strategic choice.
H ₀ 46	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (MARGIN) and resource dependence, institutional pressure, and strategic choice.	H _A 46	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (MARGIN) and resource dependence, institutional pressure, and strategic choice.
H ₀ 47	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and institutional pressure and strategic choice.	H _A 47	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (CONCEN) and institutional pressure and strategic choice.
H ₀ 48	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and resource dependence, institutional pressure, and strategic choice.	H _A 48	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and resource dependence, institutional pressure, and strategic choice.

APPENDIX C. Final Hypotheses

Phase 1–Model 1: Correlational Hypotheses

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H ₀ 1	Among large, nonprofit CBHOs, there is no statistically significant relationship between resource dependence (REDE-HETER), as measured by an adapted Gibbs-Martin Heterogeneity Index, and institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI].	H _A 1	Among large, nonprofit CBHOs, there is a statistically significant relationship between resource dependence, as measured by an adapted Gibbs-Martin Heterogeneity Index, and institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI].
H ₀ 2	Among large, nonprofit CBHOs, there is no statistically significant relationship between resource dependence (REDE-HETER), as measured by an adapted Gibbs-Martin Heterogeneity Index, and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.	H _A 2	Among large, nonprofit CBHOs, there is a statistically significant relationship between resource dependence (REDE-HETER), as measured by an adapted Gibbs-Martin Heterogeneity Index, and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.
H ₀ 3	Among large, nonprofit CBHOs, there is no statistically significant relationship between resource dependence (REDE-HETER), as measured by the Gibbs-Martin Heterogeneity Index, and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.	H _A 3	Among large, nonprofit CBHOs, there is a statistically significant relationship between resource dependence (REDE-HETER), as measured by the Gibbs-Martin Heterogeneity Index, and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.
H ₀ 4	Among large, nonprofit CBHOs, there is no statistically significant relationship between resource dependence (REDE-HETER), as measured by the Gibbs-Martin Heterogeneity Index, and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.	H _A 4	Among large, nonprofit CBHOs, there is a statistically significant relationship between resource dependence (REDE-HETER) as measured by an adapted Gibbs-Martin Heterogeneity Index, and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H ₀ 5	Among large, nonprofit CBHOs, there is no statistically significant relationship between institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI], and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.	H _A 5	Among large, nonprofit CBHOs, there is a statistically significant relationship between institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI], and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.
H ₀ 6	Among large, nonprofit CBHOs, there is no statistically significant relationship between institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI], and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.	H _A 6	Among large, nonprofit CBHOs, there is a statistically significant relationship between institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI], and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.
H ₀ 7	Among large, nonprofit CBHOs, there is no statistically significant relationship between institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI], and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.	H _A 7	Among large, nonprofit CBHOs, there is a statistically significant relationship between institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI], and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.
H ₀ 8	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and resource dependence (REDE-HETER), as measured by an adapted Gibbs-Martin Heterogeneity Index.	H _A 8	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and resource dependence (REDE-HETER), as measured by an adapted Gibbs-Martin Heterogeneity Index.
H ₀ 9	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and resource dependence (REDE-HETER), as measured by an adapted Gibbs-Martin Heterogeneity Index.	H _A 9	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and resource dependence (REDE-HETER), as measured by an adapted Gibbs-Martin Heterogeneity Index.
H ₀ 10	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI].	H _A 10	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI].

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H _O 11	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI].	H _A 11	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (CONCEN) and institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI].
H _O 12	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI].	H _A 12	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and institutional pressure (INPRESS), as measured by an adapted Institutional Vulnerability Index [IVI].
H _O 13	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.	H _A 13	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.
H _O 14	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and a legitimization strategy (LEGIT), as measured by an adapted strategic tactic list.	H _A 14	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and a legitimization strategy (LEGIT), as measured by an adapted strategic tactic list.
H _O 15	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.	H _A 15	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.
H _O 16	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.	H _A 16	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (CONCEN) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H ₀ 17	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.	H _A 17	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (CONCEN) and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.
H ₀ 18	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.	H _A 18	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (CONCEN) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.
H ₀ 19	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.	H _A 19	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and an overall revenue-seeking strategy (OVERALL_REVSEEK), as measured by an adapted strategic tactic list.
H ₀ 20	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.	H _A 20	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and a legitimation strategy (LEGIT), as measured by an adapted strategic tactic list.
H ₀ 21	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.	H _A 21	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN) and a retrenchment strategy (RETRENCH), as measured by an adapted strategic tactic list.
H ₀ 22	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (DEBT), and resource dependence (REDE-HETER), institutional pressure (INPRESS), and strategic choice (OVERALL_REVSEEK; LEGIT; RETRENCH).	H _A 22	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (DEBT), and resource dependence (REDE-HETER), institutional pressure (INPRESS), and strategic choice (OVERALL_REVSEEK; LEGIT; RETRENCH).

Hypothesis Number	Null Hypothesis	Hypothesis Number	Alternate Hypothesis
H ₀ 23	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (CONCEN), and institutional pressure (INPRESS) and strategic choice (OVERALL_REVSEEK; LEGIT; RETRENCH).	H _A 23	Among large, nonprofit CBHOs, there is a statistically Significant relationship between financial performance (CONCEN), and institutional pressure (INPRESS) and strategic choice (OVERALL_REVSEEK; LEGIT; and RETRENCH).
H ₀ 24	Among large, nonprofit CBHOs, there is no statistically significant relationship between financial performance (ADMIN), and resource dependence (REDE-HETER), institutional pressure (INPRESS), and strategic choice (OVERALL_REVSEEK; LEGIT; RETRENCH).	H _A 24	Among large, nonprofit CBHOs, there is a statistically significant relationship between financial performance (ADMIN), and resource dependence (REDE-HETER), institutional pressure (INPRESS), and strategic choice (OVERALL_REVSEEK; LEGIT; RETRENCH).

**APPENDIX D. Development of the Gibbs-Martin Revenue Heterogeneity Index, Adapted
with Permission, from Bielefeld (1992a)**

Category	Type	%
		Column = 100%
Private	Corporate Donations ^a	%
Private	Federated Funding (United Way) ^a	%
Private	Other Client or Program Service Fees/Membership Dues ^b	%
Public	Government Grants/Contracts ^a (Federal, State, County, Local)	%
Private	Fundraising/Individual Donations/Foundations/Trusts ^c	%
Self-Generated	Program Fees <u>Directly Associated</u> with Contract Revenue ^d (<i>organization would not generate fee without an associated contract</i>)	%
Public	3 rd Party Reimbursement: Medicaid-Medicare or Medicaid-Medicare Managed Care Only ^d	%
Self-Generated	3 rd Party Reimbursement: Private Commercial Only ^d	%
Self-Generated	Investment/Interest Income ^a	%
Self-Generated	Sale of Assets ^a	%
Self-Generated	Commercial - Unrelated to Service Provision Entrepreneurial Earned Income Opportunity ^a	%
TOTAL:		

Note. From Bielefeld, W. (1992a). Nonprofit funding environment relations: Theory and application. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 3(1), 48-70. Retrieved from ABI/INFORM Global database.

Calculation for the Gibbs-Martin Revenue Heterogeneity Index: (a) square each percentage per category; (b) sum the squared percentages; (c) subtract sum from 1.0 to produce the Gibbs-Martin index. Higher Gibbs-Martin index reveals greater revenue heterogeneity; lower Gibbs-Martin index reveals greater revenue homogeneity.

^a Item consistent with Bielefeld (1992a); ^b Item consistent with Bielefeld, but with added definition; ^c Item reflective of multiple categories from Bielefeld (1992a), collapsed into a single category; ^d Denotes a new category.

**APPENDIX E. Development of the Institutional Vulnerability Index, Adapted with
Permission, from Bielefeld (1992a)**

Importance Index: Rate each item from low (0) to high importance (5)

Rate the level of <i>importance</i> of each stakeholder group to the organization's services and practices.	Check One (⇐low to high⇒)					
	0	1	2	3	4	5
1. Government-Based or Professional Trade Organizations						
2. Funders and Payers						
3. Legislative Bodies						
4. Community Leaders						
5. Politicians						
6. Competitor Organizations						

Influence Index: Place a check mark (√) for each area

Stakeholder Group	Check All That Apply				
	Strategic Goals	Org. Structure	Org. Operations	Types of Services	Types of Clients
1. Government-Based or Professional Trade Organizations					
2. Funders and Payers					
3. Legislative Bodies					
4. Community Leaders					
5. Politicians					
6. Competitor Organizations					

Note. From Bielefeld, W. (1992a). Nonprofit funding environment relations: Theory and application. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 3(1), 48-70. Retrieved from ABI/INFORM Global database.

Calculation of IVI. Importance index: sum all ratings given to stakeholder groups 1 – 5. Highest possible value = 30. Lowest possible value = 0. Influence index: add all checks across the five categories and across all six stakeholder groups. Highest possible value = 30. Lowest possible value = 0. Add the Importance value and Influence value. Highest possible score = 60. Lowest possible score = 0.

APPENDIX F. Development of the Strategic Tactics List, Adapted from Bielefeld (1992b)

Strategic Tactic List

REVSEEKGEN	Carried out formal assessment of community needs to develop new services. ^a
REVSEEKGEN	Carried out formal market studies to develop new services. ^a
REVSEEKGEN	Set up earned income opportunity/profit-making venture related to mission. ^a
REVSEEKGEN	Adjusted (added/changed) services to generate new (non-government related) revenues. ^a
REVSEEKGOV	Started new service(s) or program(s) through local contract or state contract. ^b
REVSEEKGOV	Started new service(s) or program(s) through federal contract. ^b
REVSEEKGOV	Started new service(s) or program(s) that relies heavily on Medicaid-Medicare. ^b
REVSEEKGOV	Approached local, state, and/or federal government source for contract funding. ^c
REVSEEKGOV	Submitted proposal for local, state, and/or federal contract funding. ^c
REVSEEKNONGOV	Started new service(s) or program(s) through non-government commercial source (e.g., commercial insurance). ^c
REVSEEKNONGOV	Started new service(s) or program(s) through donative/philanthropic/private grant source funding. ^c
REVSEEKNONGOV	Approached new donative/philanthropic source of funding. ^c
REVSEEKNONGOV	Approached new commercial source of funding. ^c
REVSEEKNONGOV	Submitted proposal for commercial, private, or donative funding. ^c
LEGIT	Sought endorsements/recommendations from funders/industry elites. ^a
LEGIT	Contributed to community causes. ^a

Strategic Tactic List

LEGIT	Engaged in lobbying efforts or other forms of political advocacy. ^a
LEGIT	Adapted services to funder preferences and/or priorities. ^a
LEGIT	Collaborated with funder(s) on industry-related committees and/or projects. ^b
LEGIT	Sought funding from prominent individual or corporate source. ^a
LEGIT	Led or provided industry-related training to public and/or competitor organizations. ^b
LEGIT	Published work related to services in journal or presented at conference. ^b
LEGIT	Tried to make services more relevant through marketing, and other public relations efforts. ^a
RETRENCH	Increased staff workload. ^a
RETRENCH	Increased use of volunteers or internships. ^c
RETRENCH	Increased use of part-time staff. ^a
RETRENCH	Delayed or did not fill vacancies. ^a
RETRENCH	Reduced administrative support or staff. ^a
RETRENCH	Eliminated services or programs. ^a
RETRENCH	Instituted pay freezes or reductions to pay or benefits, including reduction in work week for paid staff. ^c
RETRENCH	Reduced service delivery staff or service levels to clients. ^c
RETRENCH	Reduced staff training. ^a

Note. From Bielefeld, W. (1992b). Funding uncertainty and nonprofit strategies in the 1980s. *Nonprofit Management and Leadership*, 2(4), 381-401. Retrieved from Business Source Complete database.

^a consistent with Bielefeld (1992b); ^b added to Bielefeld (1992b); ^c modified or consolidated language from Bielefeld (1992b).

APPENDIX G. Financial Indicators

Measure	Formula	Data Source
Equity Ratio [DEBT]	$\text{Assets} - \text{Liabilities} / \text{Total Revenues}$	IRS 990 Assets: Line 20 Liabilities: Line 21 Total Revenues: Line 12
Operating Margin [MARGIN]	$\text{Revenue} - \text{Expenses} / \text{Revenues}$	IRS 990 Total Revenues: Line 12 Total Expenses: Line 18
Revenue Concentration [CONCEN]	$\sum (\text{Revenue}_i / \text{Total Revenues})^2$	Gibbs-Martin Index for revenue % per category & IRS 990 Total Revenue: Line 12
Administrative Expense [ADMIN]	$\text{Admin. Expense} / \text{Total Expenses}$	Admin Expense (% reported by CEO or designate)

Note: These standard financial measures were used by Tuckman and Chang (1991)

APPENDIX H. Field Test Instrument

EXPERT PANELIST CODE: _____
EXPERT PANEL INSTRUMENT

Thank you for your participation as an expert panelist for this research on factors affecting the viability of nonprofit community behavioral healthcare organizations. Please complete Sections I – IV and return your instrument in the pre-paid mailer provided. Should you have any questions related to the instrument, please refer to the informed consent document for researcher contact information.

SECTION I: REVENUE CONCENTRATION

Please address each question according its corresponding instructions. You may use other organizational resources (e.g., CFO, Controller, etc.) to obtain data for your answers.

Question 1: Revenue Concentration

Please fill in the revenue concentration index below as it pertains to your specific organization. Then, please answer the four follow-up questions, 1a – 1d.

With the last fiscal year in mind, identify the percentage of your organization’s revenues that came from each of the following sources. The sum of percentages from all sources must equal 100%.

Category	% (must add to 100%)
Corporate Donations	
Federated Funding (United Way)	
Fundraising/Individual Donations/Foundations/Trusts	
Government Grants/Contracts (Federal, State, County, Local)	
3 rd Party Reimbursement: Private Commercial Only	
3 rd Party Reimbursement: Medicare/Medicaid or Medicare/Medicaid Managed Care Only	
Other Client or Program Service Fees/Membership Dues	
Investment/Interest Income	
Sale of Assets	

Category	% (must add to 100%)
Entrepreneurial Earned Income Opportunity <i>(e.g., revenues from client-operated businesses; revenues from ancillary businesses within the organization)</i>	
TOTAL (must equal 100%)	

Revenue Concentration ~ Follow-Up Questions:

1a. As CEO, did you call on other senior staff (e.g., CFO, Controller, COO etc.) to obtain accurate percentages for the above index?

- YES
 NO

If “YES” please specify the position(s) used to obtain revenue data:

1b. How clearly described/defined are the revenue categories within the index?

- VERY CLEAR SOMEWHAT CLEAR NOT CLEAR

1c. If you could improve on the clarity/definition of a category or categories, please describe how you would do so.

1d. Is there a category or categories that should be added or removed, or is the index suitable as designed?

Question 2: Contract Revenue

Please answer the question below; then answer the two follow-up questions, 2a – 2d.

Specify the total number of local, state, and/or federal government contracts your organization presently has. These contracts may be directly with government or an agency/entity operating under government authority.

My organization presently has a total of _____ local, state, and/or federal government contracts.

Contract Revenue ~ Follow-Up Questions:

2a. As CEO, did you call on other senior staff (e.g., CFO, Controller, COO, etc.) to obtain the accurate number of contracts held by your organization?

- YES
- NO

If “YES” please specify the position(s) used to obtain contract data:

2b. How easy was it to retrieve information from your organization to provide contract data? Select one.

- VERY EASY
- EASY
- SOMEWHAT EASY
- DIFFICULT
- VERY DIFFICULT

2c. How clear is Question # 2?

- VERY CLEAR
- SOMEWHAT CLEAR
- NOT CLEAR

2d. If you could improve on the clarity of this question, please describe how you would do so.

SECTION II: INSTITUTIONAL PRESSURE

Many stakeholder groups influence the following organizational elements in behavioral healthcare organizations:

- ◆ **Strategy** (e.g., organizational goals and business development opportunities);
- ◆ **Operations** (e.g., fiscal and operational policies and practices);
- ◆ **Structure** (e.g., composition of human resources and supervisory structures; program design);
- ◆ **Types of programs** offered; and
- ◆ **Types of clients** served by the organization.

Question 3: Institutional Pressure

Please adopt a *sector-wide perspective* for this section. *In ascending order, from most influential (1) to least influential (10), please rank the following 10 stakeholder groups. Please keep in mind that your ranking should reflect the level of overall importance/influence each stakeholder group has on strategy, operations, structure, programs, and clients-served by community behavioral healthcare organizations. The most important/influential stakeholder group should be rated 1 and the least important/influential group should be rated 10. No two stakeholder groups can share a ranking: each stakeholder group must assume its own ranked position.*

Ranking (#1 - #10)	Stakeholder Group
	Competitor Organizations
	General Public
	Clients and/or Family Members
	Funders and Payers
	Politicians
	Accrediting (e.g., JCAHO, CARF, COA) and/or Licensing Bodies
	Legislative Bodies (local, state, federal)

Ranking (#1 - #10)	Stakeholder Group
	Media
	Community Leaders
	Government-based (e.g., SAMHSA) or Professional Trade Organizations (e.g., National Council for Community Behavioral Healthcare; National Association of Social Work; United States Psychiatric Rehabilitation Association)

SECTION III: STRATEGIC CHOICE

Many of the following strategies listed below in Question 4 come from nonprofit studies and reflect tactics commonly used by nonprofit organizations to promote viable and sustainable organizations.

Please adopt a *sector-wide perspective* for this section. Think about your organization and pull from your knowledge of other nonprofit community behavioral healthcare organizations (CBHOs). Check off all strategies commonly engaged by CBHOs to promote organizational viability and sustainability. Focus on strategies commonly used by CBHOs in the last 3 – 5 years.

Because many of the strategies listed below have strong validity and reliability in the nonprofit sector overall, it should not be uncommon or unusual for *some, many, most, or all* strategies to apply to CBHOs. The purpose of Question 4 below is to formulate a comprehensive and relevant list of tactics for a national survey. In the national survey, CEOs will choose strategies used by their organizations to promote organizational viability and sustainability.

Question 4: Strategic Tactics

Please place a checkmark (✓) next to each strategic tactic you understand as commonly-used among nonprofit community behavioral healthcare organizations (CBHOs) to promote organizational viability and sustainability. Afterwards, please answer questions 4a – 4c.

✓ All That Apply	TACTIC
	Carried out formal assessment of community needs to develop new services.
	Carried out formal market studies to develop new services.
	Set up earned income (social enterprise) venture related to mission.
	Adjusted (added/changed) services to generate new (non-government related) revenues.

√ All That Apply	TACTIC (Continued)
	Started new service or program through local or state government contract.
	Started new service or program through federal government contract.
	Started new service or program that relies heavily on Medicare/Medicaid.
	Approached local, state, and/or federal government source for contract funding.
	Submitted proposal for local, state, and/or federal contract funding.
	Started or supported a new service or program through non-government commercial source (e.g., commercial insurance).
	Started or supported a new service or program through donative/philanthropic/private grant source funding.
	Approached new donative/philanthropic source of funding.
	Approached new commercial source of funding.
	Submitted proposal for commercial, private, or donative funding.
	Sought endorsements/recommendations from funders/industry elites.
	Contributed to community causes.
	Engaged in lobbying efforts or other forms of political advocacy.
	Adapted services to funder preferences and/or priorities.
	Collaborated with funder(s) on industry-related committees and/or projects.
	Sought funding from prominent individual or corporate source.
	Led or provided industry-related training to public and/or competitor organizations.
	Published work related to services in journal or presented at conference.
	Tried to make services more relevant through marketing, and other public relations efforts.
	Increased staff workload.
	Increased use of volunteers or internships.
	Increased use of part-time staff.
	Delayed or did not fill vacancies.
	Reduced administrative support or staff.
	Eliminated services or programs.
	Instituted pay freezes or reductions to pay or benefits, including reduction in work week for paid staff.

√ All That Apply	TACTIC (Continued)
	Reduced service delivery staff or service levels to clients.
	Reduced staff training.

Strategic Tactics ~ Follow-Up Questions:

4a. How easy was it to complete the strategic tactic list?

- VERY EASY
- EASY
- SOMEWHAT EASY
- DIFFICULT
- VERY DIFFICULT

4b. How clear is Question # 4?

- VERY CLEAR SOMEWHAT CLEAR NOT CLEAR

4c. If you could improve on the clarity of this question, please describe how you would do so.

SECTION IV: FINANCIAL PERFORMANCE

Please answer Question 5 as it pertains to your own organization and also address follow-up questions 5a – 5d.

Question 5: Administrative Expense

The administrative expense (allocation) for my organization = _____ %.

Administrative Expense ~ Follow-Up Questions:

5a. As CEO, did you call on other senior staff (e.g., CFO, Controller, COO, etc.) to obtain the administrative expense for your organization?

- YES
- NO

If “YES” please specify the position(s) used to obtain data:

5b. How easy was it to retrieve information from your organization to determine its administrative expense? Select one.

- VERY EASY
- EASY
- SOMEWHAT EASY
- DIFFICULT
- VERY DIFFICULT

5c. How clear is Question # 5?

- VERY CLEAR SOMEWHAT CLEAR NOT CLEAR

5d. If you could improve on the clarity of this question, please describe how you would do so.

Thank you for completing the Expert Panel Survey. Please submit this form, along with the PINK SHEET (Informed Consent), in the pre-paid mailer and mail back to me at your earliest convenience.

Thank you,

APPENDIX I. Pilot Study Survey Instrument

PILOT STUDY CODE: _____

PILOT STUDY SURVEY

Thank you for your participation in this pilot study for a national survey on factors affecting the viability of nonprofit Community Behavioral Healthcare Organizations (CBHOs). Please complete Sections I – IV and return the survey in the postage-paid envelope provided. Should you have any questions related to the instrument, please refer to the informed consent document for researcher contact information.

SECTION I: REVENUE CONCENTRATION

Please answer Question 1, 1a, and 1b according to the corresponding instructions. You may use other organizational resources (e.g., CFO, Controller, etc.) to obtain data for your answers.

Question 1: Revenue Concentration

Please fill in the revenue concentration index below as it pertains to your specific organization. With the last fiscal year in mind, note the percentage of your organization’s revenues that came from each of the following sources. The sum of percentages from all sources must equal 100%.

Category	%
	Must add to 100%
Corporate Donations	
Federated Funding (United Way)	
Fundraising/Individual Donations/Foundations/Trusts	
Government Grants/Contracts (Federal, State, County, Local) <i>Contracts that include Medicaid dollars may be included in this category.</i>	
3 rd Party Reimbursement: Private Commercial Only	
3 rd Party Reimbursement <i>not related to contracts</i> : Medicare and/or Medicaid or Medicare and/or Medicaid Managed Care Only	
Other Client or Program Service Fees/Membership Dues	
Investment/Interest Income	
Sale of Assets	

Category	% Must add to 100%
Entrepreneurial Earned Income Opportunity (e.g., revenues from client-operated businesses; revenues from ancillary businesses within the organization)	
TOTAL (must equal 100%)	

Revenue Concentration ~ Follow-Up Questions:

1a. How clearly described/defined are the revenue categories within the index?

- VERY CLEAR SOMEWHAT CLEAR NOT CLEAR

1b. If you could improve on the clarity/definition of a category or categories, please describe how you would do so.

Question 2: Contract Revenue

Please specify the total number of local, state, and/or federal government contracts your organization presently has. These contracts may be directly with government or an agency/entity operating under government authority.

My organization presently has a total of _____ local, state, and/or federal government contracts.

Contract Revenue ~ Follow-Up Question:

2a. How easy was it to retrieve information from your organization to provide contract data? Select one.

- VERY EASY
 EASY
 SOMEWHAT EASY
 DIFFICULT
 VERY DIFFICULT

SECTION II: INSTITUTIONAL PRESSURE

Many stakeholder groups influence the following organizational elements in behavioral healthcare organizations:

- ◆ **Strategy** (e.g., organizational goals and business development opportunities);
- ◆ **Operations** (e.g., fiscal and operational policies and practices);

- ◆ **Structure** (e.g., composition of human resources and supervisory structures; program design);
- ◆ **Types of programs** offered; and
- ◆ **Types of clients** served by the organization.

Question 3: Institutional Pressure

Importance Index: Rate each item from low (0) to high (5) on the importance of each stakeholder group to your organization’s services and practices. Place a check mark (√) under the importance rating for each stakeholder group.

Stakeholder Group	Check One (⇐low to high⇒)					
	0	1	2	3	4	5
Government-Based or Professional Trade Organizations						
(e.g., SAMHSA; National Council for Community Behavioral Healthcare; National Association of Social Work; Open Minds; United States Psychiatric Rehabilitation Association; and others that apply to your organization)						
Funders and Payers						
Legislative Bodies						
Community Leaders						
Politicians						
Competitor Organizations						

Influence Index: Place a check mark (√) for each and every area the stakeholder group influences within your organization. √ all that apply.

Stakeholder Group	Check All That Apply				
	Strategic Goals	Org. Structure	Org. Operations	Types of Services	Types of Clients
Government-Based or Professional Trade Organizations					
Funders and Payers					
Legislative Bodies					
Community Leaders					
Politicians					
Competitor Organizations					

SECTION III: STRATEGIC CHOICE

Many of the following strategies listed below in Question 4 come from nonprofit studies and reflect tactics commonly used by nonprofit organizations to promote viable and sustainable organizations.

Question 4: Strategic Tactics

Please check off (✓) all strategies your organization has used to promote viability and sustainability in the last 3 – 5 years.

✓ All That Apply	TACTIC
	Carried out formal assessment of community needs to develop new services.
	Carried out formal market studies to develop new services.
	Set up earned income venture related to mission.
	Adjusted (added/changed) services to generate new (non-government related) revenues.
	Started new service or program through local or state government contract.
	Started new service or program through federal government contract.
	Started new service or program that relies heavily on Medicaid-Medicare.
	Approached local, state, and/or federal government source for contract funding.
	Submitted proposal for local, state, and/or federal contract funding.
	Started or supported a new service or program through non-government commercial source (e.g., commercial insurance).
	Started or supported a new service or program through donative/philanthropic/private grant source funding.
	Approached new donative/philanthropic source of funding.
	Approached new commercial source of funding.
	Submitted proposal for commercial, private, or donative funding.
	Sought endorsements/recommendations from funders/industry elites.
	Contributed to community causes.
	Engaged in lobbying efforts or other forms of political advocacy.
	Adapted services to funder preferences and/or priorities.
	Collaborated with funder(s) on industry-related committees and/or projects.

√ All That Apply	TACTIC (Continued)
	Sought funding from prominent individual or corporate source.
	Led or provided industry-related training to public and/or competitor organizations.
	Published work related to services in journal or presented at conference.
	Tried to make services more relevant through marketing, and other public relations efforts.
	Increased staff workload.
	Increased use of volunteers or internships.
	Increased use of part-time staff.
	Delayed or did not fill vacancies.
	Reduced administrative support or staff.
	Eliminated services or programs.
	Instituted pay freezes or reductions to pay or benefits, including reduction in work week for paid staff.
	Reduced service delivery staff or service levels to clients.
	Reduced staff training.

SECTION IV: FINANCIAL PERFORMANCE

Please answer Question 5 as it pertains to your organization and also address follow-up question 5a.

Question 5: Administrative Expense

The administrative expense (allocation) for my organization = _____ %.

Administrative Expense ~ Follow-up Questions:

- 5a.** How easy was it to retrieve information from your organization to determine its administrative expense? Select one.
- VERY EASY
 - EASY
 - SOMEWHAT EASY
 - DIFFICULT
 - VERY DIFFICULT

Please add any final comments about content/clarify of survey: _____

Appendix J. Full Survey Instrument

SURVEY: FACTORS AFFECTING VIABILITY OF COMMUNITY BEHAVIORAL HEALTHCARE ORGANIZATIONS

Thank you for your participation in this national survey on factors affecting the viability of nonprofit Community Behavioral Healthcare Organizations (CBHOs). **Please complete Sections I – IV and return the survey in the postage-paid envelope provided.** Should you have any questions related to the instrument, please refer to the informed consent document for researcher contact information.

SECTION I: REVENUE CONCENTRATION

Question 1: Revenue Concentration

Please fill in the revenue concentration index below as it pertains to your specific organization. With the last fiscal year in mind, note the percentage of your organization’s revenues that came from each of the following sources. The sum of percentages from all sources must equal 100%. You may use additional resources (CFO; Controller, etc.) to complete this section.

Category	% Must add to 100%
Corporate Donations	
Federated Funding (United Way)	
Fundraising/Individual Donations/Foundations/Trusts	
Government Grants/Contracts (Federal, State, County, Local) <i>Contracts that include Medicaid dollars may be included in this category.</i>	
3 rd Party Reimbursement: Private Commercial Only	
3 rd Party Reimbursement <i>not related to contracts</i> : Medicare and/or Medicaid or Medicare and/or Medicaid Managed Care Only	
Other Client or Program Service Fees/Membership Dues	
Investment/Interest Income	
Sale of Assets	

Category	% Must add to 100%
Entrepreneurial Earned Income Opportunity <i>(e.g., revenues from client-operated businesses; revenues from ancillary businesses within the organization)</i>	
TOTAL (must equal 100%)	

Question 2: Contract Revenue

Please specify the total number of local, state, and/or federal government contracts your organization presently has. These contracts may be directly with government or an agency/entity operating under government authority.

My organization presently has a total number of _____ local, state, and/or federal government contracts.
(list number)

SECTION II: INSTITUTIONAL PRESSURE

Many stakeholder groups influence the following organizational elements in behavioral healthcare organizations:

- ◆ **Strategy** (e.g., organizational goals and business development opportunities);
- ◆ **Operations** (e.g., fiscal and operational policies and practices);
- ◆ **Structure** (e.g., composition of human resources and supervisory structures; program design);
- ◆ **Types of programs** offered; and
- ◆ **Types of clients** served by the organization.

Question 3: Institutional Pressure

Importance Index: Rate each item from low (0) to high (5) on the importance of each stakeholder group to your organization’s services and practices. Place a check mark (✓) under the importance rating for each stakeholder group.

Stakeholder Group	Check One (←low to high→)					
	0	1	2	3	4	5
Government-Based or Professional Trade Organizations						
(e.g., SAMHSA; National Council for Community Behavioral Healthcare; National Association of Social Work; Open Minds; United States Psychiatric Rehabilitation Association; and others that apply to your organization)						
Funders and Payers						
Legislative Bodies						
Community Leaders						
Politicians						
Competitor Organizations						

Influence Index: Place a check mark (✓) for each and every area the stakeholder group influences within your organization. ✓ all that apply (up to 30 ✓marks)

Stakeholder Group	Check All That Apply				
	Strategic Goals	Org. Structure	Org. Operations	Types of Services	Types of Clients
Government-Based or Professional Trade Organizations					
Funders and Payers					
Legislative Bodies					
Community Leaders					
Politicians					
Competitor Organizations					

SECTION III: STRATEGIC CHOICE

Many of the following strategies listed below in Question 4 come from nonprofit studies and reflect tactics commonly used by nonprofit organizations to promote viable and sustainable organizations.

Question 4: Strategic Tactics

Please check off (✓) all strategies your organization has used to promote viability and sustainability in the last 3 – 5 years.

✓ All That Apply	TACTIC
	Carried out formal assessment of community needs to develop new services.
	Carried out formal market studies to develop new services.
	Set up earned income venture related to mission.
	Adjusted (added/changed) services to generate new (non-government related) revenues.
	Started new service or program through local or state government contract.
	Started new service or program through federal government contract.
	Started new service or program that relies heavily on Medicaid-Medicare.
	Approached local, state, and/or federal government source for contract funding.
	Submitted proposal for local, state, and/or federal contract funding.
	Started or supported a new service or program through non-government commercial source (e.g., commercial insurance).
	Started or supported a new service or program through donative/philanthropic/private grant source funding.
	Approached new donative/philanthropic source of funding.
	Approached new commercial source of funding.
	Submitted proposal for commercial, private, or donative funding.
	Sought endorsements/recommendations from funders/industry elites.
	Contributed to community causes.
	Engaged in lobbying efforts or other forms of political advocacy.
	Adapted services to funder preferences and/or priorities.
	Collaborated with funder(s) on industry-related committees and/or projects.
	Sought funding from prominent individual or corporate source.
	Led or provided industry-related training to public and/or competitor organizations.
	Published work related to services in journal or presented at conference.

	Tried to make services more relevant through marketing, and other public relations efforts.
	Increased staff workload.
	Increased use of volunteers or internships.
	Increased use of part-time staff.
	Delayed or did not fill vacancies.
	Reduced administrative support or staff.
	Eliminated services or programs.
	Instituted pay freezes or reductions to pay or benefits, including reduction in work week for paid staff.
	Reduced service delivery staff or service levels to clients.
	Reduced staff training.

SECTION IV: FINANCIAL PERFORMANCE

Please answer Question 5 as it pertains to your organization.

Question 5: Administrative Expense

The administrative expense (allocation) for my organization = _____ %.