

QUASI-GOVERNMENT ACCOUNTABILITY:
AN EVALUATION OF ORGANIZATIONAL CHANGE IN
A COMMUNITY MENTAL HEALTH CENTER IN GEORGIA

by

SEOK-EUN KIM

(Under the direction of Dr. ROBERT T. GOLEMBIEWSKI)

ABSTRACT

This study addresses the importance of evaluation for ensuring quasi-government accountability by assessing, at various levels of rigor as permitted by the available data sources, the processes and outcomes of change interventions in a community mental health center in Georgia (“The Center” hereinafter). The Center change is particularly suitable for addressing an issue of accountability in the quasi-government because it was initiated by a critical incident associated with insurance fraud and poor management of a residential facility in one of the work units.

In order to test whether evaluation of the organizational changes at the Center can serve as a tool for quasi-government accountability, this study proposes an analytical framework with carefully selected outcome variables based on previous research on organizational change. Defining clear relationships between the interventions and hypothesized outcomes was very difficult because the group of interventions tends to produce more than one outcome simultaneously, and, more importantly, because no useful learning theory or philosophy guided the process of change. This study hypothesized that, at the conceptual level, the interventions at the Center would have a

positive impact on employees' attitudinal and behavioral changes as well as on organizational performance.

The results generally support the hypothesized outcomes, as illustrated by an analytical framework proposed in this study, although some anomalies were found regarding the modest increase in employees' withdrawal behaviors and performance improvements. In addition, employees' loyalty has decreased significantly.

The research findings imply two lessons. First, some unintended directions of change, such as decreased employee commitment and increased withdrawal behaviors, result from the lack of consistent value-driven change strategies. Second, despite some unexpected outcomes, the analytical framework for evaluating the efficacy and effectiveness of the interventions at the Center has shown its usefulness in describing the outcomes of the interventions and in improving understanding of the relationships between outcome variables. Replications of the framework in different settings with different samples can add substantially to its usefulness by expanding its generalizability.

INDEX WORDS: Organizational change, Evaluation, Accountability, Performance,
Quasi-government, Mental health

QUASI-GOVERNMENT ACCOUNTABILITY:
AN EVALUATION OF ORGANIZATIONAL CHANGE IN
A COMMUNITY MENTAL HEALTH CENTER IN GEORGIA

by

SEOK-EUN KIM

B.P.A., University of Seoul, Korea, 1992

M.P.A., Iowa State University, 1997

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial
Fulfillment of the Requirements for the Degree

DOCTOR OF PUBLIC ADMINISTRATION

ATHENS, GEORGIA

2002

© 2002

Seok-Eun Kim

All Rights Reserved

QUASI-GOVERNMENT ACCOUNTABILITY:
AN EVALUATION OF ORGANIZATIONAL CHANGE IN
A COMMUNITY MENTAL HEALTH CENTER IN GEORGIA

by

SEOK-EUN KIM

Approved:

Major Professor: Robert Golembiewski

Committee: Joseph Whorton
Edward Kellough
Milton Lopes
Charles Lance
Scott Clark

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
December 2002

To My Family

ACKNOWLEDGMENTS

This dissertation is a collaborative enterprise with many people who have provided rigorous reviews, offered a word of encouragement, and made suggestions or corrections. My deepest appreciation goes to Dr. Robert Golembiewski, my major professor and mentor, who tirelessly devoted his time and effort to my dissertation work. Throughout this project, he has taught me how to tackle my frustration in order to complete this challenging field research. Through him, I was introduced to a bottomless pool of knowledge.

My appreciation also goes to the other members of my dissertation committee: Dr. Edward Kellough, Dr. Charles Lance, Dr. Milton Lopes, Dr. Joseph Whorton, and Mr. Scott Clark. Special thanks go to Mr. Scott Clark, the director of Management Information Systems at Advantage Behavioral Health Systems, the agency where I developed this dissertation. Not only did he serve as one of my dissertation committee members, but he also made this taxing field research possible by showing unlimited support for me.

I am also indebted to many others in this agency. My gratitude goes to Dr. Marc Weinstein, the former director of Continuous Quality Improvement, who suggested the initial idea for this project. I wish to thank Mrs. Nicole Griep, Utilization Manager, for her warm support and encouragement. I am also grateful to Mr. Larry Gabriel, the director of the Business Office; Mrs. Valerie Elder, manager of Central Administrative

Intake; Mrs. Marie Ballard, the associate director of Human Resources; Mr. Jim Jenkins, manager of Emergency Services; Mr. Art Davis, manager of Payroll and Budgets; Mr. Dave Tarpley and Ms. Regina Walker at Hospital Liaison; Ms. Vera Fairman of the TRIGRS team, for her kind and warm support for my research; and finally, the agency employees who took the time to respond to the employee attitude survey.

A word of thanks must be extended to Dr. Yong Lee, my major professor during my master's program at the Iowa State University. Despite the several years that have passed since I left Ames, Iowa, he has consistently provided his support and guidance. I am also indebted to Dr. Yearn-Hong Choi at the University of Seoul and Dr. Jae-Won Yoo at Hanyang University, who encouraged me to study in the United States. I would like to thank Dr. Kyung-Hyo Park, who directed my interest in the study of public administration during my college days.

I would like to thank Robert Rhudy for his valuable editorial assistance. Because of his help, this manuscript was greatly improved.

My deep appreciation goes to my family. I could not have completed this long-term project without their emotional and financial support. They have been always with me throughout my doctoral studies, although geographical distance keeps us from seeing each other.

Finally, I would like to thank my wife, Suh-Young, for her patience and love which allowed me to devote myself to my doctoral work. I thank my son, Andy, who has made my life full of joy every day.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	v
LIST OF TABLES	x
LIST OF FIGURES	xii
CHAPTER	
1. INTRODUCTION	1
1.1. Distinguishing characteristics of three types of organizations	4
1.2. The research setting	7
1.3. Objectives of the study and research questions	15
1.4. Significance of the study	18
1.5. Organization of the study	20
2. LITERATURE REVIEW	23
2.1. Accountability in the quasi-government	23
2.2. Evaluation as a tool for accountability	27
2.3. Evaluation as an agent for change	28
2.4. Evaluation research in quasi-government organizational change	32
2.5. Summary	49
3. RESEARCH METHODS: ANALYTICAL FRAMEWORK, DESIGN, AND MEASURES	52
3.1. Analytical Framework	52

3.2. Evaluation designs	78
3.3. Measures and methods	84
4. ANALYSIS AND RESULTS	102
4.1. Impact on employee attitudes	103
4.2. Impact on employee withdrawal behaviors	116
4.3. Impact on organizational performance	125
4.4. Additional results	137
5. DISCUSSIONS AND CONCLUSIONS	151
5.1. Reliability and validity of the data analysis	152
5.2. Summary and conclusions	162
5.3. Implications of the findings	169
5.4. The desirable future state of the Center	175
5.5. Limitations of the research	178
5.6. Directions for future research	180
REFERENCES	184
APPENDICES	
I. THE CHRONICLES OF MAJOR ORGANZIATIONAL CHANGES	
AT THE CENTER	202
II. EMPLOYEE ATTITUDE SURVEY	205
III. APPROVAL FORM FOR EMPLOYEE ATTITUDE SURVEY	215
IV. A SAMPLE OF CONSUMER COMPLAINT FORM	216
V. CLIENT SATISFACTION QUESTIONNAIRE (CSQ-8)	217

VI. LISREL CODE FOR OMNIBUS TEST OF EQUALITY OF COVARIANCE MATRICES: INVOLVEMENT	218
VII. LISREL CODE FOR LINEAR-HOMOSCEDASTIC MODEL: ABSENTEEISM	219
VIII. LISREL CODE FOR OMNIBUS TEST OF EQUALITY OF COVARIANCE MATRICES (MULTISAMPLE ANALYSIS): CONSUMER SATISFACTION	220
IX. SUMMARY OF THE EMPLOYEE RESPONSES TO THE CENTER CHANGE	222

LIST OF TABLES

TABLE	Page
1.1. Distinguishing characteristics of three types of organizations	5
3.1. Major interventions and their features at the Center	59
3.2. Three-day mandatory training programs at the Center	61
3.3. Summary of dependent measures	86
3.4. An example of a clinician’s Performance Management Form (jobs and individual responsibility)	98
4.1. Summary of differences in employee satisfaction on before and after intervention	110
4.2. Results of the omnibus test of measurement equivalence ($\Sigma^t = \Sigma^{t+1}$) for three dimensions of organizational commitment scales	113
4.3. Summary of differences in employee commitment on before and after intervention	115
4.4. Tests of alternative LGM measurement model goodness-of-fit: Absenteeism rate	120
4.5. LGM parameter estimates for employee absenteeism	120
4.6. Changes in the rate of employee turnover at the Center	124
4.7. Tests of alternative LGM measurement models’ goodness-of-fit: Performance appraisals	127

4.8. LGM Parameter estimates for employee performance appraisals	128
4.9. Changes in the number of state DACE utilized by Center consumers	131
4.10. Changes in the number of consumer complaint during the study period	133
4.11. Changes in consumer satisfaction measured by self-report survey	136
4.12. Frequency distributions and means of employee perceptions on the organizational change	138
5.1. Comparisons of pairwise t-tests for employee absenteeism rates across the three waves of measurement	158
5.2. Comparisons of pairwise t-tests for employee performance appraisals across the three waves of measurement	159
5.3. Comparisons of pairwise t-tests for consumer satisfaction between consumers and family respondents	161
5.4. Summary of the results of the interventions on employee attitudes, behaviors, and organizational performance	163
5.5. Successful organizational transformation at the Center	176

LIST OF FIGURES

FIGURE	Page
1.1. The Center within the Georgia community MH systems	12
2.1. Evaluation as an agent for change in the quasi-government	30
3.1. An analytical framework for evaluating organizational change	53
3.2. The changes of organizational structure throughout the intervention period	64
3.3. The relationships between the interventions and outcome variables	77
3.4. A sample of monthly summary of staff time (Bluesheet)	94
4.1. The implied measurement model for comparison of a latent construct across time	105
4.2. Basic Latent Growth Model (LGM)	117
4.3. Absenteeism latent mean change trajectory	121
4.4. The plot of linear growth trajectories for individual employees' absenteeism rate during the organizational change period	122
4.5. Changes in turnover rate at the Center for the study period	123
4.6. Employee performance mean change trajectory	128
4.7. The plot of linear growth trajectories for individual employees' performance appraisal scores during the organizational change period	129
4.8. Changes in the number of state DACE utilized by Center consumers	130
4.9. Changes in the number of consumer complaints for the study period	134

4.10. Mean changes in consumer satisfaction with the Center services	
at short- and long-post measures	137
4.11. Problems of organizational change at the Center	143
4.12. Successes of organizational change as a result of interventions	145
4.13. Successes of organizational change under current management team	146
4.14. Suggestions about ways of improving Center management	147
4.15. Desirable future state of the Center	148
5.1. Comparison of service satisfaction between consumers and	
their family members	160

CHAPTER 1

INTRODUCTION

In recent decades, the notion of the hybrid organization has emerged as a popular concept in public management. A basic assumption behind this emerging trend is that these hybrid organizations, which possess both private and public characteristics, would provide alternatives to existing private and public agencies (Smith & Lipsky, 1993). The hybrid option has become increasingly popular as a result of the “private is better” dogma, combined with the public’s distrust of government management. Today, a wide range of public services is delivered by hundreds of these hybrid entities that can be collectively called the “quasi-government” (Moe, 2001; Seidman, 1988).

The burgeoning quasi-government has attracted considerable attention from both scholars and practitioners in public management because this new mode of governance has raised an issue of accountability, given the fact that these entities serve public purposes and actually make policy decisions in important government service delivery systems (Kettl, 1993; Moe, 2001; Rainey, 1997). Not surprisingly, the series of financial scandals involving major non-profit organizations in the early 1990s has significantly discouraged public trust in the operations of these organizations (Kearns, 1996).

The issues become more serious when the quasi-government tends to engage in “businesslike” management under a contract regime. Government agencies have

increasingly contracted-out services through grants to profit or non-profit service providers, both of which function to varying degrees outside the regular structural and policy network of government management (Donahue, 1989; Kettl, 1993; Mosher, 1980). Therefore, accountability is fundamentally vulnerable because these entities are not clearly subject to political control, as contrasted with public organizations.

The increasing attention to accountability has made governments favor performance-based contracting, in which contractors must demonstrate their program successes to gain and retain government funding (Smith & Lipsky, 1993). In order to ensure successful program implementation, government agencies tend to require that contractors develop individual program goals along with specific performance indicators that permit program evaluation. Consequently, performance-based contracting is seen as prompting organizational change and development among contractors and puts much emphasis on the evaluation of their flexibility and achievements (Clary, Ebersten, & Harlor, 2000).

Performance evaluation benefits an organization in two basic ways: (1) it raises the probability that a program complies with proper procedures, and (2) it advances our knowledge about program management. Evaluation serves as a mechanism to ensure provider accountability by measuring what has been achieved and to what degree (Cutt & Murray, 2000; Dewan, Daniels, Zieman, & Kramer, 2000; Hoefler, 2000; Moxley & Manela, 2000). It also permits constructive feedback to program managers, so they can learn where they are now and how far they are from where they should be. This knowledge-building can powerfully prompt organizational change.

Such pleasant possibilities notwithstanding, performance evaluation of the quasi-government seems rare due to the difficulty of measuring outcomes (Behn & Kant, 1999; Berman, 1998; Kettl, 1993; Milward, Provan, & Else, 1993). As one result, almost no empirical research exists for evaluating what is being done with government funds, despite the growing importance of performance-based accountability (Kettl, 1993; Smith & Lipsky, 1993). Furthermore, little longitudinal evaluation research supports program success from both short- and long-term perspectives, while its importance has received considerable attention from many scholars as one way of establishing the validity of evaluation findings (e.g., Golembiewski, 1990; Macy & Mirvis, 1976; Macy & Peterson, 1983). Mostly, only descriptive and anecdotal data exists, providing few practical guides for those facing radical changes.

This study seeks to address the lack of solid evaluation research on the quasi-government by assessing the processes and outcomes of a recent change effort in the Advantage Behavioral Health Systems, a community mental health (MH) center in Georgia (“the Center” hereafter). In early 1998, the Center launched a comprehensive program of organizational changes in order to revitalize employee attitudes, behaviors, and their performance of high-quality service for the mentally disabled. The Center has seriously examined work structures, policies and procedures, and human resources, with the goal of maintaining accountability for consumers’ needs while providing efficient service delivery.

Today, after approximately two years of re-engineering the entire organization of the Center, the time seems ripe to evaluate whether it is indeed characterized by a new organizational infrastructure that may better fit internal and external demands. With a

carefully-designed evaluation framework, this study proposes that rigorous evaluation of quasi-governmental change can address many, if not all, questions of accountability about what is being done with tax dollars.

This introductory chapter intends to chart relatively unknown territory in public management, building toward the establishment of evaluation as a major tool for quasi-government accountability. Specifically, this chapter consists of four major sections. The first section analyzes the distinguishing characteristics of three types of organizations: private, public, and hybrid. This section contends that hybrid organizations came into being in order to address the weaknesses of both private and public organizations but potentially involve the greatest risks of accountability among the three types.

The second section of this chapter presents the characteristics of the research setting in this dissertation, focusing on the hybrid characteristics of the target. The complexity of the research setting requires subtleties in establishing research objectives.

The third section describes the objectives of the study as well as the research questions in conjunction with their bearing on each objective.

The fourth and concluding section of this chapter illustrates the significance of the study, focusing on the utility of outcome evaluation of quasi-government accountability.

1.1. Distinguishing characteristics of three types of organizations

Several authors discourage sharp distinctions between private and public organizations (Bozeman, 1987; Cohen, 2001; Rainey, 1997). Cohen (2001) succinctly contends that “in a complex, interconnected society and economy there are, in fact, no purely private organizations. All firms are regulated and must be sensitive to legal,

social, cultural, and political constraints....Conversely, government organizations are not immune to considerations of efficiency” (p. 433). Because of the blurring between public and private organizations, the distinguishing characteristics of the two conventional sectors become difficult to observe or define.

Nonetheless, Table 1.1 indicates that differences between these two conventional sectors remain, and their distinguishing characteristics offer a basis on which hybrid organizations can be said to supplement the weaknesses of both private and public organizations. Many advocates of privatization emphasize the strength of voluntary exchanges in the market (Butler, 1985; Savas, 1987). Attracted by the market-driven mode of governance, private organizations have the advantage of responding to market changes quickly, and competition provides an incentive to produce services more efficiently and at a lower cost.

Despite the strengths of the private sector, a market model often does not work, or has a limited capacity to handle certain types of problems that require government

Table 1.1. Distinguishing characteristics of three types of organizations

Types of Organization	Mode of Governance	Strengths	Weaknesses
Private (non-governmental, business firms)	Market model	<ul style="list-style-type: none"> • responds quickly to market change (flexibility) • efficient service delivery • sensitive to customer needs 	<ul style="list-style-type: none"> • less responsive to public interests • less competent to deal with public goods • weak accountability
Public (governmental, public agencies)	Bureaucratic model	<ul style="list-style-type: none"> • strong accountability • sensitive to public interests • competent to deal with public goods 	<ul style="list-style-type: none"> • poor response to market change (rigidity) • inefficient service delivery • poor response to local needs
Hybrid (part public, part private)	Hybrid model (mixture of market and bureaucratic models)	<ul style="list-style-type: none"> • somewhat efficient service delivery • strong sense of mission • responsive to local needs 	<ul style="list-style-type: none"> • allegedly not as efficient as private organizations • allegedly not as accountable as public organizations

intervention (Kettl, 1993; Rainey, 1997). For example, the sellers often have no incentive to compete because the benefits of certain types of services, such as national defense, have an impact on everyone. Also, the sellers sometimes undercut competition purposefully, because of high entry-level costs in the market. This market failure has led to government intervention in the private sector to make sure that anyone in need has access to the services and that the quality of services is acceptable to public expectations.

Government can also fail, however. Although a greater degree of political control can ensure accountability for what government does, the bureaucratic mode of governance often suffers from its rigidity regarding market changes, in ways that include inefficiency in service delivery and monumental insensitivity to local circumstances (Golembiewski & Stevenson, 1998). Government can be inefficient because there are other important values that must be taken into account in public policy, such as responsibility and equity, and because virtually no sharp competition exists in situations in which government is one of the competitors in the market.

Hybrid organizations came into being in response to the weaknesses of both conventional sectors: in effect, they combine the market and bureaucratic modes of governance. While these entities would not be subject to a host of government regulations and expressions of bureaucratic rigidity, they have explicit or implicit government backing, such as state or local tax exemptions. The implication is that hybrid organizations, on the one hand, can be more powerful than private or public organizations because they possess the strengths of both conventional sectors (Koppell, 2001). On the other hand, accountability becomes more problematic in these entities.

Presently, no extensive research explores the scope and types of hybrid organizations. Although his categories are not definitive, Moe (2001) suggests seven categories of hybrid organizations in the quasi-government: (1) quasi-official agencies such as the Smithsonian Institution, (2) government-sponsored enterprises such as the Federal National Mortgage Association, known informally as Fannie Mae, (3) federally funded research and development corporations such as the RAND Corporation, (4) agency-related non-profit organizations, (5) venture capital funds such as the Overseas Private Investment Corporation, (6) congressionally chartered non-profit organizations, such as the National Academy of Public Administration, and (7) instrumentalities of indeterminate character such as the U. S. investigations services.

A neat classification of these hybrid organizations seems impossible and is in any case beyond the scope of this study. However, an examination of the distinguishing characteristics of these three types of organizations would improve understanding of the research setting, where it generates distinctive policy implications concerning the quasi-government. The next section introduces the research setting with attention to its hybrid characteristics.

1.2. The research setting

This section introduces the research setting where this study develops its story. It first defines the characteristics of the Center in conjunction with the previous discussion about three types of organizations. Second, it locates the Center within the Georgia community MH systems. In doing so, the study sketches the history of MH systems in the

state of Georgia to provide background information for the establishment of the Center. Finally, it illustrates the causes of organizational change at the Center.

1.2.1. The characteristics of the Center

The Center is hybrid in that it possesses both public and private characteristics. The Center is public in nature: established by state law, House Bill (HB) 100 in 1993, the Center is operated through federal and state grants and has immunity from state taxation. The Georgia Supreme Court recently upheld the sovereign immunity of community MH centers from legal suits in the state (*Margie Youngblood v. Gwinnett Rockdale Newton Community Service Board et al.*, 2001).

On the private side, the Center's management is not directly subject to state regulations except for a few rules such as leave and holiday policies. The Center intends to transform its management, making it more "businesslike" under contract with the state of Georgia. Each year, the Center enters into an annual contract with the state through the regional board—one of the service planning boards under the Department of Human Resources (DHR) in Georgia. The Center strives to meet or exceed contractual obligations with the state in order to win an annual competition. In response to declining government funds, the Center has tried to expand its revenue sources by identifying more Medicaid consumers and developing new services to collect consumer fees. Significantly also, approximately two-third of the Center staff are now unclassified employees, since the Georgia Civil Service Reform in 1996 led to "employment at will" personnel management.

According to Moe's typology (2001) that describes types of quasi-governmental entities, the Center largely fits into "agency-related non-profit organizations." HB 100 defined the Center as a non-profit organization, one in which mental disability services are delivered by providers that are neither public nor private; this entity is exempt from state tax under IRS 501(c)(3) classification. However, the Center does not fit well with Moe's typology because, while the board members are appointed voluntarily from the community, the Center is required to receive approval from the state for their budget and management practices.

For the purpose of this research to provide another perspective, the Center can be classified as a Government-Funded Non-profit Agency (GFNA), following Smith and Lipsky (1993)'s typology of non-profit organizations. The authors note that many non-profit agencies have been established with government funding since the 1960s in order to respond to community needs, especially for the poor, the mentally ill, and the developmentally disabled. In contrast with traditional non-profit agencies, the boards in GFNAs run like business boards in which the executive directors set the agendas of the boards. This allows the executive directors to exercise greater discretion and to reinvent program management. Nonetheless, these boards are more community-oriented than traditional business boards and sometimes have consumer representatives on the boards.

1.2.2. The Georgia community MH systems and the establishments of the Center

The Center was established in 1971 as one of the earliest efforts in Georgia to institutionalize community-based MH systems. The MH systems in Georgia—and, in fact, nationwide—had been suffering from extensive public cynicism due to the persistent

problems of overcrowding and deplorable conditions in the facilities, which coexist with lack of accountability, inefficiency, and complexity in service delivery. The public outrage about the MH systems nationwide resulted in the Community Mental Health Act of 1963, under which small but comprehensive community-based MH centers that are closely attuned to the needs of mentally ill people were established (Shield, 1999).

By 1972, regional hospitals and community mental health and mental retardation centers began to be set up throughout the state of Georgia. In 1972, the Georgia DHR and the Division of Mental Health and Mental Retardation (later Substance Abuse as well) under the DHR were established as a comprehensive human service agency. The development of the MH system has continued since then; the most important subsequent change came in 1992 when one of the most sweeping health care reforms was launched to create a consumer-driven model of the public MH system.

The call for change in Georgia's public MH system reflected an imperative need for a new way of doing business to get a more responsive and consumer-oriented system of care. By 1992, consumers and families were still not receiving appropriate care when they needed help, and only limited services were available to them (State Commission on Mental Health, Mental Retardation, and Substance Abuse [The Commission], 1992). The public managers in the MH system, on the other hand, suffered from a lack of flexibility in transferring funding sources, as well as from the problem of multiple sources of accountability.

In 1992, the Georgia General Assembly responded to the challenges by establishing the State Commission on Mental Health, Mental Retardation, and Substance Abuse ("The Commission," hereafter). The Commission blasted state MH policies and

practices. After carefully investigating and considering the issues, the Commission identified six major problems in Georgia MH systems in its first report:

- (1) The lack of accessibility to many persons with mental illness
 - (2) No single point of accountability due to fragmented authority lines
 - (3) Inequities in resource allocations and services within the state
 - (4) Disjointed linkages between inpatient and outpatient services
 - (5) The consumers' lack of choice and control over the types of service provided
 - (6) The rigid bureaucratic systems of care due to the lack of privatization efforts
- (The Commission, 1992).

Responding to the problems documented in the Commission report, the state legislature enacted HB100 as an attempt to reduce the utilization of state hospitals by increasing community-based services. HB 100 seeks to delegate decision making authority and accountability to local consumers and families in order to be more responsive to their needs. In doing so, HB 100 created new forms of community governance—the “regional board” as an entity for service planning and the “Community Service Board (CSB)” for service delivery—by which major decisions on MH services are made from the bottom up (The Commission, 1992). Notably, HB 100 specified that patients and their families must constitute half of the members of regional and CSB board.

In Georgia, where one regional board governs one or two CSBs, there are thirteen regional boards and nineteen CSBs. The Center belongs to Regional Board Three. Figure 1.1 depicts where the Center is placed within the Georgia community MH systems.

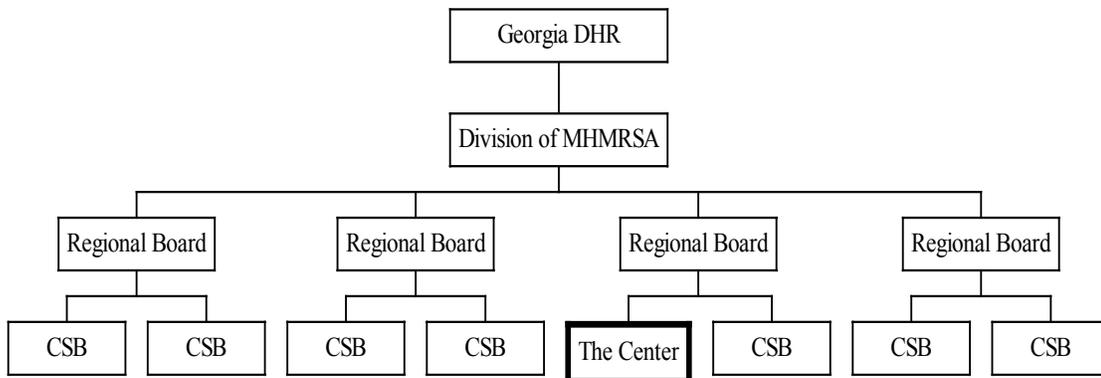


Figure 1.1 The Center within the Georgia community MH systems

Figure 1.1 shows that the Georgia community MH systems consist of three governing entities: the Division of Mental Health, Mental Retardation, and Substance Abuse (MHMRSA); the regional boards; and the CSBs. The Division of MHMRSA is responsible for setting policy regarding the use of all federal and state funds and for maintaining policy oversight. Regional boards are responsible for service planning, coordinating, contracting, and resource allocation functions. Finally, CSBs are responsible for delivering services. In brief, the regional boards make virtually all decisions about service planning and funding while CSBs take responsibility for service delivery. Consequently, the state plays only a coordinating role in the Georgia community MH systems.

The Center operates 35 work units across 10 counties in Northeast Georgia with approximately a \$ 25 million budget funded by the Georgia DHR (Weinstein, 2000). The funding sources include federal and state grants as well as Medicaid, but consumers may pay service fees when they are not receiving Medicare benefits. With approximately 500

employees including salaried and hourly staff, the Center served 9,872 consumers in FY 2000.

The Center provides human services under the following four divisions: Admissions, Outpatient, Rehabilitation, and Residential. The Admissions Division provides intake and referral services for consumers' first contact with the agency. When consumers seek services from the Center, the intake team does the initial assessment and refers the consumers to appropriate work units that best fit the consumers' needs based on their mental status, psychosocial assessment, and medical assessment. The Center sometimes gets referrals from other social service organizations, such as school systems and doctors' offices, and transfers them to the Center's service units.

The Outpatient Division provides four main services: outpatient MH services, alcohol and other drug services, treatment for severely emotionally disturbed children, and outreach and prevention education. Outpatient MH services offer individual and group counseling as well as psychiatric services that support the recovery processes of consumers. Alcohol and other drug services consist of diagnostic assessment, nursing assessment, drug screens, individual or group therapy through outpatient treatment, community detoxification, and intensive outpatient therapy. The Center also offers services for children who experience emotional and behavioral difficulties so that they can return to their schools or families with better coping skills. The outreach program is designed to educate people about mental illness and Center services.

The Rehabilitation Division provides transitional services in order to help consumers move from clinical settings to their communities. Services include case management, day treatment programs, interpersonal skill training, vocational preparation

and training, and supported employment. The Center runs six developmental disabilities service centers across ten counties to give consumers opportunities to learn vocational skills and to return to their communities as more productive citizens.

Finally, the Residential Division provides direct support services to consumers that permit them to maintain their daily lives with more dignity. The division serves people with mental disorders, mental retardation, and a combination of both. Services include providing intensive residential care, running everyday errands, transportation services, vocational development, and emotional support.

1.2.3. The needs for change

The call for change in the Center derives largely from three needs. The first and most direct need came from a critical incident in one of the work units at the Center. In February 1998, the Georgia Bureau of Investigation began to target the Elbert County mental retardation unit for alleged insurance fraud committed by its employees as well as for its poor management of a residential facility. The *Atlanta Journal and Constitution* published a series of investigations related to the incident and reported that Center employees in Elbert County are alleged to have sold at least twenty life insurance policies to mentally retarded people, naming employees as beneficiaries. In addition, critics alleged that employees misused state funds by billing the state for Medicaid services that were never rendered and neglected the physical safety and well-being of patients (The *Atlanta Journal and Constitution*, May 29, 1998). These incidents were a stunning set of events that brought about many abrupt changes in the management of the Center.

The second need for change involved contractual obligations with the state of Georgia. In exchange for receiving the funding necessary for delivering services, the Center must be held accountable for service delivery. The accountability mandate must be met by maintaining a certain level of performance standards set by the state of Georgia. Otherwise, the Center may lose state funding, which is the major financial resource for the Center's operation. Consequently, these contractual obligations direct the Center's attention toward continuous quality improvement for survival in a competitive bidding process.

Finally, in connection with its contractual obligations, the Georgia DHR mandated that the Center must achieve accreditation from the Commission for Accreditation of Rehabilitation Facilities (CARF) for its service delivery. As a nationally known rehabilitation accreditation commission, CARF requires the Center to meet its various performance standards—e.g., maintaining incident and complaint structures—in order to obtain accreditation. Fulfilling CARF standards is critical because, without accreditation, the Center cannot bill private insurance companies or Medicare/Medicaid, and may also lose the state funding it needs to continue to operate. Implicitly and explicitly, meeting the CARF requirements offers the greatest challenge to the Center, and this fact reinforces the need for organizational changes to meet the new performance standards.

1.3. Objectives of the study and research questions

This study intends to test, at various levels of rigor as permitted by available data sources, whether evaluation of the organizational changes at the Center can serve as a

model for the local situation as well as more broadly for quasi-government accountability. Evaluation here acts as an agent for change by exploring the elements that have succeeded or failed in the change processes. Concrete conclusions applicable in the future state are inappropriate because the Center is still in a transitional state. Nor does this study expect any “big bang” change from the organizational turmoil the Center went through during the change process. Rather, this study seeks to make a contribution to the present foundation and progress, if any, for other assessments of the future state of the Center as well as for replicas elsewhere.

Since the beginning of the Center change, virtually no formal evaluation has been conducted in the Center to determine the state of the organization, and this lack of assessment creates uncertainty in management. Evaluation can reduce the uncertainty created in the course of change processes in several ways—e.g., by observing change dynamics and analyzing various types of outcome data. In analyzing outcome data, this study has four emphases.

- It articulates an analytical framework for evaluating quasi-government organizational change with major emphasis on individual employees’ attitudes, behaviors, and performance.
- It examines the extent to which changes have achieved the intended objectives or produced unintended consequences, which will provide perspective on whether past experience can help direct the future state of the organization.
- It helps the Center management, whose major role is to communicate with various stakeholders, as well as suggesting policy implications for state

legislators, public managers, consumers, and the community as a whole.

- It provides similar types of human service organizations with lessons learned from Georgia's experience.

In response to these aims, the present evaluation can serve as a tool for continuous learning that can be fed back to the early planning of new organizational changes at the Center. Learning from evaluation can help the Center increase its ability to successfully cope with continuous organizational change. An organization must find new ways of doing business to survive in the turbulent environment of the contemporary world in which complexity requires continuous knowledge building to deal with unexpected demands. In the course of building necessary knowledge from organizational changes, this dissertation will address the following five research questions:

- Has the Center moved beyond past employee attitudes, behaviors, and performance, due to change interventions?
- Have Center changes served the intended objectives? Have they produced any unintended consequences?
- How close is the Center to the desirable state of the organization after the interventions, as defined by its mission and values? How do we get the rest of the way "there"?
- In what ways, if any, can the outcome evaluation help the Center management as well as stakeholders foster and deal with organizational change?
- What can we conclude, even if tentatively, from the Center's change efforts?

What is generalizable to other human service organizations, especially those facing rapid transition?

1.4. Significance of the study

Organizational changes at the Center were designed to cope with the problem of accountability of a quasi-government in the delivery of important human services. The issue of accountability is of great importance in human service organizations because such organizations provide services to many of the most disadvantaged citizens in our society. Moreover, mental health, mental retardation, and drug and alcohol treatment programs constitute the largest portion of state-contracted social services according to a survey conducted by the International City/County Management Association (ICMA) (Kettl, 1993). Therefore, there must be clear evidence indicating whether the Center is doing a good job in providing important human services. In this sense, evaluation can serve as a tool for ensuring the accountability of the Center.

Technically, evaluating the effectiveness of change interventions allows examination of important questions. Perhaps paramountly: Did the resources utilized during the intervention produce the intended increase in organizational effectiveness, and could similar results be expected from similar interventions for potential organizational problems? (Zmud & Armenakis, 1978). From the evaluation of organizational intervention programs, organizations can determine if change programs account for the observed changes and thus if further utilization of resources should continue.

Moreover, the study focuses on the broad impact of changes at the Center that go beyond performance evaluation. Specifically, this dissertation rests on a five-fold

rationale that adds to its significance. First, the Center must communicate with many stakeholders so that it can achieve substantial agreement among multiple interests. Coming to mutual agreement is difficult because goals and performance indicators in human service organizations are in many cases subject to diverse interpretations and complex compromises. Techniques of evaluation can assist managers in such cases by providing evidence supporting managerial excellence. Also, agreement about program goals tends to ease implementation while decreasing resistance to new programs.

Second, researchers in organizational change have deplored the fact that evaluation research in the field still suffers from a lack of methodological rigor (Nicholas & Katz, 1985; Porras & Berg, 1978; Robertson, Roberts, & Porras, 1993). These critics have emphasized that many researchers have given short shrift to the quantitative approach to evaluation research, while others have been too reliant on subjective or self-report data with weak research designs. This study will contribute to the literature by supporting “methodological pluralism,” blending subjective and objective data, with a longitudinal research design (Moxley & Manela, 2000).

Third, evaluation research on organizational change has focused largely on employee experiences in implementing change interventions while neglecting the responses from consumers (e.g., Coyle-Shapiro, 1999). However, the opposite is true at the Center where the agency has been assessing consumer satisfaction for the last several years, but virtually no attempts have been made to measure employee reactions to the program of change. This study will fill a major void by incorporating both employees and consumers’ reaction to the changes.

Fourth, as the first comprehensive evaluation effort since July 1998, this study can benefit the Center, and perhaps others as well, because it will create an extensive database on which ongoing evaluation can be based. This dissertation will collect, organize, analyze, and evaluate various agency records and subjective responses concerning employees' work attitudes, behaviors, and performance. These data not only provide valuable baseline information to the Center but also permit policy lessons for the stakeholders, including state legislators, public managers, and consumers.

Finally, the study also plays an instructive role for similar types of human service organizations as well as for other CSBs statewide. Despite the sizable MH reform in Georgia, no comprehensive evaluation has been conducted by any CSBs in the state and, consequently, only anecdotal evidence exists about what they have attempted and how well they have worked (The Commission, 1996). This study can pave a significant part of the road for evaluating what has been achieved since the Georgia's MH reform.

1.5. Organization of the study

This introductory chapter presents distinguishing characteristics of private, public, and hybrid organizations in order to clarify the research setting and the policy implications of the study. Then it describes the objectives of the study and several research questions on which further analysis will be based. Finally, it illustrates the significant elements of the study, focusing on the utility of outcome evaluation.

How will this dissertation build on these introductory sections? Chapter 2 provides a review of the literature that relates to evaluation of change programs in the

quasi-government. In the literature review, the focus is on the use of evaluation as a tool for ensuring accountability as well as for improving organizational performance.

Chapter 3 proposes an analytical framework on which evaluation of the Center's changes will be based, and factors on which the change impacts will be measured are identified. The proposed framework includes intervention as an independent variable and an array of the impacts of the change interventions as dependent variables. The relationship between variables represent a set of hypothesized outcomes related to several research hypotheses.

Subsequent sections describe basic evaluation designs, list multiple measures, and detail methods of measurements. Three major evaluation designs—now-then, abbreviated time series, and interrupted time series—are utilized for measuring the impacts of the change interventions. Multiple measures and methods will cross-validate the research findings.

Chapter 4 illustrates the analytical procedures used to test nine hypotheses in order to answer a major research question: Have the Center changes achieved the intended objectives, moving beyond past employee attitudes, behaviors, and performance as a results of change interventions? Several analytical tools—from traditional t-tests to the Latent Growth Model (LGM) approach—serve to estimate whether the Center interventions have produced major and expected effects.

Chapter 5 presents a discussion of conclusions. The reliability and validity of the data are discussed and these provide evidence for statistical significance of the research findings. The findings imply several implications from theoretical, managerial, and policy perspectives and the implications of the research findings suggest the desirable

future state of the Center. The limitations of the study are discussed, and these suggest directions for future research.

CHAPTER 2

LITERATURE REVIEW

This literature review summarizes a growing body of evaluation research on organizational change, highlighting the important role of evaluation for ensuring quasi-government accountability. The chapter has four emphases. First, it addresses the issue of accountability in quasi-governments and the role of evaluation as a tool for ensuring accountability. Second, the text seeks to view evaluation as an agent for change that stimulates various kinds of change efforts as well as assesses initiated programs. The third section focuses on the major streams of evaluation research on organizational change among three sectors: private, public, and hybrid. Finally, the chapter declares that evaluation is not living up to our expectations, in either promoting organizational change or guaranteeing quasi-government accountability.

2.1. Accountability in the quasi-government

The expansion of hybrid organizations into the delivery of governmental services has been quite striking in recent years. This development has been described under several different rubrics: government by proxy (Kettl, 1988), indirect administration (Mosher, 1980), the shadow state (Kettl, 1993), the hollow state (Milward, Provan, & Else, 1993), the contract state (Greve, 2001), and, most commonly, privatization

(Donahue, 1989; Moe, 1987). Government agencies have taken a back seat in many discussions related to delivery of important public services, while hybrid organizations—private or non-profit providers—deliver services through contracting. The increasingly common practice of contracting fundamentally changes the nature of public management (Mosher, 1980; Seidman & Gilmour, 1986).

The increased role of the quasi-government in delivering public services reflects in substantial part the public's distrust of government service delivery. As shown in chapter 1, Georgia mental health (MH) reforms imply that the government has failed to provide MH services that efficiently answer the needs of individual consumers. Widespread perceptions about government inefficiency and increasing public expectations have made it necessary to find alternative ways of delivering government services in an emerging sector (Salamon, 1990). In addition, the quasi-government has grown due to the fact that its services are presumed to have a broader impact on the general society, as opposed to the specific objectives alleged to exist in the private sector (Golembiewski & Stevenson, 1998).

Thus, some scholars claim that quasi-governments may be an alternative to government inefficiency (Butler, 1985; Savas, 1987). Furthermore, by means of regulation, it is sometimes easier to ensure equity and accountability in public services provided through contract than in services provided through government agencies. (Wilson, 1989). Others, however, maintain that accountability in these hybrid entities is vulnerable, due to the lack of government control over their management (Haque, 2001; Gilmour & Jensen, 1998; Moe, 1987, 2001; Mosher, 1980). To illustrate, scandals in the

nation's giant charities and alleged inefficiencies in their administration have increased suspicions about non-profit providers (Hoefler, 2000; Kearns, 1996).

In 1992, William Aramony, the president of United Way, resigned; he was later sentenced to seven years in prison for converting the charity's money to his personal use. As the head of the nation's largest charity network, he earned a yearly salary of \$390,000 plus \$73,000 in benefits and enjoyed chauffeured cars among other perks (The Washington Post, October 16, 1992; Denver Post, November 12, 1997). In 1995, the Foundations for New Era Philanthropy filed for protection under Chapter 11 of the U.S. bankruptcy code because of mismanagement of its investment pool. These events fueled controversy about accountability and damaged public trust in the entire non-profit sector (Kearns, 1996).

Several scholars warn about specific manifestations of the problems of accountability in quasi-government arrangements. For example, Smith and Lipsky (1993) observe that contracting diffuses accountability for delivering public services because of the transfer of responsibility from government to contractors. Rainey (1997) also views that accountability becomes a central issue in a quasi-government arrangement because the government loses direct administrative control of outcomes. Moreover, values other than efficiency are at stake, since many non-profit organizations are dealing with the most vulnerable citizens in society. Equity, responsiveness, and accountability must be considered in public service along with efficiency and fiscal integrity.

The case for businesslike management often results in unexpected consequences. For example, the U.S. government has been seeking private efficiency in service delivery, but, ironically, the aspirations of entrepreneurial government have been tarnished by

corruption, waste, and inefficiency. The magic of competition often does not work in the market because of information asymmetries between government and service providers and because of the lack of qualified service providers. The government, therefore, must become a “smart buyer,” with more aggressive management of government-private relationships, because the quasi-government not only spends tax dollars but also exercises considerable discretion over the use of public authority (Kettl, 1993). However, the government has little administrative capacity to engage in performance evaluation. For example, Kettl (1993) finds that just eleven workers in one Wisconsin county supervise 143 contractors and 360 separate contracts, accounting for sixty million dollars. In this case, the contractor’s self-report becomes a major oversight mechanism and, in turn, aggravates performance tracking in quasi-government.

Similarly, in analyzing a community mental health system, Milward et al. (1993) find that the state exercises very little control over how the system spent public funds. The shortfalls are perhaps greatest in mental disability service delivery. The primary reason for the lack of control is that no other options exist in the mental health market to provide service for mentally ill people. Simply put, competition does not exist, due to the few qualified providers in the mental health market. In addition, the department of health services lacks the administrative capacity to exercise effective oversight of the entities, no matter which wins the often-tepid competition.

In sum, although the contracting regime has grown into a major form of government activity, contractor accountability has remained a major risk in quasi-government arrangements. Contrary to the promises of privatization advocates, competition often does not work in the service market due to the few qualified providers

and the lack of government capacity to manage the contracting relationship. As a result, the government cannot effectively exercise performance monitoring over contractors, producing a degenerative cycle of contractor accountability in quasi-government arrangements.

2.2. Evaluation as a tool for accountability

Given the concern about accountability on the part of contractors, the rationale for performance evaluation, broadly defined, seems compelling. Evaluation of the quasi-government can reveal whether government funds are used for their intended public purposes (Langbein, 1980; Moxley & Manela, 2000; Wholey, 1989). Evaluation offers factual information to government agencies as well as to legislative oversight bodies. It also provides feedback to managers for program adjustment (Sonnichsen, 1989). In the basic sense, evaluation becomes an important tool for ensuring accountability of the quasi-government.

Evaluation helps public managers to provide public accountability (Kearney & Berman, 1999). Kettl (1993) makes this case by viewing quasi-government arrangements in terms of principal-agent theory. While contracting can save money, it imposes considerable transaction costs due to the information asymmetries between the government (principals) and service providers (agents). Since the government often does not know about the provider quality, and because only a few qualified providers exist in the market, the principals often choose unqualified providers who are not likely to produce optimal results. This is usually called as the adverse selection problem. In addition, the private providers may not work hard, and may even deceive the principals,

because they know that their aberrant behavior is not likely to be detected by the principals. This is the moral hazard problem.

The “market theory” of competition fits such features poorly. These two basic kinds of transaction costs can generate inefficiency and ineffective program management, both of which can significantly undermine public trust and confidence. Simply put, contracting cannot solve the central problems of government inefficiency. Kettl (1993) believes that evaluation can eliminate some of these problems by determining what the government has to buy and by developing the expertise to determine what it has bought. Clearly, evaluation can serve as a tool for the government to behave like a “smart buyer” by increasing organizational learning about ways to detect and correct errors.

Measuring performance or outcomes is critical because this seems the only way to know whether an agency is doing a good job. The public and other stakeholders want clear evidence about organizational performance because mounting operational costs deplete the public purse. For example, approval of public programs or initiatives by a cost-conscious public becomes more difficult, even with satisfactory evaluation (Paul & Gross, 1981). The measurement of program performance continues to receive attention due to the resource constraints on the government. As Kearney and Berman (1999) point out, “measurement helps increase accountability and, thereby, trust between public organizations and citizens” (p. 2).

2.3. Evaluation as an agent for change

The concern about accountability has induced specialists to create a new form of contracting between government and profit or non-profit providers—performance-based

contracting (Behn & Kant, 1999; Clary, Ebersten, & Harlor, 2000). A performance-based contracting, according to Behn and Kant (1999), “specifies what results the vendor should produce, giving the vendor the flexibility to determine how best to produce them, and then pays the vendor only when it has been successful” (p. 471). Government agencies have increasingly asked contractors to develop and keep track of performance indicators and require them to meet specified levels of performance as a condition of maintaining funding. In recent years, for example, several states have implemented performance-based contracting with community mental health centers, where contractors are paid in accordance with a set of performance criteria, such as the number of hospital days prevented by the community-based care (Gaynor, 1990; Smith & Lipsky, 1993).

It is often argued that the funding mechanism underlying performance-based contracting tends to accelerate organizational development and changes because contractors must show that their program is successful to maintain government funding (Clary et al., 2000; Smith & Lipsky, 1993). In non-profit organizations, authority shifts from the board to the executive directors, who exercise greater discretion in order to transform the organization to be more entrepreneurial in program management (Smith & Lipsky, 1993). The executive directors deliberately make efforts to transcend the “public agenciness” of the organization and become more “businesslike” in order to achieve public purposes efficiently (Sawhill & Williamson, 2001). Borrowing Donahue’s (1989) term, non-profit organizations are pursuing “public ends” with “private means.”

Evaluation here can play an active role in increasing a contractor’s ability to successfully cope with and master organizational change. Under the current conditions of substantial pressure for performance improvement, evaluation helps build knowledge

to guide organizational development and change. Knowledge building through evaluation can increase organizational capacity “to judge what the agency does; how it does it; and the consequences, outcomes, and effectiveness of its programs, procedures, and products” (Moxley & Manela, 2000, p. 317). Equipped with the information obtained through evaluation in the best-case scenario, an agency can identify a need for change, learn how to approach change, and judge the effectiveness of the initiated programs.

Figure 2.1 depicts the role of evaluation as a facilitator of organizational change in the quasi-government arrangement. Demands for accountability in the quasi-government tend to require evaluation of what has been achieved with public resources.

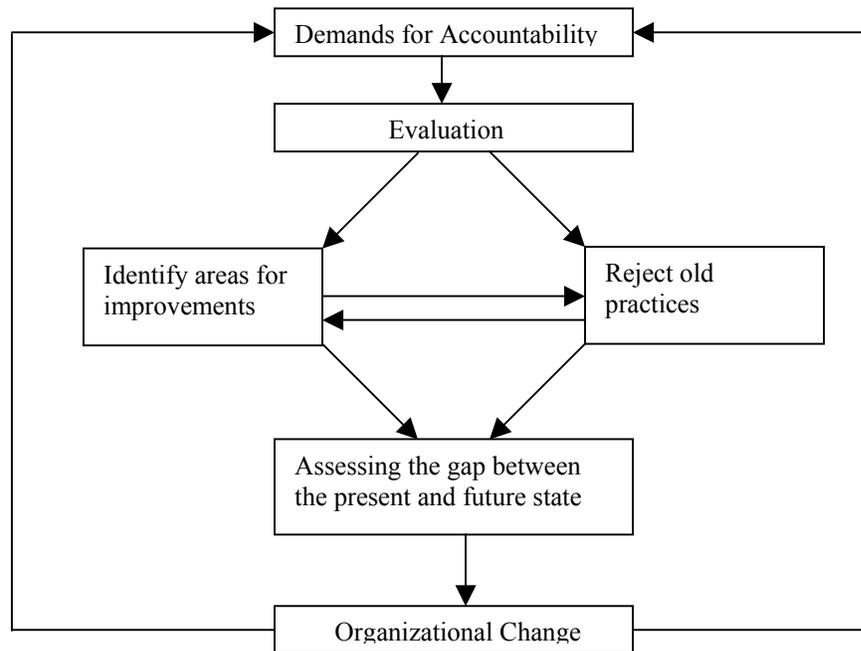


Figure 2.1. Evaluation as an agent for change in the quasi-government

Evaluation outcomes tend to identify areas of program improvement and suggest new ways of accomplishing program goals. Simultaneously, the new requirements for change reject old practices and immediately bring instability to the organization (Lovelady, 1980; Sonnichsen, 1989). Otherwise, people in an organization might feel more comfortable with the old practices and might even perceive change as too risky. Sonnichsen (1989) thus observes that “evaluation is often perceived as a threat to established routines and power structures and program managers expend considerable effort minimizing turbulence in their programs” (p. 61).

Rejecting old practices implies the need for a new state of organization. Thus, the next necessary step is defining the present state of the organization in terms of the future state to be achieved. A clear definition of the future state of the organization offers several advantages, such as improving employee compliance, reducing uncertainty, and creating a sense of urgency. In addition, a description of the future state can provide a rationale for managers to develop change strategies to reduce the gap between the present and future state of the organization (Beckhard & Harris, 1987).

Change is more successful if evaluation accurately detects organizational problems through comparison to the future state and provides feasible alternative methods achieving goals. It becomes apparent that much more needs to be done than simply following the rules and standards of the oversight authority. New demands for accountability require attention as the organization transforms into a new state. Much effort must be directed toward re-engineering the work process, employee empowerment, and responsiveness to consumer needs. Evaluation in the ideal case multiplies the speed of change.

2.4. Evaluation research in quasi-government organizational change

This section introduces evaluation research on organizational change in the quasi-government. Since very little research has been conducted on quasi-government organizational change, I will first introduce private and public sector cases for a preliminary discussion of the ways that evaluation research has been conducted in these conventional sectors. Then I will describe evaluation research in the quasi-government. Rather than the full panoply of evaluation research, the emphasis here will be on empirical studies with identifiable change interventions and research methods.

2.4.1. Evaluation research of organizational change: The private sector

A growing body of research documenting the effects of organizational change has proliferated in the private sector (e.g., Carnall, 1980; Coyle-Shapiro, 1999; Downie & Pastoria, 1997; Huse & Beer, 1971; Golembiewski, Hilles, & Kagno, 1974; Golembiewski & Rountree, 1998, 1999; Kimberly & Nielsen, 1975; Murphy & Sorenson, 1988; Zand, Steele, & Zalkind, 1969). The prevailing wisdom holds that the private sector is the leader in terms of the number of evaluation studies on organizational change. However, the discussions about the quality of evaluation seem inconclusive, although strong positive claims have been made about success rates in the spheres circumscribed by Organization Development (OD) and Quality of Working Life (QWL) (e.g., Golembiewski, 1990).

Some contend that evaluation research of organizational change has suffered from a lack of methodological rigor (Nicholas & Katz, 1985; Porras & Berg, 1978). Others, however, show evidence for the rigor of evaluation on both private and public sector

changes (Golembiewski, Proehl, & Sink, 1981, 1982; Golembiewski & Sun, 1990). Still others reserve judgment regarding methodological rigor in organizational change evaluation (Terpstra, 1981, 1982).

Those who are concerned about methodological deficiencies maintain that few published evaluation studies are well documented and use solid measures with rigorous research designs. Many research findings are descriptive and rely on anecdotal evidence or subjective judgments. Although understandable, the lack of longitudinal measures devalues findings because change in many cases takes time to produce intended effects (Nicholas, 1979; Nicholas & Katz, 1985; Porras & Berg, 1978; Robertson et al., 1993). Additionally, weak research designs create many threats to the internal validity of the findings, which generates uncertainty about whether outcomes result from change interventions or from other causes.

In contrast, some scholars have a quite positive view concerning evaluation research with supporting evidence in OD applications (Golembiewski et al., 1981, 1982) as well as in QWL interventions (Golembiewski & Sun, 1990). Golembiewski et al. (1981, 1982) evaluate a large batch of OD applications and find that at least 70 percent of OD interventions produce positive and intended effects on outcomes. In their analysis of more than 200 QWL applications, Golembiewski and Sun (1990) assign degrees of methodological rigor to evaluations of change interventions, using both hard and soft measures of outcomes. They conclude that the common wisdom is overly simple. The authors argue that all 231 QWL evaluative studies involve some level of methodological rigor based on selective criteria, such as control group utilization and statistical

sophistication. They go on to state that the variance has only a modest impact on success rates.

Terpstra (1981, 1982), however, provides mixed results regarding the rigor of evaluation studies on organizational change. Based on 67 evaluation studies associated with the selected OD interventions, the author finds that, contrary to what one might expect, empirical studies surpass descriptive studies and case studies in number, and a significant number of studies employed control or comparison groups. However, other evidence, such as non-representative sampling, excessive use of soft measures, and lack of statistical sophistication, permits questions about the methodological rigor of the evaluation studies.

Despite the persistent debates about methodological rigor in evaluation studies, there seems to be a growing trend toward more rigorous methods and stronger research designs in private sector organizational change evaluation. Some scholars tend to use longitudinal design with a control group to uncover the real effects of change over time (e.g., Golembiewski et al., 1974; Zand et al., 1969). Others emphasize the importance of multiple measures and strong statistical analyses in order to remove many threats to internal validity (e.g., Kimberly & Nielsen, 1975).

Recently, more sophisticated evaluation research of organizational change has emerged with well-refined research designs and multiple measures (e.g., Coyle-Shapiro, 1999; Golembiewski & Rountree 1998, 1999). Coyle-Shapiro (1999) empirically tested the impact of TQM interventions focusing on employee participation in education and training. Three waves of employee self-report data were collected: 6 months prior to the treatment, 9 months after the introduction of TQM, and 32 months after the treatment.

Hierarchical regression analysis isolated significant differences between measurement waves and revealed a positive relationship between employee perception of changes and participation in TQM interventions. Contrary to the TQM literature, however, employee participation did not enhance commitment towards the organization.

Golembiewski and Rountree (1998, 1999) thoroughly evaluated change interventions in a medical nursing unit that was suffering from role devaluation and subsequent low employee morale. Major interventions included survey feedback and structural redesign of the work system to improve role clarification and organizational performance. Self-reports and several other unobtrusive measures, such as the number of uses of patient call lights and costs of nursing services, were used to measure differences between pre- and post-conditions in the work setting in terms of employee satisfaction, work environment, and employee performance. A one-way ANOVA produced almost uniformly significant and positive effects of interventions on the nursing unit. A control group, carefully equalized in setting but with no treatment, helped validate these findings by revealing non-significant impacts on the comparison group in the post condition.

The advances in evaluation studies of organizational changes concern not only changes in the intended direction, but also the amount of change that occurs.

Golembiewski, Billingsley, and Yeager (1976a) operationalized a change typology in which they identified three types of change —alpha, beta, and gamma change. Alpha change occurs in measuring the difference in a relatively fixed state within a stable time interval. Beta change involves the change of a portion of the measurement standard that makes the measurement of differences during a time interval vulnerable. Gamma change refers to a sweeping change, in which basic redefinition of the quality of organizational

life introduces a new psychological state or perception. The authors point out that gamma changes are the prime intended effects of the changes, in contrast to alpha or beta change, where a lesser degree of change occurs within a given state.

Factor analysis is a major tool for isolating the multiple forms of change, defining substantial incongruence of pairs of between-wave factorial structures as gamma change. The data come from an OD structural intervention, the installation of Flex-Time in a R & D department (Golembiewski et al., 1974). In this study, the authors sought to assess the impact of Flex-Time on employee attitudes and behaviors at work with both self-report data and hard measures, such as absenteeism, cost of support service, and times of worker arrival and departure. An abbreviated multiple time series design was used, and pretest, short-post, and long-post measures were compared using within and between waves of measurements. The significance of the differences was determined by t-tests.

The authors conclude that the structural intervention generated major differences in both the attitudinal and behavioral senses. But the new questions are daunting: How much of the change occurred because of the intervention? And can analysis define a new state that is transformationally different from old practices (i.e., gamma change)? To test the magnitudes and kinds of change, the authors used Ahmavaara's (1952) technique for estimating the common variance between pairs of factorial structures from self-report data. Specifically, Ahmavaara's technique permits identifying both the pattern and the magnitude of factorial structures by computing the intra-class and product-moment correlation coefficients (Golembiewski, Billingsley, & Yeager, 1976b). Based on the factorial congruence method using Ahmavaara's technique, researchers isolated "gamma change," or major changes in the patterns as well as magnitudes of pre vs. post estimates.

Later, Golembiewski (1990) expanded his multiple models of change by testing the phase model of burnout for gamma effects with Ahmavaara's procedure. He found substantial evidence that gamma differences exist in each of the seven pairs of burnout phases. The common variances of factorial structures shared between each pair of phases are less than 50 percent, on average, using the squares of both the intra-class and product-moment correlation coefficients. This test demonstrates that burnout phases serve as a reasonable measure for estimating gamma change.

Note, however, that explicit criteria for distinguishing alpha, beta, and gamma changes still remain elusive. Golembiewski et al. (1976a) admitted that "today, we simply do not know how to distinguish the three types of change in any reasonably rigorous and consistent way. Too much is left to the imagination. Our purpose here is to take a small step toward what we need to know" (p. 143). Later, the authors also acknowledged the uncertainty involved in distinguishing beta change from gamma change (Golembiewski & Billingsley, 1980). Nonetheless, Golembiewski and his associates have significantly enriched the evaluation literature on organizational change by distinguishing kinds of change and change dynamics.

Since Golembiewski's proposal for multiple forms of change using Ahmavaara's procedure, three distinctive analytical approaches have appeared for distinguishing alpha, beta, and gamma changes: the coefficient of congruence method, the retrospective procedure using a "Then" measure, and the Confirmatory Factor-Analytic (CFA) procedure, which uses the Linear Structural Relationships (LISREL) program (Armenakis, 1988; Schmitt, Pulakos, & Lieblein, 1984).

Zmud and Armenakis (1978) proposed the coefficient of congruence method to assess alpha, beta, and gamma change. According to the authors, a high coefficient between factor structures of before and after measures indicates a lack of gamma change, while a low coefficient between factor structures demonstrates gamma change. Alpha and beta changes were determined by difference scores between “Actual” and “Ideal” scales administered at pre- and post-measures. For example, if change was observed for both the Actual and Ideal scores while the difference between them did not change, the observed change was due to a change in the measurement scale, not a change in actual behavior, or beta change. Conversely, a change in the difference between the Actual and Ideal scores with no change in the Ideal scores indicates evidence for alpha change.

Terborg, Howard, and Maxwell (1980) suggested the retrospective procedure to detect the three types of change at both the individual and group levels of analysis. In addition to the traditional pre- and post-difference, this second approach suggested a “Then” measure, in which respondents are asked to indicate how they perceived themselves to have been just before the change occurred. Specifically, a pre-test is given at time 1, and a post-test and a “Then” measure are administered at time 2. Alpha change occurs with a difference of means for post- and then-measures. Similarly, beta change is indicated by a mean difference between pre- and then-measures.

Gamma change can be defined by three different methods. First, the authors recommended computing correlations between each pair of pre-, post-, and then-measures, or what they call “profile shapes.” If the correlation between post- and then-measures is substantially greater than the correlations between pre- and post-measures, and between pre- and then-measures, gamma change has occurred. The second approach

involves computing standard deviations for pre-, post-, and then-measures, or what they call “profile dispersions.” If the standard deviations of the post- and then-measures are not different from each other but each is different from the standard deviation of the pre-measure, it is likely that gamma change has occurred. Third, substantial differences in both profile shapes and dispersions can provide the strongest evidence of gamma change.

The CFA procedure provides the third method for detecting change dynamics. Schmitt (1982) introduced the CFA method in an analysis of attitude change among 116 individuals who obtained a new job after a certain period of unemployment. The CFA method typically represents the observed response as a linear function of a latent construct and examines the extent to which differences in the pattern of factor loadings, the scale metric, and the error variance exist between waves of measurement (Schmitt, 1982; Steenkamp & Baumgartner, 1998; Taris, Bok, & Meijer, 1998).

The method involves sequential steps for testing and identifying alpha, beta, and gamma change. It is recommended that gamma change be defined first by observing different patterns of factor loadings between measures. Beta change can occur if people respond to the items in different ways across time intervals. In other words, if a response of 3 means “somewhat agree” at time 1 but “agree” at time 2, the metric variance indicates beta change. Mean difference between measures, or alpha change, becomes meaningful only after safely eliminating the effects of gamma and beta change across waves of measurement. Comparison of mean difference is meaningless if pre- and post-measures represent two different constructs.

In conclusion, three points are worthy of note. First, there is little agreement across the three different analytical procedures described above. Based on the

comparisons of the results of the three methods, for example, Schmitt et al., (1984) found that the findings of Terborg, et al. (1980) and Zmud and Armenakis (1978) showed somewhat similar patterns of beta change, but different degrees of gamma change. The gamma change identified by Zmud and Armenakis (1978) was more consistent with that of Schmitt (1982), but these two methods produced different results regarding beta change.

Second, gamma change should be considered first, before assessing beta and alpha change. If gamma change occurred, any comparisons between time periods can be misleading, because the pre- and post-measures represent different constructs (Millsap & Hartog, 1988; Taris et al., 1998; Vandenberg & Self, 1993). Thus, Golembiewski et al. (1976a) warned that the use of conventional mean difference tests to detect change produces meaningful results only under the stable measurement across time periods.

Finally, the CFA procedure seems to be the most practical approach for detecting alpha, beta, and gamma change. Despite the strengths of Ahmavaara procedure (e.g., Golembiewski et al., 1976b), little research published has subsequently utilized the approach (examples include Macy & Peterson, 1983 and Randolph, 1982), and even the necessary computer software is no longer available for researchers. Similarly, the coefficient of congruence method had only a few applications in the late 1970s and early 1980s (e.g., Armenakis & Smith, 1978; Armenakis & Zmud, 1979; Randolph, 1982). No further published research has appeared in recent years using this approach. Likewise, the retrospective procedure proposed by Terborg et al. (1980) is found in no significant research since the work of Terborg and Davis (1982).

Conversely, the CFA procedure has drawn consistent attention from scholars in the field of psychology and management (e.g., Millsap & Hartog, 1988; Schaie & Hertzog, 1985; Schmitt et al., 1984; Steenkamp & Baumgartner, 1998; Taris et al., 1998; Vandenberg & Lance, 2000; Vandenberg & Self, 1993). There is no specific reason why the CFA procedure has been sustained while others have faded away. Some scholars suggest that the CFA procedure offers unique strengths; for example, it offers “an overall test of similarity of the pre and post variance and covariance matrices as well as tests for various types of change and the degree of variance associated with each” (Schmitt, 1982, p. 345). However, the CFA approach may still be unfamiliar to many researchers, especially in public administration. Also, the practical importance of a significance test seems inconclusive (Schmitt et al., 1984).

2.4.2. Evaluation research of organizational change: The public sector

For the last two decades, organizational change has become a common goal in public organizations. A wide array of demands from consumers, funders, and regulators overwhelms public organizations with considerable pressure to perform well (Berman, 1998; Moxley & Manela, 2000). The environmental challenges and high expectations for performance strongly encourage planned change to keep pace with a newly competitive world. In addition, public organizations must communicate with stakeholders to make sure that public funds are used efficiently for program success (Langbein, 1980; Sonnichsen, 1989; Wholey, 1989). Evaluation data can assist public managers in coping with such environmental challenges.

Despite the importance of the evaluation of program performance, as noted, effective exemplars are rare, and so is the evaluation of organizational change programs (Sonnichsen, 1989). Although a few studies recognize the importance of evaluation in public sector organizations and attempt to evaluate change interventions with analytical models and measurable data (e.g., Lippitt, Langseth, & Mossop, 1985), many still remain to be done. Overall, little evaluation research on public sector organizational change has been conducted and communicated, and this lack of evaluation research prevents important policy learning from change interventions (Ingraham, Thompson, & Sanders, 1998).

The primary reason for the lack of evaluation research on public sector organizational change is the considerable conceptual problem of defining goals. In the public sector, defining clear and readily measurable performance indicators is always challenging and may seem impossible (Dobbs, 1994; Golembiewski, 1969, 1985; Rainey, 1997). Multiple and conflicting goals in public organizations often prevent methodological rigor because evaluation criteria are uncertain. Put otherwise, poor descriptions of dependent variables inhibit the identification of a clear set of outcome data in evaluation research (Nicholas & Katz, 1985; Wholey, 1989). Worse yet, ambiguous definitions of outcomes can even undercut the creation of surrogate measures (Bent & Kant, 1999).

Consequently, the case study has emerged as a major tool for assessing public organizations (Behn, 1993; Goodsell, 1994). For example, Behn (1993) advocates a case-analysis approach on the grounds that organizational reality precludes scientific research. As he explains, “The objectives of most public organizations are rarely defined

in ‘concrete terms,’ and it is almost impossible to exercise the experimental control necessary to isolate the important factors under study....Real conditions cannot be controlled so as to tease out the effects of any single managerial actions” (p. 44).

However, case analysis, as a major tool for public organization analysis, offers an uncertain basis for scientific generalization (Yin, 1994). Although it can provide rich information, case study invites a lack of methodological rigor and many threats to the internal validity of the findings.

Suggestive, if not definitive, evidence for this conclusion is perhaps best illustrated by a series of evaluation reports from the National Performance Review (NPR). Stimulated by Osborn and Gaebler’s (1992) book, Reinventing Government, the federal government established several hundred “reinvention laboratories” to pilot innovations (Kamensky, 1998). A wide variety of change interventions have been carried out—from structural redesign to self-directing teams—to move toward businesslike management, which in theory will lead to more efficient, trustworthy, and empowered government.

Approximately one year after the program was launched, a series of assessments of the NPR achievements sought to find evidence of success (e.g., Kamensky, 1998; Kettl, 1994, 1998; Kettl & DiIulio, 1995). Unfortunately, evaluations of the federal programs are, for the most part, based on inferential and anecdotal evidence (Kamensky, 1998). Citing the results of an employee attitude survey, for example, Kettl (1998) reports that 59 percent of employees, among the places where the NPR was a top priority, “thought” productivity had improved. Many questions remained unanswered: Do those successes indeed result from the reinvention efforts? If so, how long will they last? And

can “successes” built with private sector approaches and often resting on criteria appropriate to that nexus be considered successes in the political context?

Golembiewski (2002) criticizes the NPR as doomed to failure because it not only lacks a model for applications, but also maintains bureaucratic structures that undercut management initiatives such as TQM. For example, according to the author, the low success rates for TQM (approximately 30 percent) are attributable to the pathology of bureaucratic structures that tend to prevent regenerative interactions among team members. In contrast, Golembiewski reports that the success rate of public sector OD applications is substantial, and the OD experience in the public sector can be comparable to the private sector applications (Golembiewski et al., 1981, 1982). Nonetheless, his analysis focused on the selection of the OD success cases rather than on specific descriptions of evaluative study on individual OD applications.

Poister (1989) suggested an example of comprehensive “OD-type” interventions to revitalize the Pennsylvania Department of Transportation (Penn DOT). The approximately 6 year-long revitalization programs included structural, managerial, and behavioral interventions designed to improve employee satisfaction and organizational productivity, thereby regaining legislative support for, as well as public trust in, Penn DOT. The author argues that the outcomes produced intended effects, such as improved morale and performance, enhanced road condition, and a new public image. However, these results are seldom empirically tested but rather rest mostly on anecdotal evidence. Although the results of a 1986 survey of employee attitudes received “good” or “excellent” ratings for selected conditions, no “before” or “comparison” measure supports the findings. This lack reflects many internal validity problems.

Nevertheless, a few exemplars of solid organizational change evaluation exist in the public sector (Golembiewski & Kiepper, 1976; Lippitt et al., 1985; Paul & Gross, 1981). Recognizing the importance of evaluation in organizational change, Lippitt et al. (1985) attempted to evaluate a one-year major change effort in the Administrative Department of the World Bank. Notably, the authors introduced an analytical model that suggested useful factors and criteria for evaluation of organizational change. Multiple methods, from documentation analysis to in-depth interview, and measures, involving both hard and soft data, were used to determine the efficacy and effectiveness of change interventions. Although preliminary, the results indicated that OD projects at the World Bank generally improved employees' interactions, internal and external communications, and organizational productivity.

In assessing the effects of team building efforts among Metropolitan Atlanta Rapid Transit Authority (MARTA) senior staff, Golembiewski and Kiepper (1976) focused on the effects of the OD intervention on interactions between senior staff and directors of departments as well as MARTA board members. Multiple measures, including a paper-and-pencil test and an interview, were employed to evaluate three major interactions of the MARTA managerial team. Further, the authors tested both short- and longer-run effects over a nine-week period to examine whether temporary effects led to misleading conclusions about overall team building effectiveness.

Longer-range assessments were also attempted by Golembiewski (1994), extending over a decade. A set of interviews were conducted with MARTA executives and additional quantitative data were gathered, but statistical tests for change over time were not possible due to the small sample size. The results showed limited successes

consistent with OD values and approaches, and the author concluded that many advantages still remain with MARTA.

Paul and Gross (1981) assessed a year-long OD project in a municipal government setting to see whether OD interventions can improve productivity as well as employee morale. The authors' treatment of the research design is noteworthy. They clearly identified several OD interventions, used multiple measures including both hard and soft data, made frequent measurements, and employed several high-quality comparison groups to improve the internal validity of the measures. Appropriate statistical methods—repeated analysis of ANOVA and regression analysis—were employed for analyzing data. Moreover, all dependent measures were chosen before the interventions; many other studies use post-hoc evaluation procedures.

The three studies described above have important implications for the plausibility of rigorous evaluations of public sector change. Nonetheless, their evaluation procedures warrant cautious interpretation. Although rigorous in the use of an analytical model and measurable data, the findings of the evaluative study conducted by Lippitt et al. (1985) seem weak because there are no pre-measures that can establish criteria for judgment. The studies of Golembiewski and Kiepper (1976) and Golembiewski (1994) involve small samples and only an interaction-focused intervention; thus, the results of this partial OD intervention may not successfully explain the relationship between senior staff and work environment. The work of Paul and Gross (1981) is also limited in that the research setting they chose—the communications and electrical division of a city—produces rather easily quantified services—e.g., number of street lights re-lamped. Hence, researchers had no difficulty in measuring dependent variables such as productivity and

efficiency. Despite limitations in research design, these studies made a significant contribution to scientific research on evaluation of public sector change.

2.4.3. Evaluation research of organizational change: The hybrid sector

As the previous section shows, conceptual problems in defining measurable goals in the public sector circumvent rigorous evaluation research, but small steps can be taken toward methodological rigor in areas where organizational goals are more easily quantifiable. Evaluation research in the quasi-government seems even more troublesome, especially in human service organizations in such areas as mental health, drug abuse prevention, and mental retardation services (Behn & Kant, 1999; Fine, Thayer, & Coghlan, 2000; Hoefler, 2000; Sawhill & Williamson, 2001; Wolf, 1990). Many services in such organizations produce outcomes that are not easily quantifiable or require a longer period of time to accurately assess. In a community mental health clinic, for example, individual treatments for a child to improve his or her self-esteem and attention in classroom activity are difficult to assess, and, even if assessed, require considerable passage of time to meaningfully measure their effects.

In the non-profit sector, many agencies have attempted to estimate outcomes with several surrogate measures, such as the number of hospital beds emptied, the number of job placements, and the number of enrollments in transitional programs. Also, they consider process measures—e.g., the timely and orderly submission of documents—as alternatives for contracting requirements (Smith & Lipsky, 1993). Consumer or public perceptions of agency services may also serve as an important indicator of program quality. Thus, many non-profit agencies have increasingly conducted consumer

satisfaction surveys and collected consumer complaints about services, both in order to measure the quality of services and to further identify areas for program improvements in response to the consumer's needs.

A number of evaluations are being conducted in non-profit sector agencies, using the surrogate measures described above (Fine et al., 2000; Hoefler, 2000; Sawhill & Williamson, 2001), but the quality of evaluation seems far from adequate. Based on survey data from non-profit agencies, Hoefler (2000) and Fine et al. (2000) find that many non-profit agencies rely heavily on internal expertise to design and implement evaluations, which raises a question about their capacity for comprehensive program evaluation. Here, evaluations often utilize operational and financial measures but seldom use the behavioral variables necessary to differentiate organizational contexts. In addition, evaluation in many cases is initiated by funding requirements and the need to control program compliance with standard procedures, not by a need to demonstrate program effectiveness. Finally, many evaluations use post-test-only designs or single group pre- and post designs, both of which tend to create threats to internal validity.

Despite the increasing attention to program evaluation in the quasi-government, virtually no empirical study exists among scholarly publications. One notable exception, although it is a conference paper, raises the possibility of methodological rigor in evaluating quasi-government agencies. Morse and Pandey (2000) report an evaluation of a restructuring process at a veterans medical center as part of the Restructuring Implementation Plan of the U.S. Department of Veterans Affairs. The restructuring plan sought to integrate six service lines into one channel, in order to provide "one-stop shopping," or interdisciplinary care for patients. Multiple measures involving both

quantitative and qualitative data are employed and analyzed with greater attention to qualitative methods. The authors manually analyzed interview data and confirmed the findings using a computer software called NUD*IST (Non-Numerical Unstructured Data Indexing Searching and Theorizing). Although computer-aided analysis and manual methods yielded similar conclusions, the software permitted more thorough examination of the qualitative data.

In sum, many scholars call for evaluation as a major tool for ensuring accountability, but few of these scholars actually conduct a solid evaluation of quasi-government organizational change. Anecdotal evidence for program success is useful, but no published research supports the evidence empirically. This lack of evaluation damages the role of performance evaluation in the quasi-government as an important means for accountability.

2.5. Summary

Program evaluation has received growing attention due to persistent skepticism about the quasi-government accountability. The increasing demand for accountability prompts organizational change because old practices often cannot live up to new challenges. Evaluation here asks whether organizational change establishes a new form of accountability that creates a more responsible organization for both employees and consumers.

In the private sector, noticeable progress toward rigorous evaluations provides evidence for optimism. Evaluation in the public sector has served as a means of encouraging accountability, but conceptual problems in defining program goals have

resulted in a lack of empirical studies. Few hard measures are used, and analysis becomes subjective and largely anecdotal. Not surprisingly, case study has emerged as a major tool for evaluative study in the public sector. Nonetheless, some notable exceptions have provided support for the methodological rigor of evaluations in public sector change (e.g., Golembiewski et al., 1981, 1982; Golembiewski & Sun, 1990).

Solid evaluations of organizational change are rarer still in the quasi-government, especially in the human services areas. Few empirical or well-documented evaluation studies exist in the literature; thus, many authors rely heavily on case studies and generate anecdotal evidence for program effectiveness. It appears that evaluation in the quasi-government is a weak means for ensuring accountability. For example, examining surveys of 160 human service agencies in Dallas, Texas, Hoefer (2000) deplores that only a few studies use rigorous research methods, and the validity and reliability of most measures employed are not clear. The author concludes that “evaluation is not yet producing accountability” (p.176).

As a major tool for evaluation study in both the public and hybrid sectors, case studies seem to serve well for an organizational reality in which multiple factors determine day-to-day organizational operations. Moreover, inductive reasoning using case analysis can produce general theories that others can test (Behn, 1993). Nevertheless, case studies seem limited in predicting the future state of organizational reality due to their lack of generalizability.

The limitations of case studies imply that future evaluation studies on organizational change should be directed to more scientific analysis of change strategies and their outcomes in order to improve generalizability. The scientific approach to

organizational change would benefit the field more than case study through the building and testing of theory with analytical models and scientific tools. This approach would improve the predictability of the future state of organizations and allow policy lessons to be drawn from generalizable research findings. The next chapter proposes an evaluation framework as an attempt to establish such scientific evaluation of organizational change.

CHAPTER 3

RESEARCH METHODS:

ANALYTICAL FRAMEWORK, DESIGN, AND MEASURES

This chapter describes an analytical framework, presents several evaluation designs, and lists multiple measures and methods of measurement. The analytical framework includes organizational change interventions as independent variables and the impacts of the interventions as dependent variables. Several evaluation designs are used due to the distinctive characteristics of both subjective and objective data and differing levels of data availability. Multiple measures and methods serve to cross-validate the research findings.

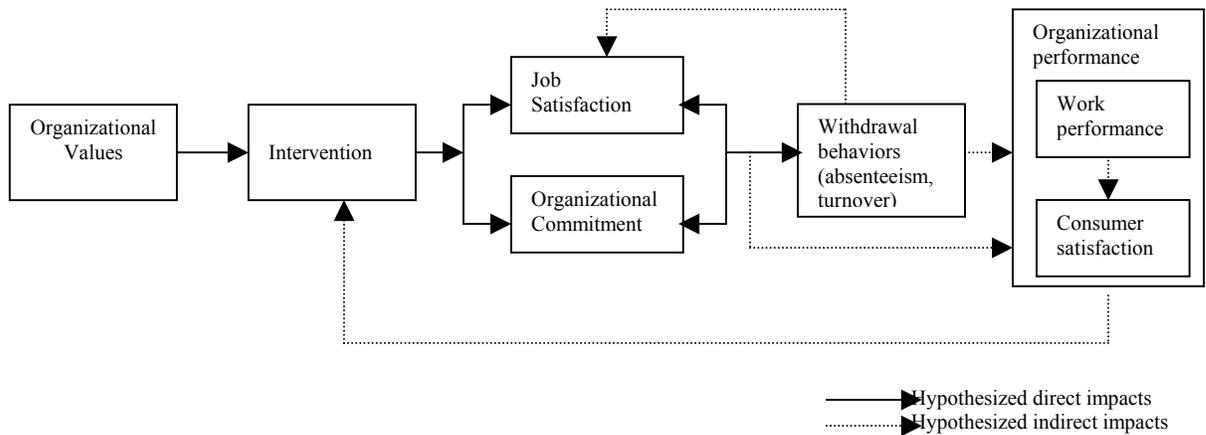
3.1. Analytical Framework

This study proposes an analytical framework that shows an overall picture of and direction for subsequent data analysis. The description of the analytical framework has four emphases. First, a general description of the model is offered with three caveats. Second, specific types of change interventions are discussed. Third, attention is given to the various impacts of the interventions that will be tested with a set of hypothesized outcomes. Finally, the relationships between the interventions and a set of hypothesized outcomes will be clarified.

3.1.1. Overview

This analysis focuses on the change interventions that occurred from approximately July 1998 to January 2000. Clarifying the intervention period during the organizational transition is often difficult because interventions occur on a continuum without sharp beginning or end points (Nicholas & Katz, 1985; Seashore, 1983). Nonetheless, some members of the Center intervention group, who have led the change interventions, reported that a remarkable difference can be found in organizational operations since July 1998, when a restricted 6-month contract with the state of Georgia started after the Elbert county incident, which resulted in the termination of several employees and forced the resignation of the executive director. Many change efforts have been made since then, and most change efforts were accomplished by January 2000.

Figure 3.1 proposes an analytical framework on which this evaluation of organizational change at the Center is based, and factors are identified to measure the



Sources: The proposed model is drawn based on Golembiewski and Rountree (1998), Kimberly and Nielsen (1975), Lawler, Nadler, and Mirvis (1983), Nicholas (1979), Robertson, Roberts, and Porras (1993).

Figure 3.1. An analytical framework for evaluating organizational change

change impacts. None of the selected variables in the analytical framework were preconceived by the members of the Center intervention group. Rather, the author created the framework ex post facto based on several theoretical models used in previous research on organizational change. This framework suggests that changes have broad impact on three factors in an organization: attitude, behavior, and performance.

The model underlying the present conceptual design contains three components: organizational values as guiding principles for changes, the change interventions, and the impact of the changes. Organizational values implicitly, though not always explicitly, guide the change interventions at the Center. The change interventions have occurred organization-wide, encompassing interaction, structure, and policies and procedures. Broadly, then, the change approach adopts a socio-technical perspective (Cummings, 2000; Golembiewski & Rountree, 1998). The impacts of the change interventions are tested against a set of variables, which also permit tests of a range of hypotheses.

Three points need to be taken into account in the present analytical framework. First, the level of analysis does not focus on individual program changes; rather, it relies on the change characteristic of much or most of the entire organization. Accordingly, there will be within-group variations in the interpretations of the findings across different work units. Second, the proposed model reflects a convenient way of identifying the change interventions and their impact, but it may be true that an alternative model could work better. Third, although the proposed model indicates causal relationships between variables, this study is not intended to test them. Rather, it attempts to examine the effects of the change interventions on specific attitudes, behaviors, and organizational performances, or a cluster of them, often in one-on-one associations.

In its overall evaluation of organizational change, this study presumes that no single independent variable can account for change and that no single dependent variable can satisfactorily assess change (Lawler et al., 1983). Consequently, the proposed approach includes an array of independent and dependent variables in order to enrich outcome evaluation and to encompass change dynamics. In the evaluation, attention will first be drawn to the independent variables that constitute a wide range of change interventions, and then the dependent variables, as the impact of the interventions, will be introduced, with research hypotheses concerning employees' attitudes, behaviors, and organizational performance.

3.1.2. The change interventions

In the literature describing longitudinal assessment of organizational change, only a few studies provide clear descriptions of intervention programs (e.g., Golembiewski & Rountree, 1998; Marrow, Bowers, & Seashore, 1967). The lack of detailed information about intervention programs is a result of the fact that organizational changes, in many cases, occur continuously and are derived from multiple change programs employed simultaneously (Huse & Beer, 1971). Consequently, even methodologically sophisticated studies on organizational change report insufficient descriptions of intervention programs (e.g., Macy & Mirvis, 1983).

This study presents problems in identifying the intervention programs, but attempts to minimize. None of the intervention programs was undertaken independently, but neither were they all orchestrated: they were a collection of efforts with various actors involved. Additionally, the problem of identifying the beginning and end of an

intervention period increased uncertainty in interpreting change. Nonetheless, several managers at the Center provided a historical account of key intervention programs and important environmental influences that directly and indirectly affect organizational change in the Center. Additionally, organizational records and reports at the Center supplied evidence of change (e.g., Advantage Behavioral Health Systems [ABHS], 1997, 1998a, 1998b, 1999a, 1999b, 2000a, 2000b, 2000c, 2000d).

Two points need to be raised in describing change interventions at the Center. First, although the idea of Total Quality Management (TQM) implicitly influences the Center change, this study does not consider the Center interventions as a TQM application. The influence of TQM on the Center change reflects a recent trend in health care organizations in which a number of hospitals and managed care plans have begun adopting TQM in the name of Continuous Quality Improvement (CQI) (Bader, 1992; Counte, Glandon, Denise, & Hill, 1995; French & Bell, 1995; Motwani, Klein, & Navitskas, 1999). For example, the Center emphasizes employee education and training as the major change levers aimed at changing the way employees work so that they can continuously improve the way they meet customer expectations (Cohen & Eimicke, 1994; Coyle-Shapiro, 1999; Hackman & Wageman, 1995).

Nonetheless, there are two reasons why the changes at the Center are not purely or simply the results of TQM application. First, the characteristics of the Center change do not usually meet the five core features of TQM application proposed by Hackman and Wageman (1995). Second, none of the managers who have led the Center change were familiar with TQM; they simply responded to external demands for change.

Second, the organizational values implicitly guide the change interventions so the Center reflects various sets of desired states, given the range of conditions encountered in the organization (Golembiewski, 1962, 1989). The following mission and value statements at the Center reflect the basic foci of interventions:

Mission Statement: Our mission is to help people find the best solutions to problems caused by mental illness, mental retardation, alcohol and other drug abuse. Operating in the public interest, we provide leadership in collaborative efforts to achieve positive outcomes at a reasonable cost.

Value Statements:

- *Quality.* We uphold high professional standards and practice continuous quality improvement
- *Responsibility.* We advocate for access to care for all people and support public efforts to fund services for vulnerable people who cannot pay. We believe that people served have personal responsibility as part of the interdisciplinary team; employees have personal responsibility for achieving the agency's mission.
- *Growth.* We believe all people should have opportunities for development at all stages of life, and support learning which promotes healthy growth and well-being. We create a workplace which supports and nurtures employees.
- *Persons Served.* We help people in ways which uphold dignity and choice.
- *Community.* We believe the use of community-based family and family-like supports are the best way of helping people with problems caused by mental illness, mental retardation, alcohol and other drug abuse (ABHS, 2000d)

These statements are the bases of organizational philosophy, more concrete principles of organizational operations, which are reflected implicitly in seven broad interventions. The following are the major principles of Center operations.

Organizational Philosophy:

- Abide by the highest standards of ethical conduct.
- Deliver services with the highest degree of integrity and competency.
- Maintain a staff and management team who are qualified, competent, and reflect the diversity of the communities we serve.
- Protect the rights of persons served.
- Maintain a continuous quality improvement structure within all levels of the organization.

- Strive to eliminate architectural, attitudinal, employment, and any other barriers to services.
- Be sensitive and knowledgeable about cultural differences so as to maximize the effectiveness of services.
- Maintain effective and responsive management structure (ABHS, 2000d).

The statements of organizational philosophy seem diverse but suggest clear guidelines for Center interventions. For example, ethical standards of staff members as well as consumer choice should be stipulated as Center policies. Individual staff must be trained to be qualified and competent in delivering services for those who are mentally ill. Organizational structure needs to be effective and responsive to consumers' needs.

Despite the influence of organizational mission and values, the overall Center change interventions were geared toward immediate remedial actions in response to the state mandates. Not only were the members of the Center intervention group unfamiliar with TQM principles as described above, but they also did not pay much attention to a set of normative issues, such as trust and openness, as heavily emphasized in OD interventions. In fact, coping with the state demands was the first priority in the beginning of the Center change.

Table 3.1 describes major interventions at the Center since July 1998 and details will follow shortly. Specific intervention programs include implementing new policies and procedures, three-day mandatory employee training, program quality teams, management consultation, organizational restructuring, new technological infrastructure, and employee recognition programs. The major organizational changes at the Center are listed in Appendix I.

Table 3.1. Major interventions and their features at the Center

Interventions	Major features
<ul style="list-style-type: none"> • Establish new policies and procedures (July – October, 1998) 	Established policies and procedures virtually for the first time in the Center
<ul style="list-style-type: none"> • Employee training (October – December, 1998) 	Instituted three days of mandatory training for all new employees concerning organizational mission, work rule, and consumer satisfaction
<ul style="list-style-type: none"> • Program quality teams (PQT) (October, 1998) 	Instituted PQT in which program coordinator and at least one representative from each work unit meet at least once a month
<ul style="list-style-type: none"> • Management consultation (September, 1998; February, 1999) 	Conducted two management reviews from outside consulting firm and provided several recommendations for management reinvention
<ul style="list-style-type: none"> • Organizational restructuring (March, 1999 – January, 2000) 	Established an integrative service structure where services for mental health, mental retardation, and substance abuse are combined
<ul style="list-style-type: none"> • New technological infrastructure (January, 1998 – September, 1999) 	Installed new consumer information system and established computer network for improving internal communication
<ul style="list-style-type: none"> • Employee recognition programs (January, 2000) 	Instituted employee recognition award and tuition reimbursement for employee career development

New policies and procedures Probably no change has been more comprehensive and radical in the Center than establishing new policies and procedures. In April 1998, the Center was about to lose its annual contract because state regulators had considerable suspicions about the Center’s operations. The Georgia DHR and the regional board charged the Center with the absence of policies and procedures about program operations. As a result, the state allowed only a six-month contract instead of the usual one-year contract, in order to allow oversight of the Center’s progress. On the verge of a crisis, the Center completely revised and rewrote its policies and procedures during the summer of 1998. Important policies established include an employee code of ethics and

procedures for consumer complaints, variance reports, quality grievances, and incident reports.

These new policies and procedures seem to have disparate objectives. However, many of the separate policies and procedures are geared toward consumers' satisfaction with Center services by suggesting formal procedures through which individual consumers can seek protection from unethical staff behaviors or request service changes to be better served.

Employee Training Employee training is intended to provide necessary skills and knowledge about work rules and organizational values as well as ways to improve consumer satisfaction with Center services. From October through December of 1998, a series of four-hour training sessions were offered for all employees to instruct them about the new policies and procedures. Since December 1998, the four hours of training have been incorporated into a three-day mandatory orientation training session. Every new employee is required to take the three-day orientation upon being hired, as well as other required training within two months of the hire date. Specific training programs include education about the organizational mission, values, and philosophy; work rules such as confidentiality and the code of ethics; customer satisfaction; workplace safety; cultural diversity; and CPR/first aid, etc. Table 3.2 represents specific training programs offered at the Center.

These efforts present a mixed bag but share some common objectives. A cursory look at the individual training programs suggests that the programs present relatively distinctive content but each individual program contributes to improving the quality of consumer care by developing appropriate skills and knowledge in the Center employees.

Table 3.2. Three-day mandatory training programs at the Center

Programs	Contents
Orientation Day 1	<ul style="list-style-type: none"> - Personnel paperwork, benefits, and compensations - Organizational mission, values, and philosophy - Work rules such as confidentiality - Overview of medications and infection control
Orientation Day 2	<ul style="list-style-type: none"> - Various types of reports such as time sheets, leave policy, and travel expenses - Continuous quality improvement such as customer satisfaction, variance reports, workplace safety
Orientation Day 3	<ul style="list-style-type: none"> - Targeted Aggression Control Training (TACT) training
Cultural Diversity	<ul style="list-style-type: none"> - Basic overview for employees that have had no exposure to cultural diversity
CPR/1 st Aid	<ul style="list-style-type: none"> - Control bleeding, rescue breathing, and apply splint
Talking About Alcohol	<ul style="list-style-type: none"> - Lifestyle risk reduction program

Source: Advantage Behavioral Health Systems (2000d). Advantage Behavioral Health Systems 2000 orientation manual. Athens, GA: Author.

Program quality teams (PQTs) Since October 1998, the Center has maintained a PQT in which the program coordinator and at least one representative from each work unit must be included. Each PQT meets at least once a month with additional meetings as necessary. The target areas of the PQT meeting involve risk management, peer review, best practices, and outcome evaluations. The main purposes of the PQT meeting are to increase opportunities for employee participation in decision making and to invoke mutual problem solving for important issues relying on real experience at the bottom.

Management consultation The Georgia DHR and the regional board urged the Center Community Service Board (CSB) to hire an outside consulting firm for a management review and an assessment of the change process. In August 1998, Technical Assistance Collaborative (TAC), a Boston-based private consulting firm, was invited by

the Center CSB and published a report documenting identified problems of the Center after a two-and-a-half-day on-site management review. In February 1999, TAC conducted the follow-up management review at the request of the Center CSB to assess how much progress had been made since the first management review. In the second report, TAC found that the Center has made a number of improvements, but much still remained to be done.

Based on the two management reviews, TAC provided the Center management with several recommendations on the basis of which the Center continues to put its efforts into management reinvention. In particular, TAC pointed out the separateness of service delivery, each protecting their own interests and preventing integrative services for people with multiple disorders. These recommendations became a driving force for subsequent Center changes, especially for establishing the integrative service structure. The major findings and observations from the two management reviews are as follows:

- No consistent, centralized organizational management
- No consistent agency-wide philosophy of management or set of management principles, objectives, or performance expectations
- Absence of a strategic plan with measurable objectives, and the absence of effective central leadership
- Low salary, high turnover, lack of human resources
- Lack of “data-driven” management regarding current staff, hiring, turnover, etc.
- Little integration between programs, particularly between the mental retardation and developmental disability programs and other services
- Lack of involvement by consumers and their families in all activities of the Center (TAC, 1998, 1999).

Organizational restructuring The TAC consultants underscored the need for organizational restructuring to integrate the disparate service systems at the Center. Traditionally, the Center’s services had been divided into “pigeon holes” in which consumers, once they had a preliminary diagnosis and received appropriate services, may

or may not have had access to other services (Weinstein, 2000). Once initially entered, in short, consumers perhaps were never reassigned. The compartmentalization of the programs neglected the fact that many consumers with mental illness have multiple diagnoses, manifesting symptoms of both mental health and substance abuse problems or both mental health problems and mental retardation.

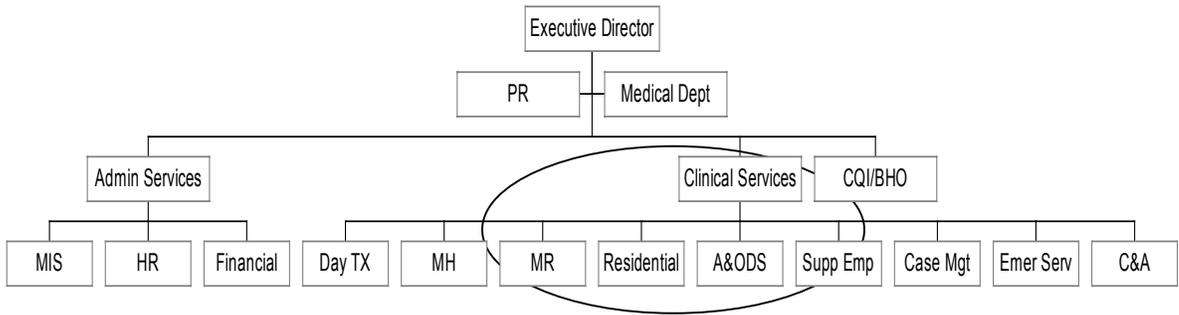
Figure 3.2 below depicts the changes in the organizational structure of the Center throughout the intervention period. Until March 1999, the Center was in a state of organizational anarchy in which functional departments were operated separately (see Figure 3.2-A). These departments were integrated by grouping similar functions under newly created directors of administrative and clinical services, but functional goals still remained untouched (see Figure 3.2-B). It was not until November 1999 that the Center established an integrative service structure in which functional departments were combined into a divisional structure so as to meet the need for coordination across departments (see Figure 3.2-C).

Since May 1999, the newly appointed director of clinical services has attempted to integrate clinical services by restructuring all clinical functions. The central purpose of this integration was the creation of an organizational structure that would be more responsive to the needs of consumers by delivering seamless services. As a facilitator of the restructuring process, the clinical service director created a “task team” consisting of program supervisory and line staff members. In the team meeting, the director asked team members to list the services they provided and group them into similar functions. Then team members assigned categories to each service. This process highlighted four major types of services in the Center —admissions, outpatient, rehabilitation, and

A. Before March 1999

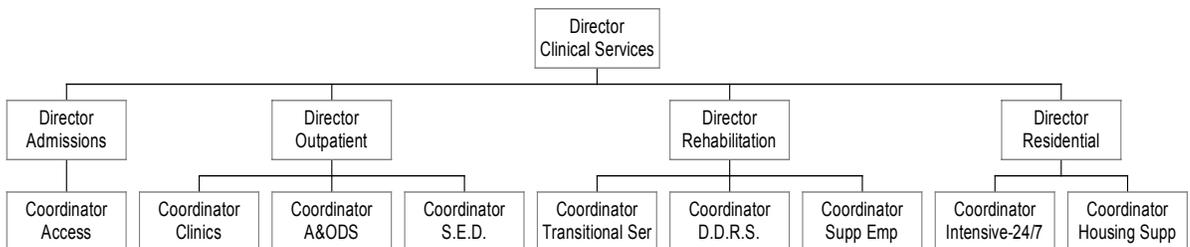


B. After March 1999



C. Since November 1999

Integrative Service Structure in Clinical Services



* Note: ACT: Assertive Community Treatment; A&ODS: Alcohol and Other Drug Services; BHO: Behavioral Health Outcomes; Case Mgt: Case Management; C&A: Children and Adolescent; Day TX: Day Treatment; DDRS: Developmental Disabilities Rehabilitation Services; Emer Serv: Emergency Services; HR: Human Resources; MR: Mental Retardation; MH: Mental Health; QI: Quality Improvement; SED: Severely Emotionally Disturbed; Supp Emp: Supported Employment

Figure 3.2. The changes of organizational structure throughout the intervention period

residential services. See Figure 3.2-C for the integrative service structure in clinical services.

The director of clinical services also established an “intake team” in the clinic in order to provide the most appropriate treatments for consumers by performing a general assessment at intake. The intake team consists of total three crisis and non-crisis workers. If a consumer is in a non-crisis condition, intake workers conduct a general assessment of mental status, a medical assessment, and psychosocial assessment. If, however, a consumer is in a crisis condition, he or she is referred to a physician and gets necessary treatment at intake.

What objective guides this change? Before the establishment of the intake team, consumers were referred to any available clinicians regardless of their different areas of clinical expertise. However, consumers now can receive appropriate treatment based on the initial assessment of their symptoms.

In short, despite potential shortcomings that can be major, the integrative service model allows consumers with multiple diagnoses to receive all necessary services in a form of “one-stop shopping.” For example, the residential service division provides its service to both mentally disordered and mentally retarded consumers. In addition, the intake team helps consumers get all necessary services by identifying their symptoms. In the integrative service structure, consumers are served based on what they need, not on what the Center is able to offer.

New technological infrastructure The department of management information systems (MIS) at the Center installed the UNICARE system—a consumer information system to manage consumers’ demographic and billing information—over the period

between January and December of 1998. In addition, MIS identified and designed the Local Area Network (LAN) system and concurrently established the Wide Area Network (WAN) system by connecting the LANs. Now all work sites are linked through the WAN, and most staff have received basic computer software and e-mail training which greatly increases communication capability among employees and work units. In September 1999, MIS created a home page for the CQI department to provide employees with policies and procedures through the Web and to share open communication channels. Finally, MIS developed data gathering systems in September 1999 to conveniently manage data from various surveys dealing with improvements in consumers' symptom and satisfaction with the Center services.

These approaches to establishing a new technological infrastructure were intended to improve overall work operations. However, one major outcome of the new technological infrastructure is the improvement of communication between work units, as compared to the interoffice mail system, which had been the major communication mechanism. Furthermore, this improvement of communication capability may have a positive impact on employee attitudes such as job satisfaction and organizational commitment.

Employee recognition programs In January 2000, the clinical service director initiated two employee recognition programs: an employee recognition award and educational (tuition) reimbursement. The employee recognition award was designed to improve employees' morale by acknowledging their excellent work performance. Nominations are sent to the Center management for review. The award criteria focus on employees' job performance, initiative, and consumer service orientation.

Similarly, the employee tuition reimbursement program was intended to offer opportunities for employees to learn state-of-the-art knowledge and skills in order to provide higher quality services, as well as to motivate employees to work hard. The Center provides eligible employees with tuition reimbursement for a maximum of two courses per semester. To be eligible, an employee must work at least 75 percent time and course work must be relevant to the individual's current job description.

3.1.3. The impacts of change interventions and research hypotheses

The analytical framework shown in Figure 3.1 suggests a set of hypothesized impacts that will be tested in an empirical evaluation of change interventions. This study assumes that the interventions at the Center will result in changes in employees' attitudes, employees' withdrawal behaviors, and organizational performance. Employees' attitudes represent job satisfaction and organizational commitment. Employee turnover and absenteeism will serve as indicators for employees' withdrawal behaviors. The impact of the interventions on organizational performance will be characterized by four indicators: employee performance appraisals, state hospital utilizations by Center consumers, consumer complaints, and consumers' perception of service satisfaction. Nine research hypotheses are presented along with the eight indicators representing the three broad impacts of the intervention.

Note that the emphasis below is conceptual. As described in the previous section, the Center intervention group was not philosophically oriented and did not follow normative guidelines for the Center change. Accordingly, the nine hypotheses are

selected by the researcher based on reviews of literature and the Center's mission and values.

3.1.3.1. Employee attitudes

Many studies of organizational change consider attitudinal change as the first effect of change interventions (Kimberly & Nelson, 1975; Lawler et al., 1983; Nicholas, 1979). However, the effects of attitudinal change on employees' withdrawal behaviors and organizational performance are controversial and inconsistent. Some researchers, for example, contend that there is a negligible relationship between job satisfaction and organizational performance (e.g., Brief, 1998; Brayfield & Crockett, 1955; Iaffaldano & Muchinsky, 1985; Katzell, Thompson, & Guzzo, 1992). Others suggest a stronger relationship between the variables (e.g., Judge, Thoresen, Bono, & Patton, 2001; Ostroff, 1992; Petty, McGee, & Gavender, 1984). Accordingly, any definite statement about the effects of attitudinal change on organizational variables could be misleading.

Job Satisfaction Job satisfaction reflects an employee's feeling toward his or her job and various aspects of it (Rainey, 1997). The effects of job satisfaction are at the core of the organizational change interventions due to its importance in mediating employee behavior as well as organizational performance (Cammann, Fichman, Jenkins, & Klesh, 1983; Lawler et al., 1983; Rainey, 1997; Williams & Hazer, 1986). Although some variations can exist among individual interventions, employee-centered change interventions, such as employee training, PQTs, and employee recognition programs, could have impact on employees' job satisfaction.

These change interventions can improve work environments that fit better with employees' needs and enhance their skills and knowledge that can help employees effectively cope with unpredictable situations involving mentally ill consumers (Hackman & Oldham, 1980). This study hypothesizes that the intervention programs at the Center, on balance, will increase job satisfaction.

Ho 1: The interventions at the Center will generate a positive change in employee job satisfaction.

Organizational commitment The concept of organizational commitment is protean. Some refer to “a person’s affective reactions to characteristics of his employing organization” (Cook & Wall, 1980, p. 40). Others characterize it as “a sense of psychological attachment based on employees sharing important organizational values” (Romzek, 1990, p. 375). Still others describe it as “loyalty” to the organization (Price & Muller, 1986). Organizational commitment matters because the success of an organization depends on employees who are willing to sacrifice their time and effort for the values of the organization (Salancik, 1995). Salancik also notes that organizational commitment not only enhances productivity but also guarantees management innovation.

Although little literature explores the relationship between organizational change and the level of employee commitment, the rationale seems clean enough. For example, interventions involving participatory management such as PQTs and establishment of a communication network at the Center tend to lead employees to feel a greater identification with, involvement in, and loyalty to the agency (Coyle-Shapiro, 1999).

Employees become proud of being a part of the organization and want to stay in the organization even if other employers offer better incentives (Blau & Boal, 1987).

This study assumes a positive relationship between job satisfaction and organizational commitment, yet the causal inferences between the two measures remain unclear. Some researchers report a causal relationship between the variables where organizational commitment is seen as an outcome (Reichers, 1985; Testa, 2001) or a determinant (Bateman & Strasse, 1984) of job satisfaction. Others describe the relationship as correlational, with reciprocal interactions between the variables (e.g., Mathieu & Zajac, 1990). Still others demonstrate no causal linkage of the variables with a longitudinal design (Curry, Wakefield, Price, & Mueller, 1986). Despite the controversial relationship, it is clear that job satisfaction and organizational commitment are associated variables that influence various organizational outcomes such as turnover and work performance (Mathieu & Zajac, 1990; Shore & Martin, 1989; Testa, 2001). This study assumes that the interventions at the Center should elevate the level of organizational commitment of its employees.

Ho 2: The interventions at the Center will generate a positive change in employee organizational commitment.

3.1.3.2. Reduction in withdrawal behaviors

Despite an assertion that employee behaviors have significant impact on organizational performance, little evaluation research has used behavioral measures, such as absenteeism and turnover, to test this assertion (Ash, 1972; Bennis, 1965; Macy & Mirvis, 1976). This scant utilization of behavioral measures in evaluation research is

directly related to the difficulty of collecting reliable and valid behavioral data, let alone their longitudinal observations. Employees' absenteeism and turnover serve as indicators for measuring employees' withdrawal behaviors.

Absenteeism Absenteeism refers to “a failure to report for work at any time when the employee was scheduled to work” (Kossoris, 1947, p. 266). Many organizational researchers report a negative relationship between satisfaction and absenteeism (e.g., Cheloha & Farr, 1980; Macy & Mirvis, 1976; Porter & Steers, 1973). On the other hand, this relationship has not been proved unambiguously due to confounding variables such as health and family problems (Rainey, 1997). For example, some meta-analyses find that the relationship between satisfaction and absenteeism is negligible (Farrell & Stamm, 1988; Hackett & Guion, 1985; Scott & Taylor, 1985). Furthermore, Tziner and Vardi (1984) rejected this relationship among social workers on the grounds that social workers have strong altruistic values. Nonetheless, the present study hypothesizes that positive changes in employee attitudes will reduce the rate of absenteeism among Center employees.

Ho 3: The interventions at the Center will reduce withdrawal behaviors measured by employee absenteeism.

Employee turnover Price and Muller (1986) define turnover as “the degree of individual movement across the membership boundary of an organization” (p. 243). Employee turnover has an impact on several organizational variables. For example, consistent high turnover in nonprofit human service agencies may lower consumer satisfaction because it creates the disruption of services. Also, high turnover would

increase employee dissatisfaction with their work because one person's leaving an organization means another's increased workload

Researchers have found a consistent and negative relationship between employee attitudes and turnover (Feldman & Arnold, 1985; Mobley, 1977; Muchinsky & Morrow, 1980; Porter & Steers, 1973). Others suggest that attitude variables, such as job satisfaction, explain only a negligible percentage of the variance in turnover (Mobley, Griffeth, Hand, Meglino, 1979; Mobley, Horner, & Hollingsworth, 1978; Hom, Caranikas-Walker, Prussia, & Griffeth, 1992; Hom & Griffeth, 1991). These scholars, who view a negligible relationship between job satisfaction and turnover, contend that withdrawal cognitions, such as thought of quitting and intention to quit, predicted turnover better than did job satisfaction. Nonetheless, this study assumes that positive changes in work attitudes would reduce employee turnover at the Center.

Ho 4: The interventions at the Center will reduce withdrawal behaviors measured by employee turnover.

3.1.3.3. Organizational performance

The typical purpose of organizational change interventions is to improve performance (Armenakis, 1988). Evidence shows that organizational change interventions result in improved organizational performance because of improvements in work environments (Hackman & Oldham, 1980; Robertson et al., 1993), attitudes (Luthans, 1996; Petty, McGee, & Cavender, 1984; Taylor & Bowers, 1972), and organizational behaviors (Kimberly & Nielsen, 1975; Lawler et al., 1983).

Many scholars have noticed the difficulty in defining performance in public organizations because of the multiple and conflicting goals involved in public programs (Golembiewski, 1985; Langbein, 1980; Meier, 1993). In particular, performance in human service organizations, such as mental health centers, has been viewed as an elusive or intractable subject. As a result, the concept of performance in public organizations is still ill-defined and used interchangeably with other similar terms, such as productivity and effectiveness. Hence, the critical role of this part of analysis is to clarify the operational definition of organizational performance at the Center.

Following Daft (1998), organizational performance at the Center is defined as the fulfillment of organizational goals or mission. The organizational goals of the Center are further broken down into several performance indicators based on a performance contract with the state. The performance contract with the state mainly involves two broad outcomes: improving work performance and improving consumer satisfaction with Center services (Northeast Georgia Regional Board, 2000). Four indicators serve to measure organizational performance at the Center: employee performance appraisals, state hospital utilizations by Center consumers, consumer complaints, and consumers' perception of satisfaction with Center services.

Performance appraisals Performance appraisals are a tool that can influence work performance by encouraging employee input through feedback processes and by justifying human resource actions, such as promotion and transfer (Pettijohn, Pettijohn, & Tayler, 2000). Also, performance appraisal can be seen as a way to improve work performance by identifying training needs, promoting shared expectations between

supervisors and employees, and setting goals for better performance in areas that need improvement (Lovrich, 1995).

Nonetheless, there has been criticism regarding the techniques of appraisals due to the problems associated with measuring performance, such as the halo effect in ratings. Successful organizational change and development can reduce such measurement problems and thus actually lower appraisals at least in the short run by making them more reliable and valid. One of the by-products of the lowered appraisals could be a short-term decline in organizational commitment and/or increase in employee turnover. This short-term decrease in appraisals is well expected at the Center because the specific procedures for performance appraisals have been institutionalized as a Center policy for the first time ever since the introduction of the interventions. This study, therefore, hypothesizes that the interventions will lower the scores on employee performance appraisals.

Ho 5: The interventions at the Center will lower the scores on employee performance appraisals.

Reduction in state hospital utilizations One of the main purposes of the Georgia MH reform was the reduction of state hospital utilizations by consumers as a result of increased availability of community-based services. Consequently, some mentally ill people, who historically have been isolated from society, can have greater opportunities to return to their communities. Since the 1960s, many states have discharged a substantial number of patients with mental disorders from state hospitals for community care by providing a budgetary incentive to community MH centers (Gaynor, 1990). For example, community MH centers can obtain a monetary incentive if they use fewer state

hospital beds than they are supposed to use each fiscal year. If, however, they overuse state hospital beds, they may suffer from having their funding cut for the next fiscal year. Therefore, a reduction in state hospital utilizations reflects that the Center is doing its job well and is meeting its contractual obligations with the state.

Ho 6: The interventions at the Center will reduce state hospital utilizations by Center consumers.

Consumer complaints Consumer complaints provide an important indicator for the quality of services in the Center because consumer complaints suggest ways of changing service delivery from the consumer's perspective. In July 1998, the Center established a policy, based on a state regulation, to maintain a consumer complaint procedure through which individual consumers can make the Center staff aware of problems. The complaint procedure is an important mechanism for consumer empowerment because it enables consumers to have a voice in requesting service changes directly from their service provider. If consumers ever feel that they are treated improperly, they can file a complaint citing the alleged violation of the state rules.

This study expects that the number of complaints will increase immediately after the intervention, in part because the Center did not have a formal complaint structure before the intervention, and in part because employees as well as consumers will become better informed about the complaint procedures. Over time, however, the number of complaints will level off as the complaint structure is institutionalized in the Center. Two hypotheses follow.

Ho 7: The number of consumer complaints will increase immediately after the introduction of the interventions.

Ho 8: The interventions at the Center will reduce the number of consumer complaints over time.

Consumer satisfaction Consumer satisfaction seems the ultimate outcome for the Center performance because satisfaction with services implies increased quality of care for consumers as well as a measure of accountability. Consumer satisfaction, as measured by consumers' self-reports, can play an important role in identifying areas for improvement from the consumers' perspective and provide insight to program managers about ways to make things better. This, in turn, could prompt organizational change.

Despite the significance of consumer satisfaction in improving services and prompting changes, caution must be taken as consumer satisfaction may not necessarily indicate high-quality organizational performance. For instance, one study found that consumers can be satisfied even with ineffective programs that do not meet their goals (Sanders, Trinh, Sherman, & Banks, 1998). Nonetheless, this study hypothesizes that the interventions will increase the levels of consumer satisfaction with Center services.

Ho 9: The interventions at the Center will generate a positive impact on consumer satisfaction measured by consumers' self-reports on Center services.

3.1.3.4. The relationships between the interventions and outcome variables

Figure 3.3 suggests a set of relationships between the individual interventions and a set of outcome variables. Clarifying the relationships is difficult, if not impossible, because a set of interventions were undertaken collectively without clear beginning and

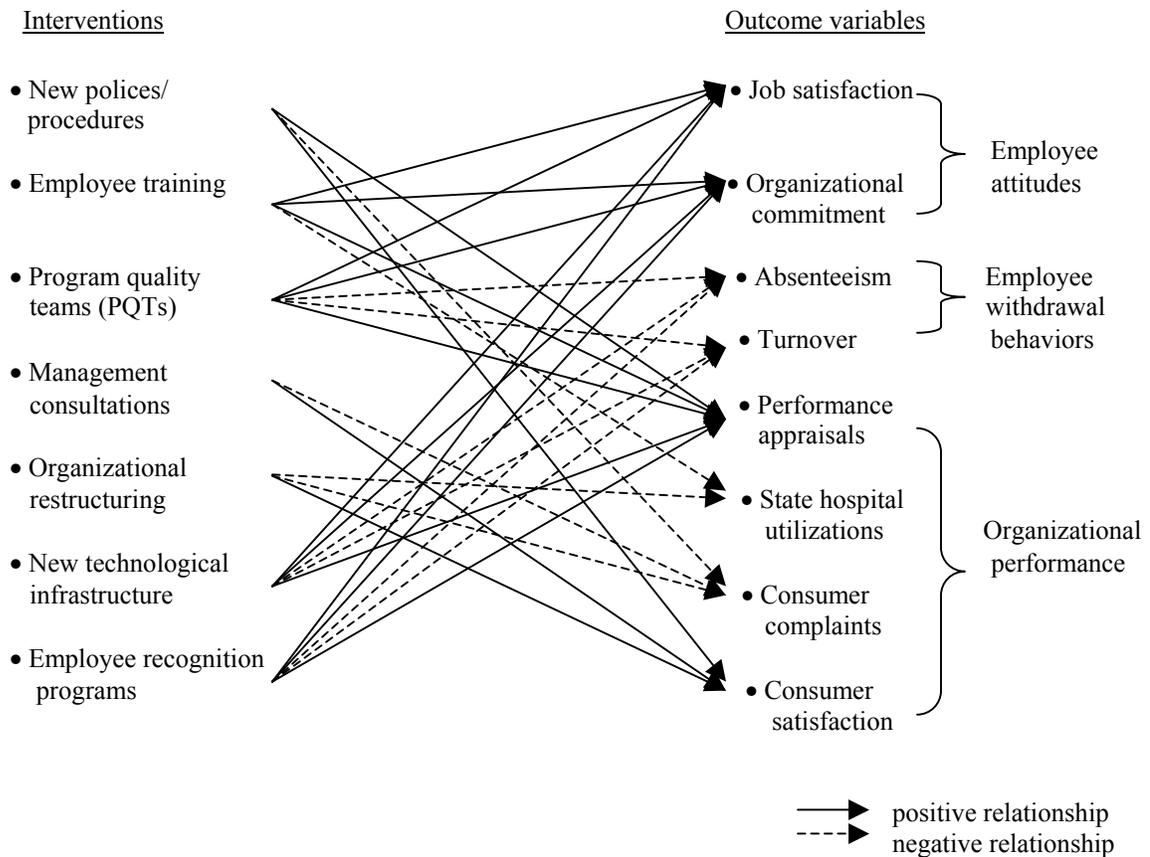


Figure 3.3. The relationships between the interventions and outcome variables

end points. Similarly, the scope of the effects of the interventions is not clear-cut because an intervention program may influence more than one outcome variable. Accordingly, the relationships described in Figure 3.3 are not definitive, but they reflect the best possible associations between the group of interventions and their outcome variables.

The group of change interventions listed on the left side of the figure were designed to have a positive influence on employees' attitudinal and behavioral changes as well as on the organizational performance of the Center. A number of change interventions may influence employee attitudinal variables. Employee training is likely to increase employee attitudes by providing opportunities to learn skills and knowledge

necessary for improved work performance. Establishing PQTs and employee recognition programs tends to improve employee job satisfaction and organizational commitment by encouraging employees' participation in decision making and by acknowledging their excellent work performance. The improvement of communication capability through using a new technology, such as e-mail, can also improve employee attitudes.

It is also assumed that the similar set of intervention programs—PQTs, employee recognition programs, and new technological infrastructure—have a negative impact on employees' withdrawal behaviors. These negative relationships are anticipated because increases in employee job satisfaction and organizational commitment as a result of these interventions tend to reduce employee withdrawal behaviors, such as absenteeism and turnover.

Virtually all Center interventions are assumed to have an impact on the improvement of organizational performance, but there may be some variations depending on the outcome variables considered. For example, new policies and procedures were heavily focused on improving consumer satisfaction, thereby reducing the number of consumer complaints. Also, organizational restructuring to establish an integrative service structure is likely to reduce state hospital utilizations by Center consumers because consumers' needs are increasingly met in this local mental health center by the holistic approach for higher quality services.

3.2. Evaluation Designs

The varying degrees of data availability for the various dependent measures result in multiple evaluation designs. Royse, Thyer, Padgett, and Logan (2001) have defined an

evaluation design as “the key features and procedures to be followed in conducting an evaluation” (p. 216). It is a plan for how frequently, how long, and from whom measurements should be taken during the course of an evaluation. Primarily, evaluation designs intend to solicit causality (Mohr, 1995). Through strong research design, a study may demonstrate reasonable estimates of the impact of change interventions on dependent measures (O’Sullivan & Rassel, 1995). Therefore, the careful choice of a research design seeks to rule out possible alternative explanations for program outcomes. In effect, the ideal research design needs to unambiguously link the series of change interventions to the outcomes of dependent measures.

As is the case with most field research, however, this research encountered four limitations that prevented an ideal research design. First, the change interventions in the Center have differing and uncertain beginning and end points. Some of the change interventions had begun even before the intervention point of this study and continue after the end points of the intervention. Second, in a post hoc evaluation, data availability is a major determinant of field research designs. Multiple evaluation designs can compensate for some missing data. Third, the focus on the organization level of analysis raises the problem of within-group variations. Finally, the Center is structurally and demographically different from other community mental health centers in Georgia, which prevents the use of other centers in the Georgia systems as a control group. Thus, a one-group design is the basic model of research design for this study.

The limitations of data availability from dependent measures result here in the need for multiple research designs with some modifications, each one applicable to a few dependent measures (Paul & Gross, 1981). The focus shifts from now-then designs to the

abbreviated time series design proposed by Armenakis & Smith (1978), and then to an interrupted time series design. These quasi-experimental design components serve to deal with the issue of alternative explanations given the limitations involved in the process of data collection (Cook & Campbell, 1979; Kimberly & Nielson, 1975).

Details follow.

3.2.1. Now-then design

For the changes in employee attitudes, now-then design was used as diagrammed below (see also Table 3.3, Summary of dependent measures), where O = observations and X = interventions. For O₂, survey respondents reported how they perceive themselves to be at present (Now). Immediately after answering the questions in this manner, respondents were asked to answer the same questions again for O₁ about how they perceive themselves to have been just before the changes occurred in July 1998 (Then).

$$O_1 \text{ (Then)} \quad X \quad O_2 \text{ (Now)}$$

An obvious reason for selecting this retrospective design is that there was no pre-test measures for employees' attitudes about satisfaction and organizational commitment, but substantial evidence shows that the now-then design can be serviceable and may even be superior to traditional pre- and post-design (Howard & Dailey, 1979; Howard, Ralph, Gulanick, Maxwell, Nance, & Gerber, 1979; Terborg, Howard, & Maxwell, 1980). Its proponents' arguments are quite convincing. In particular, Howard et al. (1979) maintain that self-report pre- and post-test measures might well be confounded by a "response-shift," a shift of common metric between pre- and post interval due to treatment effects.

For example, if a job satisfaction survey asks respondents to judge their perception about working conditions, a respondent may answer “moderately satisfied” at the pre-test and “very satisfied” at the post-test. During change interventions, however, the respondent can become disillusioned about his or her initial working conditions and realize that the initial answer should have been “dissatisfied.” In fact, the actual breadth of perception change about working conditions has increased from “dissatisfied” to “very satisfied,” not from “moderately satisfied” to “very satisfied.”

In this way, according to Howard et al. (1979), “then” scores can explore “true” scores of individual perception by increasing appreciation of their initial level of functioning on that dimension. The authors further illustrate that “at post-testing subjects remembered their pre-test level of functioning, remembered their pre rating of their level of functioning, and consciously chose to provide a different and more accurate set of ratings (Then)” (p. 14). In other words, sometimes we don’t know how bad things are until they start to get better.

Recent studies continue to support for use of retrospective design in evaluation research. Sprangers and Hoogstraten (1989) provide evidence that the retrospective pretest is the best alternative to avoid the possible effects of response shift in the self-report pretest. In evaluating the effectiveness of the School Nutrition Training, Rohs, Langone, Coleman (2001) also find that the then-post design detected more significant change than did the traditional pre- and post-test design because the former effectively eliminates a response shift bias.

Responding to the criticism that respondents might fabricate “then” responses, Benjamin (1982) countered that the now-then design is “less vulnerable to such a ‘social

desirability response' than the pre- and post-test measures" (p. 72). This may reflect the useful fact that post-test instructions may help respondents to become more aware of themselves. Also, any design contamination precludes establishing a common metric between pre- and post-test scores.

3.2.2. Abbreviated time series design

This design was used to evaluate Center change effects on absenteeism, performance appraisal, and consumer satisfaction, again due to data availability. Two rationales support this design. First, while it is often difficult to obtain suitable comparison groups in field settings, the one-group design alone seems too weak to provide convincing evidence of changes. Secondly, however, time series designs often require too much effort in collecting data from repeated measures in field settings. Hence, what emerged is an abbreviated time series design with more than one pre- and/or post-test measure. Armenakis and Smith (1978) argue that this design is superior to one-group pre- and post-test designs as well as more practical than a comparison group design. The design is diagrammed below, where O = observations and X = interventions.

$$O_1 X O_2 O_3$$

The rate of absenteeism and the scores on performance appraisals were collected from individual employees who had complete data across each measurement wave. This panel design determined individual changes that took place within the group. Unfortunately, individual scores of consumer satisfaction cannot be identified for each measurement wave because of the anonymity requirements imposed by the state of Georgia. Nonetheless, it is expected that many of the same consumers have responded

over each wave of measurement because many Center consumers have received treatments for a long period of time, often over several years.

3.2.3. Interrupted time series design

The final mode of research design used here is the interrupted time series design, which was utilized in the analyses of employee turnover, state hospital utilizations by Center consumers, and consumer complaints. The interrupted time series design takes several observations before and after the intervention in order to demonstrate that intervention programs result in expected outcomes which are over and above long-term trends, chance, or seasonal effects (Clark, 1987; O’Sullivan & Rassel, 1995). The design is diagrammed below.

O₁ O₂ O₃ X O₄ O₅ O₆

In the diagram, Os indicates observations of the dependent measures at equally spaced time intervals. X represents the change interventions at the Center. Scholars have increasingly recommended using the time series design in evaluating organizational change because many program effects, such as turnover, may appear long after the introduction of the change program (Golembiewski, 1990; Robertson et al., 1993). The time series design also serves well when experimental designs are not applicable, if at all, and appropriate comparison groups are not available. Clearly, history effects can create a validity problem, but the time series design is a useful strategy in evaluating change effects in a one-group design.

Nonetheless, this study does not claim clear causal inference in the analysis of these three dependent variables—turnover, state hospital use, and consumer complaints.

Rather, it seeks to demonstrate changes in the descriptive statistics before, during, and after the intervention program. Royse et al. (2001) provide several reasons why inferential statistics do not work well in interrupted time series data. First, the data on the three dependent variables have a relatively small number of pre-measures, which make a statistical inference problematic. Second, time series designs by their nature tend to create an autocorrelation problem, in which the data are serially dependent. If significant autocorrelation exists in the data, the inferential statistics become meaningless. Finally, trend inspection can avoid overestimation of statistical power by reducing Type I errors, which suggest differences that really do not exist. While the lack of statistical sophistication may cause Type 2 errors—that is, rejection of actual differences—it does prevent a tendency in evaluation research to overemphasize the statistical significance of changes in the data, which may not be of practical importance.

3.3. Measures and methods

This section presents details of operational definitions relevant to eight dependent measures to test whether the change interventions at the Center affect changes in each of the outcome measures. Selecting appropriate outcome measures is critical because valid and clean data can guarantee the proper measure of change effects (Hinkin, 1995; Mintzberg, 1979). Royse et al. (2001) also point out that “the entire credibility of any given [evaluation design] is dependent upon the study having used a reliable and valid outcome measure(s). Even the most rigorous designs can be hopelessly compromised if you choose a poor outcome measure, so pick a good one” (p. 218).

In this study, both self-report (subjective) and archival (objective) data were used to measure outcome variables. A self-report survey concerns how organizational actors perceive the way the organization has changed. The objective measures reinforce the findings of the self-report. Open-ended items in the self-report survey also enrich the interpretation of findings. In addition, small-scale interviews with selected program managers provide in-depth information about what has been happening during the intervention period. The “triangulation” approach—employing two or more distinct methods—permits cross-validation of trends and thus significantly reduces uncertainty of interpretation (Jick, 1979; Nicholas, 1979; Porras & Berg, 1978). Howard et al. (1979) emphasized that “it is obvious that the adequacy of the measures used in evaluation research affects the quality of findings. The integration of self report, objective, and behavioral measures has long been recognized as the most complete way to evaluate a treatment intervention” (p. 22).

This evaluation does not survey all recent employees for theoretical as well as for practical reasons. For employee attitude surveys and other objective measures such as absenteeism and performance appraisal, the unit of analysis focuses on the individual Center employees who were hired before the change interventions occurred in July 1998 and who were continuously employed throughout the period of study. Payroll records from the Business Department yield 191 sample employees out of 486 (39.3%) total employees across work units. The number of selected sample employees implies that the Center has been suffering from high turnover, which has resulted in approximately two-thirds of the employees leaving the Center during the three-year study period.

Other important sub-Ns also vary. For the last several years, the Center has conducted a yearly consumer satisfaction survey that is mandated by the state of Georgia. The number of consumers at the Center varies each year, from 8,130 in FY 1997 to 9,872 in FY 2000 in unduplicated figures. For example, even if a consumer received treatments from more than one work unit due to his or her dual diagnosis, the consumer was counted only once, rather than twice. Because many consumers at the Center have chronic diseases, which requires long-term medical and psychological care, there is a significant degree of overlap among respondents from year to year.

Table 3.3 presents a summary of the dependent measures. Employing multiple measures is especially important in studying public organizations where multiple goals always interfere with the use of any one “correct” form of evaluation measures. Measures of several agency records are taken before, during, and after the interventions. This seems logical because the change interventions at the Center have lasted more than

Table 3.3. Summary of dependent measures

Outcome variables	Instruments	Data format	Frequency of measure	Research designs
Employee Satisfaction	Minnesota Satisfaction Questionnaire (MSQ)	Individual	Before/After	Now-then
Organizational Commitment	Cook & Wall's (1980) Organizational Commitment Scales (OCS)	Individual	Before/After	Now-then
Withdrawal Behaviors	Absenteeism rate	Individual	Monthly	Abbreviated time series (panel)
	Turnover rate	Aggregated	Monthly	Interrupted time series
Organizational Performance	Performance appraisal scores	Individual	Yearly	Abbreviated time series (panel)
	Number of state hospital utilizations	Aggregated	Monthly	Interrupted time series
	Number of consumer complaints	Aggregated	Monthly	Interrupted time series
	8-item Client Satisfaction Questionnaire (CSQ-8)	Individual	Yearly	Abbreviated time series

one year (Kimberly & Nielsen, 1975; Lawler et al., 1983; Paul & Gross, 1981).

Turnover, state hospital utilizations, and consumer complaints data are aggregated agency-wide. Individual data are collected for the rest of the dependent measures. The descriptions of the dependent measures are grouped into the three broad categories of change impact, namely, employee attitudes, employee behaviors, and organizational performance.

3.3.1. Measures of employee attitudes

The employee attitude survey was conducted to assess changes in individual employees' job satisfaction, organizational commitment, and specific perceptions of the Center changes. See Appendix II for the questionnaires of employee attitude survey. Two standardized questionnaires were adopted by this author to examine employees' attitudes toward the Center: the Minnesota Satisfaction Questionnaire and Cook and Wall's (1980) Organizational Commitment Scales. Employees' perceptions of the Center changes were measured by a questionnaire with nine closed-ended items and four open-ended items developed specifically for the purpose of this study. The following text describes the three survey instruments described above and the survey administration procedures.

Minnesota Satisfaction Questionnaire (MSQ) Employee satisfaction toward their jobs was measured by a short form MSQ, a 20-item scale in which each item is correlated its highest respective scale from a 100-item long form MSQ (Weiss, Dawis, England, & Lofquist, 1967). MSQ solicits employee feelings about twenty aspects of work environments, such as supervision, pay, achievement, promotion, and job security.

Individual employees were asked to respond to the items with a 5-point Likert scale ranging from 1 = very dissatisfied to 5 = very satisfied. See section A of Appendix II for the questionnaire items.

MSQ was chosen for three reasons. First, the measurement scale can serve both global and dimensional measures, which permit investigation of specific facets of the job as well as overall job satisfaction. According to Weiss et al. (1967), factor analysis of the long-form MSQ produced three dimensions—intrinsic, extrinsic, and general satisfaction. Each dimension constitutes a set of items that load on each applicable factor; namely, intrinsic (items 1, 2, 3, 4, 7, 8, 9, 10, 11, 15, 16, 20), extrinsic (items 5, 6, 12, 13, 14, 19), and general satisfaction (all items including item 17 and 18). Accordingly, analysis can be conducted not only for individual items, but also for the three dimensions.

Second, MSQ takes little time to administer (approximately five minutes for the short form) and each item is worded at a fifth-grade reading level, which greatly reduces resistance to survey administration and thus enhances response rates (Weiss et al., 1967). Achieving a reasonable response rate, as is the case in most survey research in social science, was of particular concern in the planning of the survey administration because the study subjects—mostly clinicians—are under excessive stress in dealing with mentally ill consumers.

Finally, MSQ's validity and reliability have been established (Cook, Hepworth, Wall, & Warr, 1981; Price & Mueller, 1986). For example, Weiss et al. (1967) provided evidence of construct validity by testing differences in concepts between satisfactoriness and satisfaction. The authors also reported a median Hoyt internal reliability coefficient

from .80 for extrinsic satisfaction to .90 for general satisfaction as well as test-retest reliability across one year (.70).

Cook & Wall's (1980) Organizational Commitment Scale (OCS) OCS was adopted from Cook and Wall (1980), which is also a widely-used and validated scale. The nine-item scales solicit an employee's affective reaction to the Center before and after the change interventions. Employees were asked to respond to the items with a 7-point Likert scale ranging from 1= strongly disagree to 7 = strongly agree. See section B of Appendix II for the questionnaire items.

OCS was chosen for two reasons. First, as in the case of MSQ, OCS can serve both global and dimensional measures, which could enrich the analysis for evaluation. The scales consist of three dimensions of commitment—identification, involvement, and loyalty—each composed of the three items loaded highest on each applicable factor. Thus, the three sub-scales can be computed separately or all nine items can be combined into a global measure.

Second, OCS is short and easy to respond to, but it is also factorially robust (Cook et al., 1981). The nine-item scales were constructed because of the need for a brief measurement instrument for blue-collar employees who often have modest educational attainments, if they are not semi-literate. However, the instrument was developed and made more sophisticated via statistical analysis with a larger item pool. In addition, the scales include three negatively-worded items, one within each of the three dimensions. Despite the fact that the negatively-worded items can introduce systemic errors in scoring, they also can attenuate response pattern bias (Hinkin, 1995).

Items for employee perception to the change A final attitude measure seeks to explore employees' perceptions of the Center change. Employees were asked to respond to the items with a 5-point Likert scale ranging from 1= strongly disagree to 5 = strongly agree. See Section F of Appendix II for the questionnaire items. The nine items were developed exclusively for this study and inquire about employees' perception of the benefits from the changes, and their trust in the program's effectiveness, in the top management group, and in the overall operations of the Center.

In addition to the nine closed items, the survey includes four open-ended items which are intended to uncover employees' thoughts and experiences about the changes, focusing on four issues: problems, successes, ideas for improvement, and the desirable future state of the Center. These open-ended items provide in-depth views of the changes and enrich the findings of the data analysis.

Survey administration The survey questionnaire was modified through discussion with a group of Center managers, including the director of the CQI department. The survey was subsequently submitted to members of the Institutional Review Board (IRB) at the Center so that they could review the purpose of the research and the survey administration procedure involving human subjects—the Center employees—in order to ensure that their rights and interests were being protected (Babbie, 1995). Upon approval from the Center IRB, the questionnaire was given scrutiny by the University of Georgia (UGA) IRB at the Human Subjects Office (HSO) which paid particular attention to the consent form. See Appendix III for 'approval form' from HSO for employee attitude survey. Consent to the survey was given by the Center employees, with the provisions that each would participate in the research on a strictly voluntary basis, and any

information obtained from this research would remain confidential, and research results would be disclosed only in an aggregated form.

Although the mail survey was designed to be self-administered, several other methods were used concurrently to increase the response rate. First, sample employees received an e-mail that informed them of the upcoming survey and encouraged them to participate with a promise that individual responses would be kept confidential. Then the investigator gave copies of questionnaire to Center staff, either by directly visiting their office or by contacting their program managers, with a request that the respondents mail the completed questionnaires to the investigator's mailbox. Each questionnaire was accompanied by a postage-paid and self-addressed return envelope.

The survey was administered from July 16 through September 10, 2001. Delivery of the survey was followed by two follow-up e-mails and telephone encouragement approximately two weeks apart. When the researcher hand-delivered the questionnaire, he told the respondents about the purposes of the study and gave them instructions on how to complete the form. Respondents were also given a choice: fill out the form, or have an interview with the researcher to complete the questionnaire. The researcher put more emphasis on the interview method, especially with program managers, because appropriate interviewing would reduce the "turn down" rate and would provide rich information about open-ended questions. These efforts yielded a total of 96 responses from 191 sample employees, or a 50.3 percent response rate.

Note that a 50.3 percent response rate may seem modest, but no similar response rate has been achieved by any type of survey conducted by the Center since its establishment. For instance, a recent survey conducted by the top management only

obtained a 20 percent response rate from the Center employees, although the survey was enclosed with the monthly paycheck.

Furthermore, the responding population is like the total population in significant senses that encourage optimism that the former is a reasonable replica of the latter. For example, the respondents include 13 program managers, constituting over 50 percent of the management level positions at the Center. More than 75 percent of the respondents are female, and approximately 73 percent of the sample employees are over 40 years old.

3.3.2. Measures of employee withdrawal behaviors

Two measures reflect the change in employee withdrawal behaviors at the Center: the rates of absenteeism and turnover. The Center's archival records as well as computerized data were utilized to identify absenteeism and turnover rates for a period of approximately four years.

Absenteeism rate At the end of each month, individual employees are asked to submit a "bluesheet"—a monthly summary of the work schedule—to the MIS department with their supervisor's signature on it. The bluesheet contains several types of employee leave records: annual leave, sick leave, personal leave, other leave, holiday time earned, and state compensatory time. Annual leave is formally given by the personnel policy at the Center (e.g., 10 hours per month for the first 5 years). However, the Center compensates employees for unused annual leave at the time of retirement. Sick leave can be used for illness and medical appointments for the employee or his or her immediate family. Unused sick leave can be converted into up to three days of personal leave. Other leave includes jury duty, blood donation time, voting, funeral

attendance, maternity leave, and military leave. Holiday time consists of both national holidays and twelve state holidays declared by the Governor. Finally, state compensatory time can be earned when an employee works more than his or her normally scheduled hours in a day. The employee can use the state compensatory time for personal purposes. Figure 3.4 briefly sketches a sample of the “bluesheet.”

Based on the bluesheet, absenteeism rate can be computed by dividing the total hours of absence by total hours of scheduled to work over a six-month period shown below (Price & Mueller, 1986).

$$\text{Absenteeism rate} = \frac{\text{Total hours of absence}}{\text{Total hours of scheduled to work}}$$

The total hours of absence include hours of annual, sick, personal, and other leave. The total hours of scheduled to work can vary depending on the number of working days in each month. October through March bluesheets for 191 sample employees were manually selected to compare leave records throughout three fiscal year periods—FY 1998, FY 2000, and FY 2001—which serve as before, during, and after measures, respectively. If data on an employee was missing in any fiscal year, the observation was excluded in the computation in order to have a complete set of data in three different points in time. This filtering procedure is important to ensure that the scales measure individuals on the same metric throughout the study period. However, this matched pairs greatly reduced the number of observation points, to 92, or 48.2% of sample employees.

Turnover rate Turnover refers to voluntary movement initiated by an individual employee (Price & Mueller, 1986). Generally, research on turnover distinguishes voluntary and involuntary turnover and considers only the former in calculating the

<Front>

Reporting period						Employee ID					
thru											
M	M	D	D	Y	Y	M	M	D	D	Y	Y

The hours stated below accurately reflect my activities for the past month.

Employee Signature: _____

Supervisor Signature: _____

B	C	D	E	F	G	H	I	J	K
Total Hours Actually Worked	Annual Leave Used	Sick Leave Used	Personal Leave Used	Other Leave Used	Holiday Time Earned	State Comp Taken	FLSA Comp Taken	Total Hours B thru I	Hours Scheduled to Work
60	8	4			8			80	80

<Back>

Activity → Date	Hours Scheduled	Hours Worked	Leave, State, FLSA Comp Taken; Holiday Earned
2/1/02	8	0	8 (Holiday)
2/4/02	8	8	
2/5/02	8	8	
2/6/02	8	8	
2/7/02	8	8	
2/8/02	8	8	
2/11/02	8	0	8 (Annual)
2/12/02	8	8	
2/13/02	8	8	
2/14/02	8	8	
2/15/02	8	4	4 (Sick)
Total →	80	60	20

Figure 3.4. A sample of monthly summary of staff time (Bluesheet)

turnover rate (Clegg, 1983; Shaw, Delery, Jenkins, & Gupta, 1998; Williams & Hazer, 1986). The volume of voluntary turnover is important in an organization because it affects certain organizational costs, such as diminishing consumer satisfaction due to service disruption.

Based on a “quit rate” developed by Price & Mueller (1986), the rate of turnover at the Center can be computed by the formula shown below.

$$\text{Turnover rate} = \frac{\text{Number of employees leaving voluntarily each month}}{\text{Total number of employees each month}}$$

Voluntary turnover includes early retirement, taking a job outside the Center due to better working conditions, and changing jobs due to family reasons. Involuntary turnover involves dismissals, layoffs, and deaths. Since involuntary turnover constitutes less than 10 percent of total separation, the rate of turnover in this study includes only voluntary movement.

The data on turnover were drawn from files of the Department of Human Resources at the Center, which has maintained monthly turnover records electronically from January 1998 to September 2001. Unfortunately, data were available only after January 1998, which substantially reduces the number of data points of before-measures. Additionally, since October 1999, the Department of Human Resources has begun to use a new software program for personnel management, the “Peoples” system, which uses very specific reasons to classify terminations of individual employees. The old personnel system had only three broad categories—death, dismissed, and voluntary. For example, the “Peoples” system provides specific reasons for “dismissal,” such as disciplinary action, failed drug test, violation of Center policies, etc., while the old personnel system

supplies only an aggregated category, “dismissed.” The specific reasons for dismissal in the new system were combined into one broad category, “dismissed” in order to make the longitudinal turnover data consistent throughout the study period.

3.3.3. Measures of organizational performance

The measures of organizational performance used in this evaluation encompass multiple indicators, as is usually the case in public organizations. The four measures are identified to determine the change effects on Center performance. The first three measures reflect the increasing work performance, involving employee performance appraisals, state hospital utilizations by Center consumers, and the number of consumer complaints. An eight-item client satisfaction questionnaire was utilized to measure the change in the level of consumer satisfaction with Center services.

Employee performance appraisals Performance appraisals can serve as a direct measure of employee work performance, despite longstanding measurement problems, such as the halo effect. According to the 2001 Center personnel policy manual, all salaried employees should be evaluated at least annually, primarily for assessing salary increases (ABHS, 2001). At the end of the fiscal year, the evaluating supervisor (usually the immediate supervisor) must meet with each of his or her employees to discuss the upcoming performance appraisals. In the meeting, the evaluating supervisor should attempt to arrive at an agreement on the employee’s job and individual responsibilities as well as performance expectations. Minor modifications to the performance plan may be made and signed by both the employee and the supervisor in order to establish the Performance Management Form (PMF) (see Table 3.4).

PMF, a standard form for performance appraisal in the state of Georgia, consists of two categories to be appraised: job responsibilities and terms and conditions. The evaluating supervisor rates the employee's performance in terms of individual responsibilities and their performance expectations according to the following four scales: (1) Did Not Meet Expectation, (2) Met Expectation, (3) Exceeded Expectation, or (4) Far Exceeded Expectation. The evaluating supervisor must provide specific written documentation to support all ratings on the PMF. A rating of "Exceeds" or "Far Exceeds" requires specific examples of exceptional work for justification. Table 3.4 below presents an example of a clinician's PMF in a mental health clinic.

Terms and conditions refer to the extent to which individual employees follow work regulations and rules such as observing policies and procedures and leave usage. The employee's adherence to the terms and conditions of employment is evaluated according to the following three scales: (1) Did Not Meet Expectation, (2) Needs Improvement, and (3) Met Expectation.

The Human Resources Department at the Center maintains individual performance appraisal data for salaried employees on a yearly basis from fiscal years 1996 through 2001, which allows a panel data set for a six-year period. However, this study intended to compare scores of individual performance appraisals for three points in time—FY 1998, FY 2000, and FY 2001—which serve as before, during, and after measures, respectively. Six waves of longitudinal measurement would produce better statistical results than those with three waves of measurement, but use of the larger number would significantly reduce the size of the sample. In addition, the three

Table 3.4. An example of a clinician’s Performance Management Form (jobs and individual responsibility)

Job or Individual Responsibility	Performance Expectations	Actual Performance	Performance Rating
Assesses assigned consumers and develops individualized service plans.	<ol style="list-style-type: none"> 1. Conducts individual counseling sessions with assigned consumers. 2. Documents individual counseling sessions with assigned consumers in accordance with departmental regulations and within the established time frame. 3. Develops individualized service plans for consumers based on through evaluations of consumers’ needs and assets and availability of programs. 		<input type="checkbox"/> Did Not Meet <input type="checkbox"/> Met <input type="checkbox"/> Exceeded <input type="checkbox"/> Far Exceeded
Provides counseling services in crisis situations (e.g., consumers behaving aberrantly, illnesses, injuries, family crises, or employment crises).	<ol style="list-style-type: none"> 1. Conducts emergency counseling sessions as requested by staff or residents. 2. Appropriately de-escalates disruptive or crisis situations. 3. Is appropriately available to on-going consumers during times of emotional, physical, or life crisis. 		<input type="checkbox"/> Did Not Meet <input type="checkbox"/> Met <input type="checkbox"/> Exceeded <input type="checkbox"/> Far Exceeded

measurement points yielded a total of 169 matched pairs. This is deemed sufficient to demonstrate the effects of organizational change on the individual employee performance.

State hospital utilizations by Center consumers State hospital utilizations by Center consumers can be measured by state hospital Days of Active Client Enrollment (DACE), in which one DACE refers to “the utilization of one bed by one consumer for one day” (Shield, 1999). If, for example, three patients stay in the hospital for two days, they consume a total of six DACEs.

The rationale is obvious—to force local treatment and reduce centralized services—and the measure did not disappoint. The regional board collects monthly DACE numbers from state hospitals, including Central State, Atlanta Regional, and Augusta Regional, and sends them to the Center, where the hospital liaison office keeps track of the DACE number so as not to overuse state beds specified by contract with the state. This study adopted the monthly DACE numbers from July 1997 to June 2001, with emphasis on total adult statistics. Children and adolescent records were excluded because of the scarcity of DACE numbers on young patients. The total adult statistics, which came from both Central State and Augusta Regional Hospitals, included the number of adult patients in the mental health and substance abuse unit, the mental retardation unit, the long term care unit, and the forensic (criminal) unit.

The number of consumer complaints The Department of Utilization and Risk Management at the Center has maintained monthly consumer complaint reports as required by Center policy. The consumer complaint reports consist of several components: the work units where the complaints are filed, the content of complaints, the date of the incident, the witness or other person or people involved, the specific action

requested by the complainant, and the specific action taken by the staff to resolve the complaint. See Appendix IV for a sample of the consumer complaint form. The complaint reports include detailed descriptions of consumer complaints that can enrich the understanding about what consumers want.

Analysis of the number of consumer complaints can imply two different interpretations. On the one hand, the very act of complaints about Center services can serve as a measure of consumer empowerment because consumers have a voice about events that they perceive as having violated their rights. On the other hand, reduction in the number of consumer complaints implies that consumers tend to be satisfied with the quality of services. Consequently, the number of consumer complaints serves as a measure of increase in the quality of the Center service.

Some fine-tuning also needs acknowledgement. The number of consumer complaints must be adjusted by the number of Center consumers, since the number of Center consumers has been growing for the last several years. Unfortunately, longitudinal data on the monthly number of Center consumers was not available at the time of data collection; yearly data were used for data adjustment.

Consumer satisfaction with Center services Consumer satisfaction was determined by the Client Satisfaction Questionnaire, a standardized consumer satisfaction scale developed by Nguyen, Attkisson, and Stegner (1983). The questionnaire is also known as CSQ-8 because it consists of eight closed-ended items, each with a four-point Likert scale ranging from poor to excellent or from quite dissatisfied to very satisfied. See Appendix V for the questionnaire items. Originally designed for outpatients, CSQ-8

has been widely used for measuring consumer satisfaction in the clinics and hospitals dealing with mental health and substance abuse problems.

CSQ-8 does not include open-ended questions. This fact may prevent a better understanding of consumer experiences and a more in-depth view of Center services. Nonetheless, three strengths make CSQ-8 useful in measuring the satisfaction of Center consumers. First, CSQ-8 is short and easy to use and thus reduces resistance to survey administration. Second, it has been validated and is a reliable measure for service satisfaction of consumers (Nguyen et al., 1983). Third, it is a brief and global index that can use total average scores as a uniform measure of changes in perception of service satisfaction before and after the intervention.

The regional board in the state requires the Center to measure and report consumer satisfaction at least once a year in order to make necessary changes in services based on the results of the satisfaction survey (Northeast Georgia Regional Board, 2000). As part of the contractual obligations, the CQI department administer the CSQ-8 survey twice a year (it had been conducted every quarter until fiscal year 1999) to both consumers and their family members and analyzes the results with the benchmark 3.0, meaning that consumers are satisfied or strongly satisfied with the Center services.

Several convenient conventions are employed in this evaluation. This study adopted the CSQ-8 survey data collected by the CQI department across three time periods—FY 1998, FY 2001, and FY 2002—which serve as before, short-post, and long-post measures, respectively. The quarterly administrations of the CSQ-8 survey in FY 1998 were combined into a yearly data set comparable to FY 2001 and FY 2002 yearly data.

CHAPTER 4

ANALYSIS AND RESULTS

This chapter describes data analyses and the results of testing nine hypotheses proposed in the previous chapter, with an aim of answering a major research question: Have the Center changes achieved the intended objectives, moving beyond past employee attitudes, behaviors, and performance as a result of change interventions? In the data analysis, several analytical tools, from traditional t-tests to the Latent Growth Model (LGM) approach, were employed to measure the changes due to the distinct characteristics of the dependent variables. Also, Cronbach's *alpha coefficient* was used to establish the reliability of self-report surveys of both employee and consumer satisfaction.

Chapter 4 consists of four sections. The first section concerns the impact of the interventions on employee attitudes. Analyses of employee satisfaction and organizational commitment provide evidence for any attitudinal changes that can be attributed to the interventions. The Confirmatory Factor Analytic (CFA) approach was used to distinguish alpha, beta, and gamma change in employees' attitudes. The second section analyzes two behavioral measures—absenteeism and turnover—to test whether the interventions reduced employees' withdrawal behaviors. In the third section, the intended effects of the interventions on organizational performance are analyzed with four dependent measures: performance appraisals, state hospital utilizations by Center

consumers, consumer complaints, and consumers' self-reported satisfaction with Center services. Finally, qualitative analysis based on open-ended items from the attitude surveys provides additional evidence with respect to problems and successes resulting from the change interventions.

4.1. Impact on employee attitudes

Employees' self-report data were used to measure any major and intended effects of the change interventions on employee satisfaction and commitment. The CFA approach was used to estimate the measurement equivalent (ME) for the dimensions of the two latent constructs—employee satisfaction and employee organizational commitment—over the measurement points. Once the ME is established, traditional t-tests were employed to examine if meaningful mean differences existed before and after the intervention. These processes can identify alpha, beta, and gamma changes of employee satisfaction and commitment that can be attributable to the change interventions.

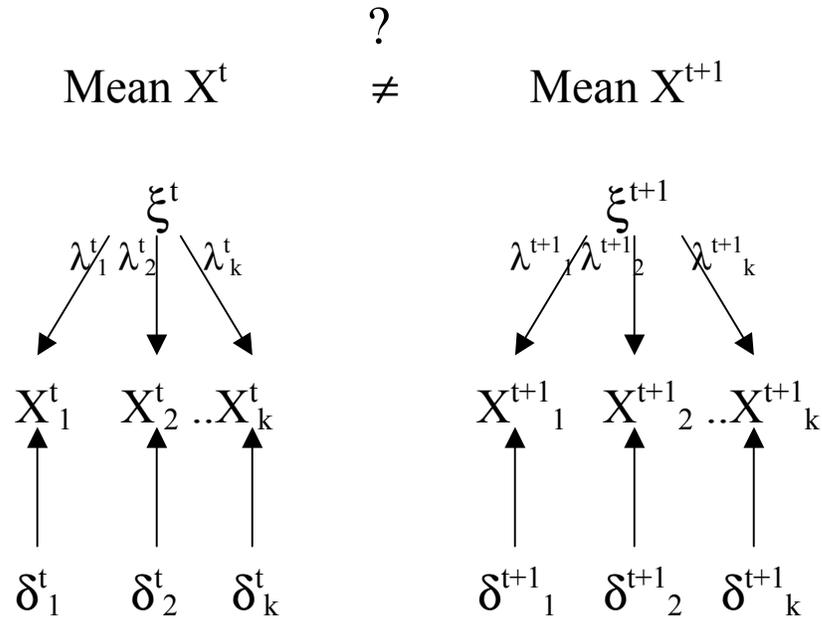
4.1.1. Analytical procedures

Traditionally, the comparison of mean differences has been used as a major way of identifying change (e.g., t-test or ANOVA). Since the findings of Golembiewski et al. (1976a) with respect to multiple forms of change, however, simple comparison of the difference scores has come under attack because it could be misleading if the measurements across time periods represent different constructs. In other words, the comparison of mean differences can supply meaningful change evaluation only if

factorial structures of a multi-item concept are the same for all time periods under consideration. Therefore, it is important that gamma and beta changes be ruled out before measuring any comparisons between time periods.

Accordingly, the establishment of ME becomes a necessary precondition to analyzing any differences among different groups (Vandenberg & Lance, 2000). The search for gamma and beta effects seeks to establish ME of factor structures in the subjective measures. ME refers to whether the factor structures of employee satisfaction and commitment remain essentially unchanged across the waves of longitudinal observations. The basic idea of ME is that covariance matrices of factors in latent constructs must be the same in order to get meaningful mean differences across measurement waves. The reliance on factor structure to identify gamma and beta change is a suitable approach because differences of factor covariance represent the change of “the major dimensions of reality necessary to economically account for the variance in scores on some large set of variables” (Golembiewski, 1990, p. 225).

Figure 4.1 illustrates the implied measurement model underlying comparison of a theoretical construct over time. In the figure, X represents observed variables, ξ indicates latent constructs such as employee satisfaction, λ is a factor loading for the effects of ξ on X , and δ indicates measurement errors, or unique factors. Vandenberg and Lance (2000) elucidate that comparison of a theoretical construct over time assumes equivalent associations between observed variables (X_{ks}^t) and ξ as well as the same degree of influence of ξ on X_{ks}^t (λ_k^t) and the same unique factors (δ_k^t) across measurement waves. If a set of measures means quite different things to subjects at time 1 and time 2,



Source: Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods, 3*, 4-69.

Figure 4.1. The implied measurement model for comparison of a latent construct across time

comparison of mean scores may be tantamount to comparing apples and oranges. Thus, the authors cited above contend that “demonstration of measurement equivalence is a logical prerequisite to the evaluation of substantive hypotheses regarding group differences” (p. 9).

To estimate ME and identify the change typology, the CFA approach was employed (Bollen, 1989). The model specifies the relations of observed manifest variables (survey items) to latent constructs (employee satisfaction and organizational commitment). Assuming q items and m latent variables, and specifying the same factor structure for each time measure t , the general equation of CFA model will be:

$$X^t = \tau^t + \Lambda^t \xi^t + \delta^t$$

where,

$X = a q \times 1$ (where q is the number of indicators of ξ) vector of observed variables,

$\xi = a m \times 1$ (where m is the number of ξ 's) vector of latent variables,

$\Lambda = a q \times m$ vector of regression slope, or factor loading, for the effects of ξ on X ,

$\tau = a q \times 1$ vector of intercept

$\delta = a q \times 1$ vector of measurement errors.

Assumptions: $E(\delta^t) = 0$, $Cov(\xi^t \delta^t) = 0$

The above equation indicates two points: (1) Observed scores on the q items are a function of underlying factor scores. However, (2) observed scores can vary across the waves of measurements due to the different intercepts (τ^t) and factor loadings (Λ^t) (Steenkamp & Baumgartner, 1998; Taris et al., 1998).

ME involves sequential steps for testing and concurrently identifying multiple forms of change (Vandenberg & Lance, 2000). In the first step, the omnibus test of equality of covariance matrices must be conducted before any questions are asked about other forms of equivalence, because once covariance matrices are determined to be the same across groups, ME is established and no further tests of other forms of equivalence are necessary.

If covariance matrices across groups differ, some form of non-equivalence exists between groups, and thus tests for gamma and beta change are warranted. Gamma change can be isolated by testing configural equivalence in which different patterns of factor loadings between measures indicate substantial degree of change. Configural equivalence can be established by constraining a referent indicator (or marker item) of each latent variable and by fixing the first item's intercept at 0. Failure to establish

configural equivalence means that two groups have different conceptual frames of reference, suggesting gamma change.

Beta change describes the situation that arises when people in different waves of measurement respond to the items in different ways. The metric equivalence can be established by constraining Λ matrix, or factor loading ($\Lambda^t = \Lambda^{t+1}$) across measurement waves. Failure to establish metric equivalence means that subjects recalibrate the measurement scale across the time frame, which suggests beta change.

The comparison of latent means for detecting alpha change requires scalar equivalence tests in addition to the tests of configural and metric equivalence presented above. Scalar equivalence can be tested by constraining the intercept (tau) between measures ($\tau^t = \tau^{t+1}$). If regression of the various items on the latent variables produce different intercepts, the overall level of change across time is due to systemic response bias between groups. Once metric and scalar equivalence are demonstrated, the equality of latent means can be established by constraining a $k \times 1$ vector, k (kappa) ($K^t = K^{t+1}$).

These considerations frame a major feature of the approach used here. However, this study utilizes only the procedure for the omnibus test of equality of covariance matrices, for two reasons. First, as shown in the results section, the three dimensions of the organizational commitment scales are, overall, equivalent between measurements, thereby effectively eliminating gamma and beta change. Moreover, employee satisfaction scales are not appropriate for the ME test due to the small sample size.

Based on the recommendations established by Vandenberg and Lance (2000), a test of equality of covariance matrices was conducted to examine overall ME ($\Sigma^g = \Sigma^{g'}$), where g and g' indicate the same group at different times (before and after the

interventions). The test includes four constraints: (1) inputting the q -items for two waves of measurement occasion matrices for each job satisfaction and organizational commitment dimension separately, (2) setting an equal number of latent and observed variables, (3) constraining variance and covariance between items/factors to be identical across measurement waves, and (4) constraining item intercepts to be identical across measurement waves. A model with poor fit warrants further tests of the ME (see Appendix VI for an example of LISREL code for the omnibus test of equality of covariance matrices for “Involvement” in the organizational commitment scale).

The chi-square (χ^2) test was used to estimate the overall model fit of covariance matrices between waves of measurement. A non-significant chi-square indicates a good model fit, representing ME of latent variables in each of the time intervals. It is noted that although the χ^2 test provides a convenient way of estimating overall model fit, several other fit measures are often necessary because the χ^2 test is dependent on sample size (Anderson & Gerbing, 1988; Schmitt, 1982). Accordingly, the χ^2 test of model fit tends to be used in conjunction with other practical fit indices, such as the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the Root Mean Square Error of Approximation (RMSEA), and the Root Mean Square Residential (RMSR).

4.1.2. Results

Employee satisfaction In chapter 3, this study hypothesized that the interventions at the Center will generate a positive change in employee job satisfaction (Hypothesis 1). LISREL 8 (Jöreskog & Sörbom, 1996) was used to analyze the factor structures of each dimension of employee satisfaction scales. Unfortunately, comparison

of factor structures for employee satisfaction was not possible because the total sample size for the analysis was smaller than the number of parameters, and parameter estimates thus became unreliable. Accordingly, conventional t-tests seem appropriate for analyzing the satisfaction data, and this prevents further analysis for distinguishing gamma and beta change. Only alpha change can be attributable from the satisfaction data.

Table 4.1 shows the results of paired-samples t-tests on employee satisfaction that identify any significant differences in mean before and after organizational change at the Center. A one-tailed test was employed because the research hypothesis posits that the mean of the sample in the after-measure is greater than that of the before-measure. Since the twenty items theoretically reflect three satisfaction dimensions (i.e., intrinsic, extrinsic, and general satisfaction), t-tests were conducted not only for individual items, but also for the three dimensions of employee satisfaction.

The organizational change efforts generally resulted in a pattern of shifts in the expected direction, although the paired samples t-tests did not indicate any meaningful change in employee satisfaction. As for between-item comparisons, patterns of change direction seem evenly distributed. Improvements were observed in twelve out of twenty items, but only one showed statistical significance at $p < .05$. Employee satisfaction declined in eight items; only one of these was statistically significant at $p < .05$. Note that Cronbach's alpha coefficients ranging between .81 and .93 support the scale reliability of the satisfaction measure.

The patterns of change between the intrinsic and extrinsic dimensions were opposed. While intrinsic satisfaction has slightly increased since the introduction of the interventions, such as program quality teams and employee recognition programs,

Table 4.1. Summary of differences in employee satisfaction on before and after intervention

Items on employee satisfaction	Before X (sd)	After X (sd)	t	Direction of change
Intrinsic Satisfaction	3.90	3.95	.48	+
Being able to keep busy all the time (Activity)	(.71) 4.22 (.82)	(.61) 4.19 (.89)	-3	-
The chance to work alone on the job (Independence)	3.98 (.99)	4.02 (.97)	.29	+
The chance to do different things from time to time (Variety)	3.99 (1.03)	4.05 (1.02)	.43	+
The chance to be “somebody” in the community (Social Status)	3.67 (1.01)	3.63 (1.04)	.33	+
Being able to do things that don’t go against my conscience (Moral values)	3.95 (1.11)	3.99 (1.02)	.28	+
The way my job provides for steady employment (Security)	4.09 (.99)	4.04 (.98)	-.38	-
The chance to do things for other people (Social service)	4.17 (.78)	4.30 (.81)	1.11	+
The chance to tell people what to do (Authority)	3.34 (.84)	3.51 (.70)	1.68	+
The chance to do something that makes use of my abilities (Ability Utilization)	3.88 (1.06)	3.97 (.99)	.58	+
The freedom to use my own judgment (Responsibility)	3.77 (1.06)	4.00 (.93)	1.75	+
The chance to try my own methods of doing the job (Creativity)	3.74 (1.07)	3.83 (1.01)	.58	+
The feeling of accomplishment I get from the job (Achievement)	3.93 (1.17)	3.79 (1.09)	-.89	-

Extrinsic Satisfaction	3.19	3.11	-.64	-
	(.98)	(.91)		
The way my boss handles his/her staff (Supervision-human relations)	3.58	3.66	.43	+
	(1.37)	(1.36)		
The competence of my supervisor in making decisions (Supervision-technical)	3.65	3.89	1.31	+
	(1.31)	(1.20)		
The way the Center policies are put into practice (Center policies & practices)	3.00	2.59	-2.56*	-
	(1.34)	(1.12)		
My pay and the amount of work I do (Compensation)	2.54	2.33	-1.55	-
	(1.15)	(1.16)		
The chances for advancement on this job (Advancement)	2.82	2.65	-1.09	-
	(1.23)	(1.28)		
The praise I get for doing a good job (Recognition)	3.49	3.45	-.25	-
	(1.31)	(1.26)		
Other Satisfaction items				
The working conditions (Working conditions)	3.56	3.51	-.34	-
	(1.20)	(1.12)		
The way my co-workers get along with each other (Co-workers)	3.47	3.79	2.29*	+
	(1.31)	(1.10)		
TOTAL (General Satisfaction)	3.65	3.66	.15	+
	(.76)	(.64)		

*p<.05. Significance of difference is determined by one-tailed t-test

extrinsic satisfaction declined after the intervention. Specifically, the Center employees showed a significantly higher level of dissatisfaction with the way Center policies are put into practice than before the change occurred. Pay and promotion opportunity were not only among the lowest levels of satisfaction, but also produced worsening effects after the intervention. This result implies that, while the Center employees maintained the level of satisfaction with intrinsic incentives such as independence in work and ability utilizations, their satisfaction with extrinsic incentives, such as pay and promotion opportunities, were at a low level and declined even after the series of organizational change efforts.

In sum, although there is little convincing evidence from the data that the organizational change intervention successfully shifted the pattern of employee satisfaction, it seems that there is a tendency for a modest level of positive alpha change, which generally confirmed hypothesis 1.

Organizational commitment The second hypothesis indicated that the interventions at the Center would generate a positive change in employee organizational commitment. A test of the ME was conducted for conceptually distinguished three dimensions of organizational commitment scales—identification, involvement, and loyalty—in order to examine whether covariance matrices of these individual dimensions represent the same constructs between measurement occasions. The primary reason for analyzing covariance matrices rather than correlation matrices is that the latter assume equal item variances and thus underestimate differences between the groups (Taris et al., 1998). A model with good fit, represented by equivalent covariance matrices, implies that the factor pattern and the magnitude of factor loadings are the same across time,

thereby indicating no gamma or beta change. Thus, comparison of latent means—alpha change—becomes meaningful.

Table 4.2 shows the results of the ME tests for three organizational commitment dimensions. Results for the omnibus test of ME for Identification indicated excellent model fit. The model $\chi^2(6)=10.20$ is statistically non-significant, and other fit measures, such as CFI and RMSEA, provide additional support for the ME before and after measures. The same results are also found in the other two commitment dimensions—Involvement and Loyalty—by non-significant chi-square and additional support from other fit measures.

Table 4.2. Results of the omnibus test of measurement equivalence ($\Sigma^t = \Sigma^{t+1}$) for three dimensions of organizational commitment scales

Dimensions	df	χ^2	SRMSR	RMSEA	TLI	CFI
Identification (N=91 $\alpha=.60$)	6	10.20	0.066	0.088	0.94	0.98
Involvement (N=94 $\alpha=.61$)	6	11.01	0.079	0.095	0.82	0.93
Loyalty (N=93 $\alpha=.54$)	6	3.74	0.078	0.0	1.05	1.00

Note: SRMSR= Standardized Root Mean Square Residential; RMSEA= Root Mean Square Error of Approximation; TLI= Tucker-Lewis Index; CFI=Comparative Fit Index.

These results have two analytical implications. First, no further tests for other forms of the ME, such as configural and metric equivalence, were necessary to examine factor structures across time. Secondly, we can safely assume that no gamma or beta change exist in any of the three organizational commitment dimensions from change interventions.

However, it may be prudent to interpret these results more carefully. Relatively low Cronbach's alpha coefficients for each of the three dimensions, ranging between .54 and .61, were found due to the small number of items (three items) in each dimension of the commitment scale (Crocker & Algina, 1986). Nonetheless, the alpha coefficients for the overall nine-item organizational commitment scales are in an acceptable range, .84 at time 1 and .80 at time 2.

Being informed but not diminished by this caveat, the evidence from the ME in three dimensions warrants a meaningful test of mean differences between the before and after measures. Table 4.3 indicates the results of paired samples t-tests on the three commitment dimensions. Overall, organizational change efforts at the Center resulted in negative shifts, although these results were not statistically significant. A closer look at the mean differences reveals that significant variations exist among the three commitment dimensions. Involvement increased significantly at $p < .05$ level after the interventions. However, the loyalty of the Center employees significantly declined at $p < .01$ or less after the interventions. Similarly, identification also had changed in a negative direction, although the change does not have statistical support.

In sum, the patterns of change displayed on the three dimensions of the organizational commitment scales were not unidirectional. Rather, they show three somewhat different directions: (1) no significant change exists in identification, (2) significant positive alpha change was found in involvement, and (3) significant but negative alpha change exists in employee loyalty toward the Center.

These results shed some light on the loyalty of the Center employees. Although employees' levels of involvement seem to have positively changed after the interventions,

Table 4.3. Summary of differences in employee commitment on before and after intervention

Items on organizational commitment	Before X (sd)	After X (sd)	t	Direction of change
Identification	4.77 (1.44)	4.52 (1.54)	-1.13	-
Proud to tell people for whom I work	4.98 (1.77)	4.59 (1.66)	-1.64	-
I feel I am part of the organization	4.74 (1.89)	4.77 (1.88)	.12	+
Not recommend my job to friends (-) ¹⁾	4.53 (1.88)	4.15 (1.98)	-1.50	-
Involvement	5.63 (1.06)	5.92 (.97)	2.27*	+
Not willing to help the organization (-)	5.37 (1.71)	5.58 (1.55)	1.01	+
Willing to work for the organization	5.55 (1.40)	5.97 (1.12)	2.55*	+
I am pleased with contribution for the Organization	6.03 (1.17)	6.21 (1.09)	1.14	+
Loyalty	4.42 (1.38)	3.72 (1.57)	-3.29***	-
Want to leave this employment for good (-)	4.61 (2.03)	3.20 (1.95)	-4.64***	-
Reluctant to change to another employer	4.67 (1.68)	3.94 (1.91)	-2.88**	-
Money doesn't affect changing my job	3.97 (1.92)	4.01 (2.02)	.16	+
TOTAL	4.94 (1.06)	4.72 (1.13)	-1.3 (.189)	-

*p<.05 **p<.01 level ***p<.001 level. Significance of difference is determined by one-tailed t-test
1) The scoring was reversed for the negatively stated items.

it appears that individual employees do not attribute their involvement to the Center, but rather to other factors, such as the chance to serve disadvantaged people in the community. Thus, it is possible that employees will leave the Center if they find other employers in welfare agencies that are more likely to offer better working conditions. This interpretation requires a caveat. One cannot be definite about the package of

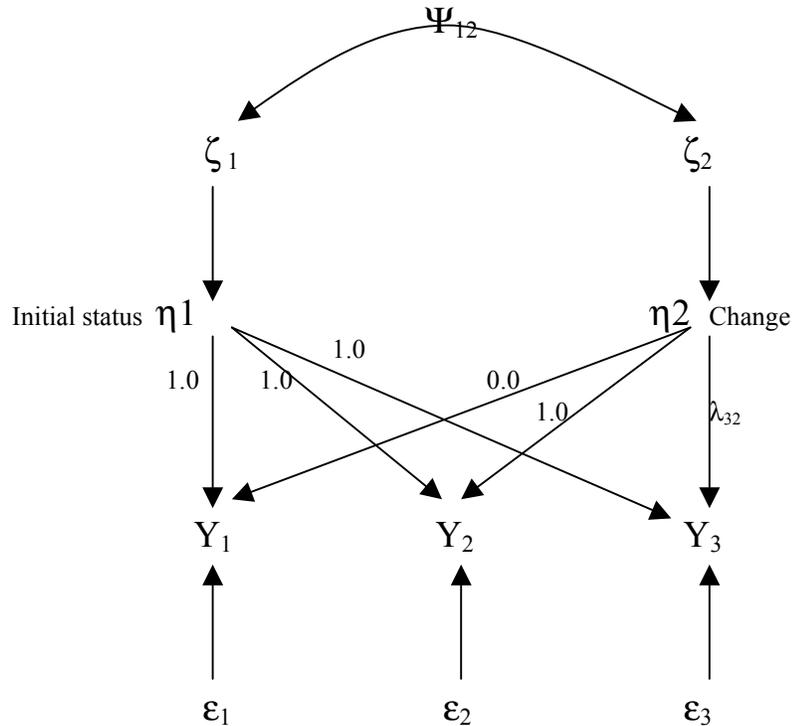
interventions in the T2 vs. T1 interval. On balance, however, the interventions did not have the intended effects.

4.2. Impact on employee withdrawal behaviors

Rates of voluntary turnover and absenteeism serve to measure changes in employee withdrawal behaviors that can be attributed to the interventions. Separate pairwise t-tests were used to examine any intended effects on the voluntary turnover rate. Absenteeism was analyzed by the LGM approach that uses a CFA structure on variables measured longitudinally. Since pairwise t-tests are a popular approach for testing mean differences between groups, LGM receives the most attention in the description of the analytical procedure.

4.2.1. Analytical procedures

LGM received scant attention until the 1980s when it began to be utilized in industrial and organizational psychology (McArdle, 1988; Meredith & Tisak, 1990). Recently, LGM has gained more widespread attention from scholars in management and psychology because it can measure individual differences in longitudinal change while traditional applications—t-tests, ANOVA or MANOVA—measure only at the aggregate level (Duncan & Duncan, 1995; Lance, Meade, & Williamson, 2000; Willett & Sayer, 1994). Note, however, that LGM requires at least three measurement points, which necessitates considerable effort for data collection as well as substantial reduction of sample size.



Source: Lance, Vandenberg, and Self (2000). Latent growth models of individual change: The case of Newcomer Adjustment. *Organizational Behavior and Human Decision Processes*, 83, 107-140.

Figure 4.2. Basic Latent Growth Model (LGM)

Figure 4.2 presents a basic LGM for a single variable (Y) measured longitudinally on three waves of measurement where:

- (1) Y_1 to Y_3 indicate measures for absenteeism rates over the three measurement waves. Note that absenteeism here focuses on “paid absences,” where annual leave, sick leave, and other leaves are included.
- (2) η_1 and η_2 indicate employees’ withdrawal behaviors that represent true initial status and true change, respectively. Specifically, η_1 represents an individual’s initial status on Y measured longitudinally and η_1 corresponds to an intercept a_1 in a regression equation. η_2 represents some optimal change on Y where λ_{32} is a

freely estimated parameter and η_2 corresponds to slope b_1 in a regression equation, thereby estimating the rate of change.

- (3) ε indicates occasion-specific error terms (unique variances) which are assumed to be uncorrelated across measurement occasions. Since measurement errors are reflected in ε , η_1 and η_2 indicate true initial status and true change.
- (4) Ψ_{12} represents covariances of η_1 and η_2 ; for example, a significantly positive Ψ_{12} shows a fan spread pattern of change across subjects while a significantly negative Ψ_{12} could indicate a reversed fan spread pattern of change across subjects—those whose initial status (η_1) is higher may increase slowly or decrease over time in comparison to those whose initial status is low.
- (5) Several arrows connecting the η s to the Ys indicate factor loadings of the Ys on the η factors. In strict linear true change, the Ys' factor loadings on η_2 are fixed at 0.0, 1.0, and 2.0. In this study, however, Y_3 's factor loading on η_2 is freely estimated for optimal change functions because it may provide a better description of the data than strict linear change.

Before estimating the mean initial status and subsequent change and variances, several alternative models are tested to identify a change model that best describes the change functions. Alternative models can be estimated with heteroscedastic and homoscedastic residual structures and with strictly linear and optimal functions of longitudinal change. A chi-square difference test and an additional fit measure, or Comparative Fit Index (CFI), were used for overall goodness of fit between models.

4.2.2. Results

Employee absenteeism Three waves of measurement on the absenteeism rate—FY 1998 (before), FY 2000 (during), and FY 2001 (after the intervention)—were analyzed with the LGM approach in order to test a hypothesis: the intervention at the Center will reduce employees' withdrawal behaviors as measured by their absenteeism rates (Hypothesis 3). First, an attempt was made to find the best model to describe the change functions. Second, the LGM parameters were estimated for changes in the absenteeism rate to locate individual and mean change trajectories. The cutoff points of the intervention periods are somewhat different from those used with the other dependent measures, such as turnover, because absenteeism data were from individual employees who reported information from all three waves of measurement for the same six-month periods.

Table 4.4 shows the nearly equivalent fit for heteroscedastic residual structure models as for homoscedastic models. The results indicated that all three models have excellent fit in terms of non-significant χ^2 and CFI >.95. Note that the optimal heteroscedastic model was excluded from the table due to its zero degrees of freedom. From comparisons of several alternative models, the linear-homoscedastic model was selected because the homoscedastic residual structure model is more parsimonious than the heteroscedastic residual structure model and because the optimal-homoscedastic model does not improve model fit over the linear-homoscedastic model. Also, the difference in the chi-square results of the linear- and optimal-homoscedastic models is non-significant, indicating that the linear model describes the data just as well as the optimal model.

Table 4.4. Tests of alternative LGM measurement model goodness-of-fit: Absenteeism rate

Model	df	χ^2	CFI
1. Linear-Heteroscedastic	1	1.19	1.00
1 vs. 2	2	1.91	---
2. Linear-Homoscedastic	3	3.10	1.00
1 vs. 3	1	2.47	---
3. Optimal-Homoscedastic	2	3.66	0.96
2 vs. 3	1	0.56	---

Note: CFI=Comparative Fit Index.

Table 4.5 below shows parameter estimates for the rate of absenteeism based on the linear-homoscedastic model (see Appendix VII, LISREL code for the linear – homoscedastic model). The estimated mean for initial status (8.72**) is statistically significant, but the estimated mean for the rate of change (.37) in absenteeism did not significantly differ from zero. Nonetheless, the rate of absenteeism has increased slowly across measurement waves, which results in an unexpected direction of change.

Table 4.5. LGM parameter estimates for employee absenteeism

Latent growth variable	Mean	Variances and covariance (Ψ)	
1. Initial Status-Absenteeism	8.72**	33.64*	
2. Change-Absenteeism	0.37	-8.48*	3.93*

*p<.05 **p<.01

The estimated means shown in Table 4.5 can be used to plot aggregate change longitudinally. The mean change trajectory is estimated as:

$$\hat{Y} = 1.0*\eta_1 + 0 \eta_2 \text{ (latent mean at T1, initial status in FY 1998)}$$

$$\hat{Y} = 1.0*\eta_1 + 2 \eta_2 \text{ (latent mean at T2 in FY 2000)}$$

$$\hat{Y} = 1.0*\eta_1 + 3 \eta_2 \text{ (latent mean at T3 in FY 2001)}$$

Based on the above formula, the aggregate change trajectory for absenteeism shows a modest level of increase, starting at a value of 8.72 at T1 and ending at a value of 9.83 at T3 (i.e., $1.0*8.72 + 3*.37$). Figure 4.3 indicates the aggregated latent mean change trajectory of employee absenteeism at the Center.

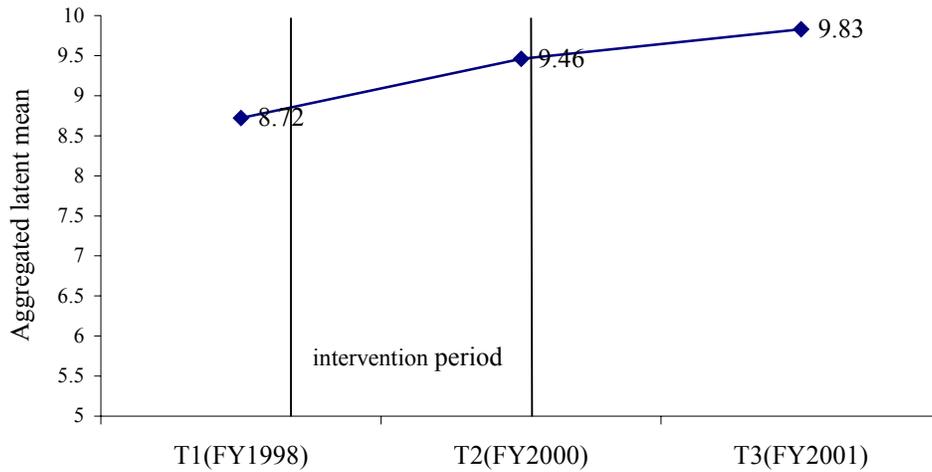
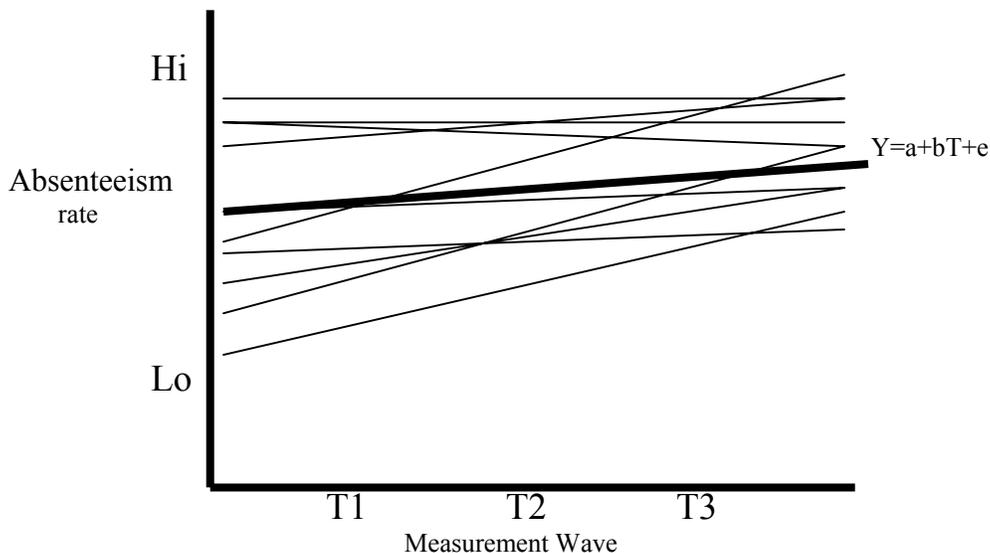


Figure 4.3. Absenteeism latent mean change trajectory

The right side of Table 4.5 shows variance and covariance matrices among initial status and change variables. Significant variability in both initial status and linear change indicates that there are significant individual differences in change trajectories, both

initially and longitudinally. Figure 4.4 shows a plot of linear growth trajectories for individual employees' absenteeism over the three waves of measurement. The change trajectories of individual differences display a negative pattern of change (-8.48*); that is, those whose initial status is higher tend to either increase slowly or decrease over time. Overall, the average estimated mean in absenteeism (the regression line in Figure 4.4) has steadily increased over time, which demonstrates an unexpected direction of change in the employee absenteeism rate.



Source: The figure was based on Day and Lance (2000). Understanding the development of leadership complexity through latent growth modeling. Paper prepared for the U.S. Army Research Institute's Consortium Research Fellows Program (Work Package No. DEVCOM 1141).

Figure 4.4. The plot of linear growth trajectories for individual employees' absenteeism rate during the organizational change period

Employee turnover Figure 4.5 shows a change in the monthly turnover rate at the Center, adjusted by the monthly number of employees, from January 1998 to September 2001. The rate of turnover was computed as the ratio of the number of

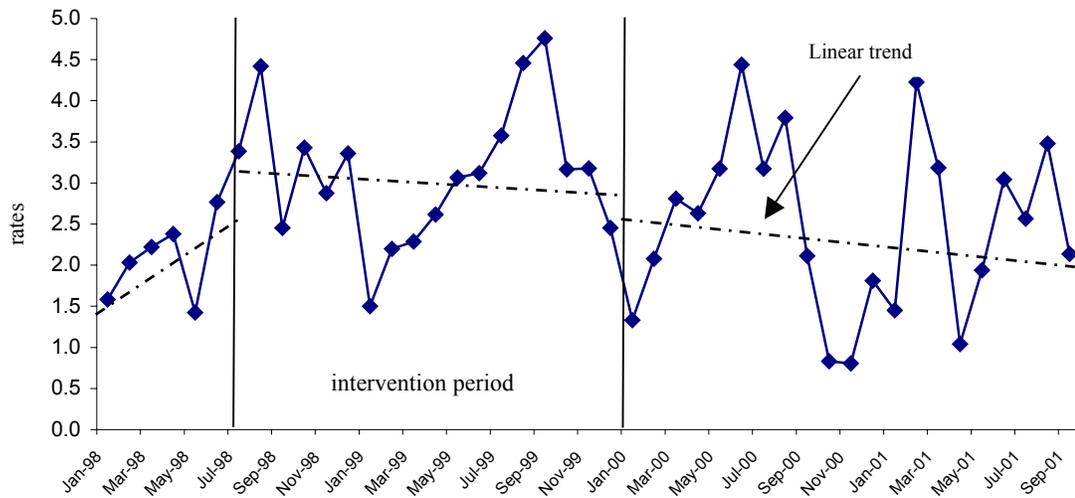


Figure 4.5. Changes in turnover rate at the Center for the study period

monthly voluntary separations divided by the total number of employees each month.

The data were used to test a hypothesis: the intervention at the Center will reduce withdrawal behaviors as measured by employee turnover rates (Hypothesis 4). As indicated in chapter 3, the intervention period described by Figure 4.5 is July 1998 through January 2000.

Separate pairwise t-tests were conducted to assess the relationships between interventions and turnover rate between before vs. during, during vs. after, and before vs. after the intervention (see Table 4.6.). The results suggest a significant increase in the turnover rate during the interventions ($t=2.46^*$). This statistical significance was supported by the large effect size ($\eta^2 = .21$) between the time and the change in the rate of turnover. The turnover rate began to decline after the intervention, but it did not decline enough to offset the increase that occurred during the intervention ($t=-1.62$, $\eta^2 = .07$).

Table 4.6. Changes in the rate of employee turnover at the Center

Time periods	Mean	SD	t-value
Before vs. During	2.07-3.05	.52-.92	2.46*
During vs. After	3.05-2.53	.92-1.06	-1.62
Before vs. After	2.07-2.53	.52-1.06	1.02

*p<.05

Overall, the turnover rate increased after the introduction of interventions relative to the initial situation ($t=1.02$). However, the small η^2 of .04 indicates only a modest change in the rate of turnover between before and after the interventions. In effect, the increase in employee turnover started before the intervention and continued into the intervention periods, but soon trailed off and then trended lower.

Figure 4.5 also shows a cyclical pattern in the rate of turnover at the Center. A closer look at the chart reveals that there are significant turnover movements at the beginnings of new fiscal years (July through September). There are two reasons for the pattern of turnover movement. First, the motive behind this turnover movement is associated with the fact that for the last several years the Center management broke promises for a salary increases. The broken promises have created considerable distrust of the Center management, which has encouraged disgruntled employees to leave for other employment opportunities during this time. Apparently, this is the major force for employee turnover at the Center.

Another reason for the cyclical pattern of turnover seems associated with student employment at the Center. Historically, Georgia DHR intended to create the Center as a “training ground” for young people who are expected to get job experience at the Center

that will help them contribute to society in later jobs. Thus, the Center has hired many students as hourly or half-time employees with the expectation that they can be assets at the Center after graduation. As Figure 4.5 shows, the rising turnover from July to September is the period when students are returning to the school after finishing their internships or are leaving to pursue other employment opportunities.

4.3. Impact on organizational performance

The effects of the interventions on organizational performance at the Center were assessed with four dependent measures: employee performance appraisals, the number of state hospital utilizations by Center consumers, the number of consumer complaints, and consumers' self-reports for service satisfaction. LGM served as the major tool for analyzing scores on employee performance appraisals across the three measurement waves. Separate pairwise t-tests were used to measure changes in the number of state hospital utilizations by Center consumers, the number of consumer complaints, and the level of consumer satisfaction with the Center's service.

4.3.1 Analytical procedures

As in the analysis of employee absenteeism, the LGM approach was used to measure changes in employee performance appraisals, which were gathered across the three waves of measurement—FY 1998 (before), FY 2000 (during), and FY 2001 (after the intervention). The cutoff points of the three waves of measurement do not neatly fit into the intervention periods described in chapter 3 because appraisal data were gathered on a yearly basis. Also, the description of the LGM model for performance appraisals is

omitted in this section because it would be much the same as the one in the section on the analysis of absenteeism.

For the rest of the three dependent measures (state hospital utilizations, consumer complaints, and consumer satisfaction), separate pairwise t-tests were conducted to examine any significant differences in means before, during, and after the intervention. The effect size (η^2) made a stronger case of any differences in means across the three waves of measurement. An attempt was made to analyze the ME of consumers' self-reported satisfaction data before computing pairwise t-tests in order to make sure that the measurements across time represent the same construct and thus that difference scores between time intervals would be meaningful.

4.3.2. Results

Performance Appraisals This study hypothesized that the change interventions at the Center would lower the scores on employee performance appraisals (Hypothesis 5). To test this hypothesis, this study uses individual Performance Management Forms (PMFs) for salaried employees collected in the Department of Human Resources. Although PMF data include two different categories for employee performance, job responsibility and terms and conditions, the scores on the terms and conditions were not included in the analysis because basically all employees (more than 99%) have received the same scores, "Met Expectations," and consequently, no variance exists in the ratings.

Also, the level of individual performance is assessed for the three time periods—before, during, and after the intervention—in order to appreciate individual performance change across time. For that purpose, the same employee's performance appraisal scores

were observed for fiscal years 1998, 2000, and 2001, yielding a total of 169 matched pairs throughout these periods.

Table 4.7 shows tests of the goodness of fit of alternative models using the scores of individual employees' performance appraisals. Comparison of model 1 and model 2 indicates that the linear-homoscedastic model has significantly worse fit relative to the less constrained linear-heteroscedastic model because the former has a higher chi-square and a higher CFI score. The optimal-heteroscedastic model was not listed in the table because it involved zero degree of freedom. The optimal-homoscedastic model was also unacceptable because it has improper solutions. Thus, model 1 (the linear-heteroscedastic model) was selected for estimation of the LGM parameters for change in employee performance appraisals.

Table 4.7. Tests of alternative LGM measurement models' goodness-of-fit: Performance appraisals

Model	Df	χ^2	CFI
1. Linear-Heteroscedastic	1	5.17*	0.84
1 vs. 2	2	27.68**	---
2. Linear-Homoscedastic	3	32.85**	0.0

** p<.01

Note: CFI=Comparative Fit Index.

Table 4.8 shows parameter estimates for the scores of employee performance appraisals over the three measurement waves. Both estimated mean initial status and change were statistically significant, predicting major change trajectories among individual employees. For example, the significant negative mean in change (-0.10**) indicated that employee performance appraisal scores had slowly but significantly

Table 4.8. LGM Parameter estimates for employee performance appraisals

Latent growth variable	Mean	Variances and covariance (Ψ)	
1. Initial Status-Performance	2.40**	0.08	
2. Change-Performance	-0.10**	-0.02	0.01

**p<.01

declined over the three measurement waves. Figure 4.6 indicates the aggregated latent mean change trajectory. As Figure 4.6 reveals, change trajectory of the estimated mean declines, starting at a value of 2.4 at T1 and ending at a value of 2.1 at T3 (i.e., $1.0 \times 2.4 - 3 \times .10$).

The right side of Table 4.8 shows variance and covariance matrices of the latent initial status and change variables. Non-significant covariances in both initial status and

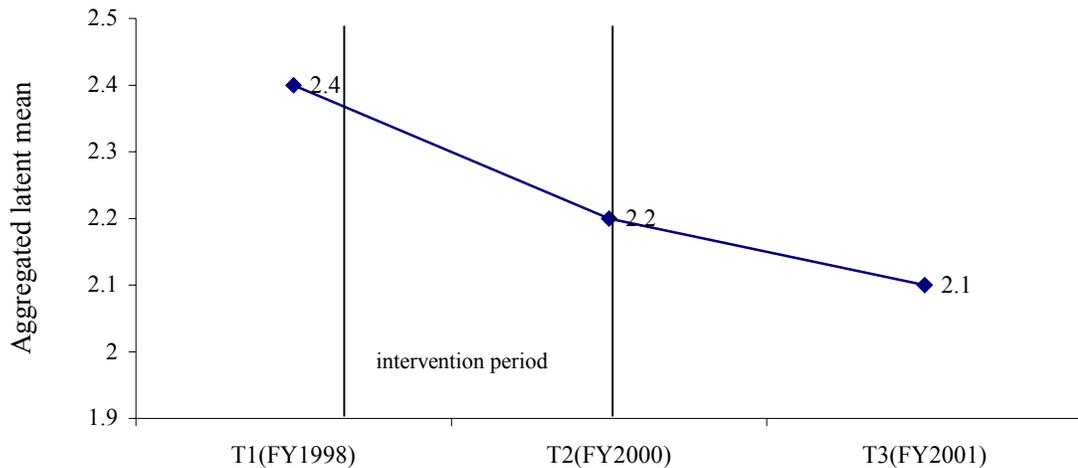


Figure 4.6. Employee performance mean change trajectory

change imply low variability of performance appraisal scores among individual employees throughout the various measurement occasions. The low variability of appraisal scores was anticipated because 63 to 88 percent of sample employees received the same rating, “Met Expectation.” Consequently, the standard deviations across the three waves of measurement were very low (.33 to .54). Thus, as Figure 4.7 shows, a plot of linear growth trajectories for individual scores looks homogeneous and generally declined consistently within a narrow range between T1 and T3.

This finding suggests an intended direction of change in scores on performance appraisals, accepting hypothesis 5. As several program managers at the Center attest, the change interventions heightened the standards evaluating supervisors used to rate employees, which tended to reduce the overall level of performance scores across employees. Furthermore, since FY2001, employee performance appraisals have come to

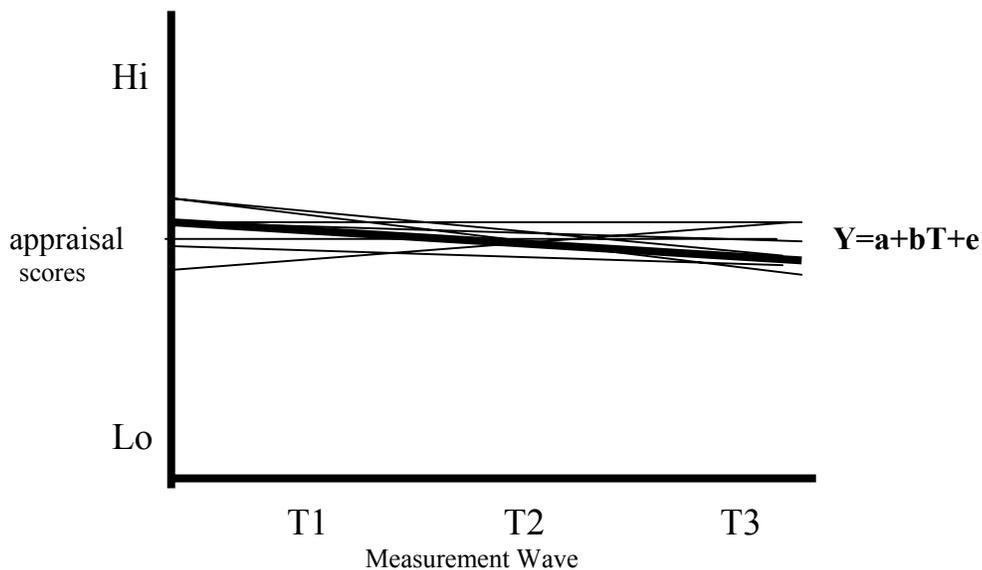


Figure 4.7. The plot of linear growth trajectories for individual employees' performance appraisal scores during the organizational change period

be directly linked with salary increases. Thus, evaluating supervisors tend to be cautious in using the “Exceeded” rating because it imposes a greater financial burden on the Center, which has already been suffering from a budget shortfall. It may be that the actual level of individual performance has increased since the introduction of the change interventions.

State hospital utilizations by Center consumers The monthly number of state hospital utilizations was computed to test whether the interventions at the Center reduce state hospital utilizations by Center consumers (Hypothesis 6). The reduction of state hospital utilizations by Center consumers serves as another measure of performance improvement because higher quality services at the Center should reduce its consumer’s needs for state hospital care.

Figure 4.8 shows a change in the monthly state hospital Days of Active Client Enrollment (DACE) by Center consumers. Separate pairwise t-tests were conducted to

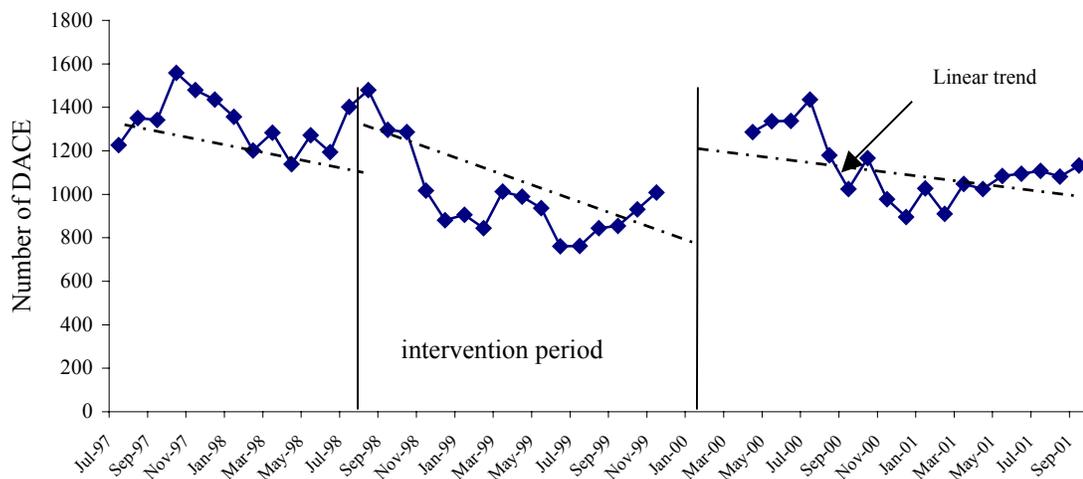


Figure 4.8. Changes in the number of state DACE utilized by Center consumers

examine any intended changes in state hospital utilizations between before vs. during, during vs. after, and before vs. after the interventions. The results of separate pairwise t-tests, as well as the means and standard deviations for the three time periods, are reported in Table 4.9. The state DACE used by Center consumers significantly decreased during the interventions at an average of 307 DACEs. This significant down-turn was reversed after the intervention, but this trend did not attain statistical significance. Overall, the change intervention at the Center resulted in a significant decline in state hospital utilizations by Center consumers at an average of 201 DACEs. This result supports hypothesis 6.

Table 4.9. Changes in the number of state DACE utilized by Center consumers

Time periods	Mean	SD	t-value
Before vs. During	1320-1013	125-220	-4.35***
During vs. After	1013-1119	220-149	1.69
Before vs. After	1320-1119	125-149	-3.83**

p<.01 *p<.001

Despite the intended directions of change in the use of state DACE, a caveat should be noted regarding the interpretation of these results. The state of Georgia allocates the Center a fixed number of DACE in the state hospitals each year. If the Center overuses the given number of state DACE, the state charges the Center the portion of the overused hospital beds and reduces the number of state DACE for the next fiscal year. Therefore, the Center has a clear budgetary incentive to reduce the state hospital DACE in order to prevent future budget constraint.

This state regulation provides a reason for the pattern of state DACE utilizations at the Center seen in Figure 4.8 earlier. Figure 4.8 shows that the number of DACE utilized by Center consumers substantially increases at the beginning of the new fiscal year and slowly decreases over the rest of the fiscal year in order not to overuse the fixed number of DACE given by the state. For example, in November 1998, the Center management realized that they had used too many DACE during the first quarter of FY 1999. In order not to overuse the 13,811 DACE that were allowed by the state for FY 1999, the Center management created a task force to develop an alternative to solve the high DACE problem. The task force members decided to place the consumers in residential facilities and return them to the community after a certain period of treatment.

In contrast with FY 1999 and FY 2001, the use of DACE at the beginning of the FY 2000 (July 1999) was quite low, because the substantial decrease in the number of DACE allowed by the state for FY 2000 led the Center management to use DACE wisely so as not to overuse them. The savings at the beginning of the fiscal year resulted in a pattern of rising state DACE use for the rest of the year given the state limitation. Although there are four missing data points from December 1999 to March 2000 due to the state computer system change, the data shows a pattern of increasing state DACE use during FY 2000.

Consumer complaints The monthly data on consumer complaints were analyzed with separate t-tests to examine two hypotheses: (1) the intervention at the Center would result in a significant increase in the number of consumer complaints in the short run (Hypothesis 7), but (2) the intervention at the Center would significantly reduce the number of consumer complaints in the long run (Hypothesis 8). In each case, one-tailed

Table 4.10. Changes in the number of consumer complaint during the study period

Time periods	Mean	SD	t-value
Before vs. During	2.45-4.26	1.37-2.68	2.44*
During vs. After	4.26-4.10	2.68-1.61	-.24

*p<.05

tests of significance were used. Hypothesis 7 attempts to examine whether the Center consumers began to be empowered by having a voice for service change. Hypothesis 8 examines whether the interventions improved the quality of services at the Center by reducing the number of complaints from consumers.

Table 4.10 presents the results of the separate t-tests, which suggest two conclusions. First, the number of consumer complaints significantly increased immediately after the intervention. The monthly complaint data (see Figure 4.9) indicate that the increase in the number of complaints filed had begun in September 1998 and continued for approximately a year into the change interventions. This result supports hypothesis 7 and confirms that Center consumers began to use complaint procedures as a major tool for requesting service changes when they felt that they were being treated improperly. In fact, the initial increase is not surprising, because the Center had acted on its announced intention to pay attention to consumer complaints. It is noteworthy that the number of consumer complaints filed significantly decreased during December each year. The utilization manager at the Center observed that consumers were inclined not to file complaint reports during the holiday season simply because people are happier then than during the rest of the year.

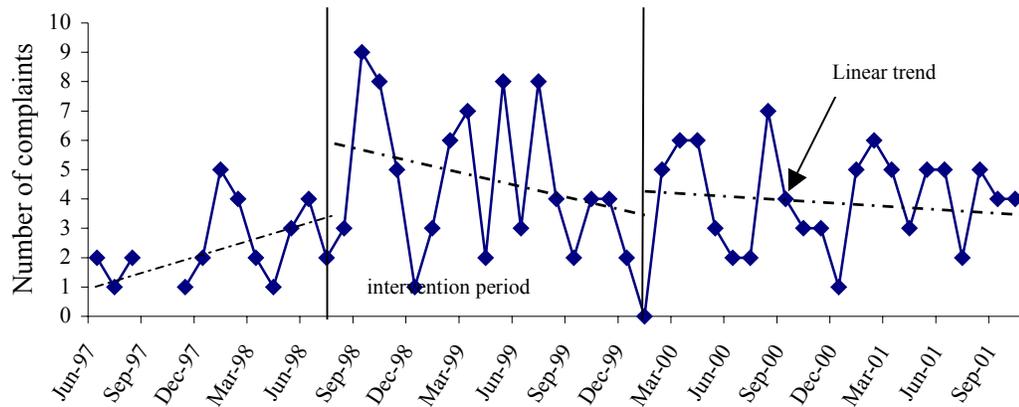


Figure 4.9. Changes in the number of consumer complaints for the study period

Secondly, there is only a modest decline in the number of complaints filed between during vs. after the intervention ($t = -.24, \eta^2 = .001$). Figure 4.9 indicated a consistent decline in the number of consumer complaints after the intervention, but only a moderate level of decline was observed. Accordingly, although hypothesis 8 is generally supported by the intended direction of change, it is not clear at this point whether the interventions improved the quality of the Center services. But some substantial dynamics were at work.

Consumer satisfaction with the Center services This dependent measure focuses more on consumers' perceptions of Center services, as opposed to objective measures of consumer complaints. Consumer satisfaction has become a new performance-assessment technique (Hays & Kearney, 2001). In keeping with this perspective, this study attempts to test a hypothesis that the interventions in the Center will generate a positive impact on consumer satisfaction (Hypothesis 9). Consumers'

self-report data were collected on a yearly basis in FY 1998 (N=493), FY 2001 (N=770), and FY 2002 (N=755). The internal consistency of the data was established by Cronbach's coefficient alphas ranging between .82 and .91.

A test of ME was conducted on the consumer satisfaction data before performing the pairwise t-tests in order to ensure that a latent construct—consumers' satisfaction with Center services—represented the same meaning throughout the measurement waves. In comparison with a test of ME of organizational commitment using the augmented covariance matrices, a multisample analysis using independent covariance matrices was conducted for a test of ME of consumer satisfaction because the data were collected at three different points in time and because samples in the three waves of measurement were different, which created different covariance matrices (see Appendix III for LISREL code for the omnibus test of equality of covariance matrices using multisample analysis about consumer satisfaction).

Result for the omnibus test of ME for consumer satisfaction showed a relatively good model fit: The statistically significant chi-squared statistic (708.23**) could indicate a bad fit, but the statistical significance is likely due to the large sample size of the consumer satisfaction survey. Furthermore, other fit measures, such as RMSR, TLI, and CFI indices, were within acceptable ranges that can be said to represent a reasonably good fit model. Therefore, no further tests for other forms of the ME were necessary, and the evidence of the ME indicated that a difference in consumer satisfaction across measurements would be meaningful.

Separate t-tests were conducted to evaluate pairwise differences in mean satisfaction scores between before vs. short-post, short-post vs. long-post, and before vs.

Table 4.11. Changes in consumer satisfaction measured by self-report survey

Time periods	Mean	SD	t-value
Before vs. Short-post	3.37-3.44	.48-.51	2.47*
Short-post vs. Long-post	3.44-3.39	.51-.52	-2.1*
Before vs. Long-post	3.37-3.39	.48-.52	.53

*p<.05

long-post. Table 4.11 presents the results of these tests. The results suggest a significant increase in consumer satisfaction between the before and short-post measures ($t=2.47^*$). However, a significant downturn took place between the short-post and long-post measures (see also Figure 4.10), which produced a nontrivial decline in consumer satisfaction in the long run ($t=-2.1^*$). Nonetheless, it seems that the overall difference between the before and after measures shows a steady increase in consumer satisfaction, although it does not attain statistical significance ($t = .53$).

However, two important points must be made regarding the interpretation of these results. First, the significant t-statistics identified between time periods did reflect the impact of the large sample size. In fact, there were only modest changes in means ranging from .07 to .02, which can hardly distinguish significant differences in consumer satisfaction across time. For example, the very small effect sizes (η^2) from .0002 to .005 between time and the changes in satisfaction scores support the modicum of change in consumer satisfaction throughout the intervention period. Even before the intervention, Center consumers had a substantial level of satisfaction with services (3.37 of 4), and this satisfaction level has generally continued. Secondly, the interventions produced a significant positive effect on consumer satisfaction in the short run, but the level

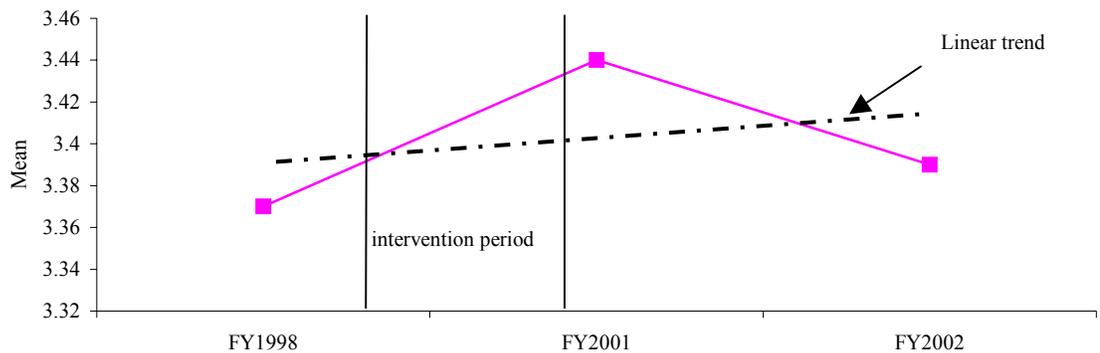


Figure 4.10. Mean changes in consumer satisfaction with the Center services at short- and long-post measures

of satisfaction tends to decrease over time. Although the overall results displayed a pattern of shift in the intended direction (Hypothesis 9 is supported), interpretation of the results must be made with caution.

4.4. Additional results

The employee attitude survey includes nine closed-ended and four open-ended items that directly ask employees about their perceptions of organizational change at the Center. This section provides some additional results based on these quantitative and qualitative data that were collected simultaneously with the employee satisfaction and commitment scales. Employee responses to the closed-ended items are reported first, followed by extensive qualitative analysis based on the open-ended items.

4.4.1. Employee perceptions on organizational change

Employee perceptions of various aspects of the change interventions were examined after the interventions along with an employee self-report survey. Table 4.12 shows a frequency distribution of nine specific items concerning the Center changes.

Employee perceptions of the Center change seem to be negatively skewed but are mixed overall. Slightly over half of the respondents perceived that their needs were not appropriately reflected in the course of organizational change. On different items, as a result, 30 to 45.9 percent of respondents either strongly disagreed or disagreed with the statement that the Center change benefit them or consumers. Rather, they either felt anxious and insecure about the change (46.9%) or overburdened with work due to the change (62.5%). Worse yet, approximately 40 to 49 percent of respondents claimed that the Center changes have not helped them to build trust in the Center, in its management

Table 4.12. Frequency distributions and means of employee perceptions on the organizational change

Items	N	Strongly Disagree	Disagree	Not sure	Agree	Strongly Agree	Mean
1. The changes appropriately reflect employees' needs.	92	14.6%	36.5%	16.7%	21.9%	6.3%	2.67
2. I believe the changes benefit me.	94	2.9	27.1	21.9	16.7	9.4	2.62
3. I believe the changes benefit our clients by improving quality of care.	94	21.9	24.0	19.8	28.1	4.2	2.68
4. I feel anxious and insecure about the changes that are taking place in the organization.	95	11.5	24.0	16.7	29.2	17.7	3.18
5. I feel overburdened with work because of the changes.	94	6.3	15.6	13.5	29.2	33.3	3.69
6. The changes have helped build trust in the Center.	93	26.0	22.9	26.0	20.8	1.0	2.46
7. The changes have helped build trust in my work units.	95	19.8	19.8	34.4	20.8	4.2	2.69
8. The changes have helped build my trust in the management team.	95	26.0	18.8	22.9	22.9	8.3	2.68
9. I believe current changes are on the right track.	95	17.7	19.8	36.5	17.7	7.3	2.77

team, or in their specific work programs.

Despite the somewhat negative perceptions of the Center changes, it may not be entirely true that the Center changes are unsuccessful. Smaller but still significant percentages of respondents perceived that the changes appropriately reflected employees' needs (28.2%), benefited them (26.4%) or consumers (32.3%), and built trust in the Center (21.9%) and in the management team (31.2%). Accordingly, responses to the direction of the Center changes seem evenly distributed among respondents who disagree or agree with positive patterns of change.

4.4.2. Qualitative analysis of employee perceptions

This study underscores the fact that qualitative data can add depth to and enrich information about the change evaluation that is unattainable from quantitative data alone. An extensive literature advocates the use of multiple methods, commonly called “triangulation,” in data collection in order to improve the quality of data interpretation (Berg, 1989; Jick, 1979; Morse, & Pandey, 2000). The popularity of the notion of triangulation reflects the widespread view that quantitative data reveals only a part of the story about what has occurred in the process of organizational change (Morse & Pandey, 2000). According to Mays and Pope (2000), triangulation assumes that “any weaknesses in one methods will be compensated by strengths in another” (p. 51). In brief, using multiple methods permits a more holistic assessment of change intervention by cross-validating data and analysis. The following qualitative analysis provides in-depth evidence that can help to validate the results from the quantitative analyses presented in the previous section.

4.4.2.1. Analytical procedures

Of 96 returned surveys, slightly more than 79 percent of the respondents (76) provided extensive written comments regarding their perception of the Center changes. The questions attempt to examine both problems and successes related to the Center changes; and to solicit employee ideas about improvements for the Center, as well as for their specific programs; and, finally, to create a vision for the desirable future state of the Center. While not every respondent responded to all of the four questions, the written comments generated over twenty pages of single spaced text.

Analysis of the qualitative responses requires making sense of the raw data by sifting and reorganizing them. Although some researchers advocate computer-based content analysis using—for example, the NUD*IST software program—this study uses a manual method because the small batch of responses is manageable enough to reveal the necessary information on organizational change. Further, there are some reports that computer software does not necessarily increase statistical power (e.g., Pope, Ziebland, & Mays, 2000).

Using content analysis, the textual data were analyzed inductively to generate categories following the ground theory framework proposed by Strauss and Corbin (1998). The authors describe this framework as a method of theory generation that is grounded in data systematically gathered and analyzed. Researchers read individual data line-by-line and word by word until they can identify common themes and categories in relation to particular words or phrases. Specifically, all the data linked in each category are identified and examined using a process called “constant comparison,” in which individual items are compared with the rest of the data to establish analytical categories

(Pope et al., 2000). Initially the constant comparison process creates a number of categories or themes, but they are entirely tentative (Berg, 1989). They are ordinarily refined and further reduced in number by grouping them together or cutting them down as researchers obtain more information throughout the research process.

The coding procedures used in this study were introduced by Strauss and Corbin (1998). They described three coding procedures: open, axial, and selective coding. In open coding, according to the authors, “data are broken down into discrete parts, closely examined, and compared for similarities and differences. Events, happenings, objects, and actions/interactions that are found to be conceptually similar in nature or related in meaning are grouped under more abstract concepts termed ‘categories’” (p. 102). Axial coding is, to a degree, a backward procedure of open coding in which coding occurs around categories and relates the categories to their subcategories. Selective coding permits theory generation by presenting a set of interrelated concepts in categories.

This study adopts open coding procedures to identify categories (or themes) linked to each question in the survey. For example, an open-ended question asks respondents to suggest possible ways of making improvements to Center operations. Respondents brought up several concepts such as supervision, direction, and professionalism. All of these three concepts have similar properties; that is, each concept is related to organizational leadership and implies that successful organization requires these features in managers’ leadership styles. Therefore, these concepts are grouped under one more abstract term, called “better leadership/supervision.”

After open coding was completed, the categories generated were filtered through axial coding procedures. The categories discovered throughout the open coding

procedure can be treated as subcategories because the categories are predetermined, formed from the four questions in the survey: problems, successes, ideas for improvement, and desirable future states of the organization. In this way, the four questions become broader categories, or what Berg (1989) describes as “coding frames,” around which intensive coding occurs. That is, subcategories are connected to the four questions to see if each category represents characteristics of the four questions in an acceptable way. In this way, the coding procedure of this study seems a mixture of open and axial coding by which categories are further refined to better represent the research questions.

4.4.2.2. Results

Figures 4.11 through 4.15 show the analysis of the qualitative data that is associated with the four broad questions about the Center organizational changes (see Appendix IX for the summary of comments). Employee perceptions were depicted by several themes or categories grouped by individual responses. Although employee responses were quantified by figures, this study does not claim that the frequency of responses reflects the importance of the themes. For example, if employees brought up “too much work” fifteen times and “poor pay” seven times as problems identified in the course of organizational change, we would reasonably think that the word “work” appeared approximately twice as many as “pay,” but it does not necessarily mean that “too much work” is twice as serious a problem as “poor pay” in the Center.

Figure 4.11 indicates the frequency of employee perceptions about problems of organizational change in the Center. 63 of 96 respondents (65.6%) provided 85 duplicate

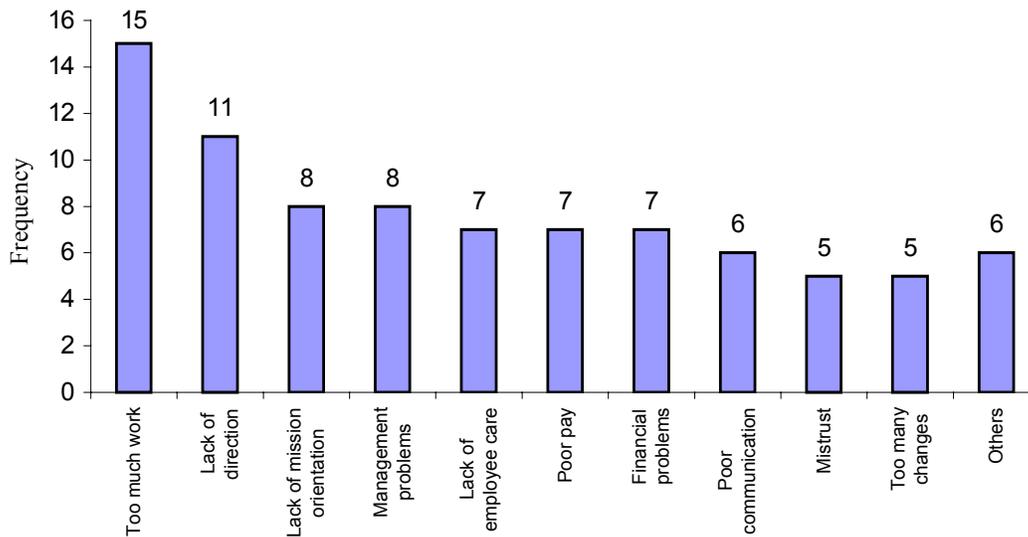


Figure 4.11. Problems of organizational change at the Center

responses. Duplicate responses mean that if a respondent mentioned three ideas with respect to one problem, all three ideas were considered as separate responses.

The 85 comments suggest three conclusions that are associated with external influence, lack of leadership/management, and lack of motivational incentives. First, a majority of the sample employees (15) perceived that “too much work” interfered with the quality of services because it shortened quality time for consumer care. In particular, the Center employees complained about too much paperwork—such as clinical charts, peer reviews, and other outcome instruments—that are required by the state regulators. Another spectrum of responses focused on “financial pressure” from the state. The Center employees believed that consistent budget deficits prevented them from providing high quality services to consumers.

Second, another group of employees (11) believed that “lack of leadership” by the Center management resulted in the loss of direction for organizational change. One comment indicated that there are “too many people telling different views on how the organization is supposed to be run.” Another respondent was concerned that “those making decisions do not seem to have a working knowledge of what’s involved at the delivery level.” Still others perceived that “the management team has a ‘know all’ attitude and individual members are easily influenced by certain staff members.” A subsequent negative outcome was employees’ distrust of the Center management, and this distrust reinforced a conflict between administrative and clinical staff.

Finally, “lack of intrinsic and extrinsic incentives” is another reason for the problems of organizational change at the Center. Seven responses indicated that “lack of employee care” from the upper management significantly reduced work motivation among employees. An equal number of responses were directed at “poor pay” that had not attracted quality personnel and in fact encouraged employee turnover. Finally, “poor communication” about policies also generated considerable misunderstanding about operational procedures, which tended to lead to distrust in the upper management of the Center.

The sample employees were also asked to make comments about successes the Center has achieved in its organizational change movement. 53 of 96 employees (55.2%) responded to the question, but 13 of these suggested cynicism toward the organizational change (see Figure 4.12). For example, one reported that “more lip service has been given expressing concern for staff’s welfare.” Similarly, others commented that

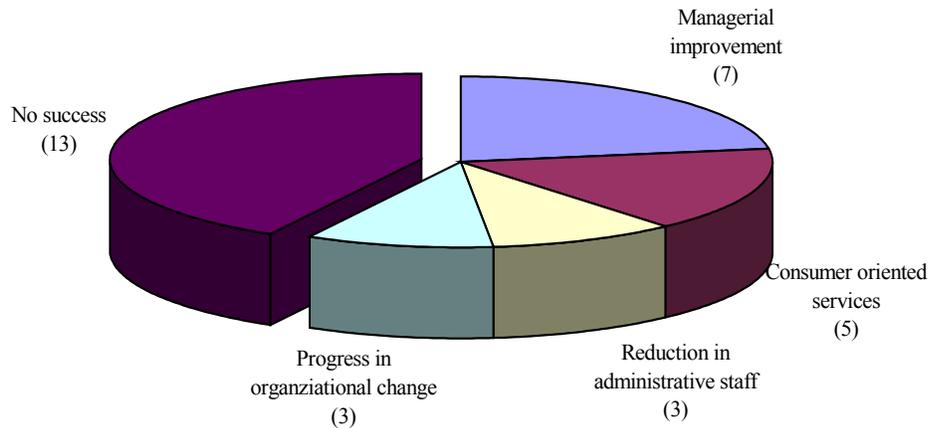


Figure 4.12. Success of organizational change as a result of interventions

“organizational change is successful in making the Center employees feel insecure about their jobs.”

In addition to the negative comments about successes due to the change interventions, 25 respondents reported successes that were attributed to current top management who took over the Center after the intervention period (see Figure 4.13). These respondents stated that successes in organizational change were not attributable to the previous management team, who led the Center during the intervention periods, but rather were due to the continuous changes that have been made under the current management team. Only 15 employees (15.6%) of 96 respondents considered the change interventions from July 1998 to January 2000 “successful.” This small number of employees perceived that the change interventions led to managerial innovations, as well as more consumer-oriented services, thereby getting on the right track.

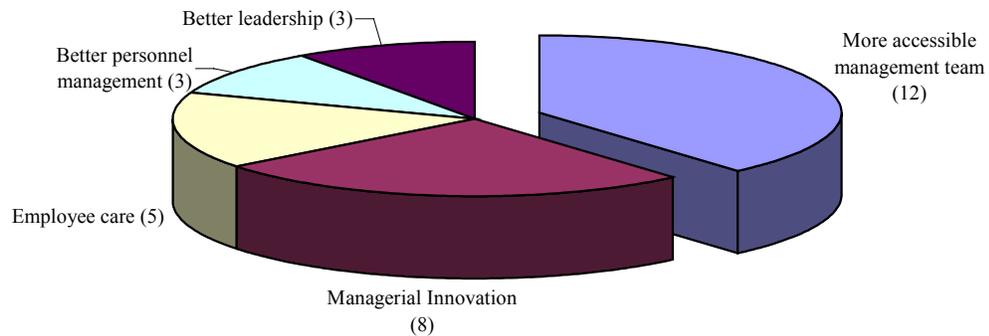


Figure 4.13. Successes of organizational change under current management team

In addition to investigating the Center employees' perceptions of problems and successes related to the change interventions, employees were also asked to make suggestions about ways of improving Center management. 71 of 96 (74%) respondents provided a total of 101 comments on this topic. From these extensive comments, several themes emerged, as shown in Figure 4.14: extrinsic and intrinsic incentives, management reinvention, leadership, financial stability, and clear policy and procedures.

A majority of the staff addressed a pool of extrinsic and intrinsic incentives as a way of improving the Center management. The Center employees particularly emphasized enhancing extrinsic incentives such as salary increases, physical facility renovations, better communication and sharing of information, and more promotion opportunities. This finding is, in fact, consistent with the dissatisfaction with extrinsic incentives that was uncovered by a closed-ended survey.

The Center employees further emphasized management reinventions such as reshuffling personnel, accurate and timely billing processes, and the streamlining of

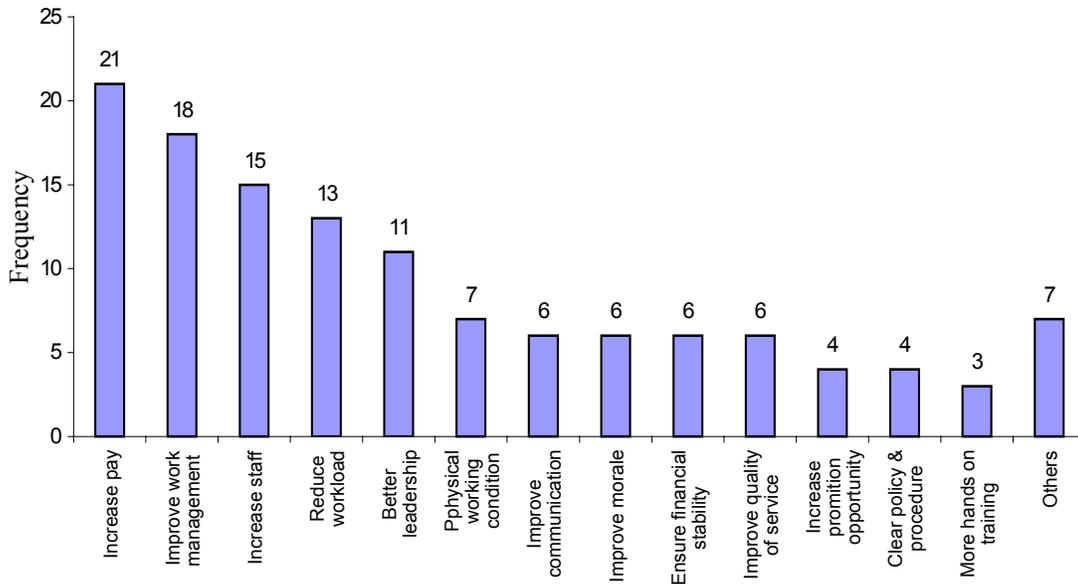


Figure 4.14. Suggestions about ways of improving Center management

processes and procedures. They stressed hiring more direct service clinical staff and suggested downsizing administrative personnel to make that hiring possible. Their suggestions pointed to the lack of clinical staff and other resources that are necessary for the provision of quality consumer care while handling the large amount of administrative workload mandated by the state. In effect, many respondents sought to reduce their workloads and direct their energy to consumer care.

Other comments were directed at better leadership or supervision, financial stability, and clear administration of policies and procedures. In particular, the Center employees put much emphasis on leadership skills that are more goal-oriented as well as emotionally supportive for individual staff. One employee reported that “we want to have supervisors who become more aware of who is doing what duties and the duties to be divided more evenly.”

Finally, respondents were asked to describe the desirable future state of the Center. A total of 121 comments from 67 respondents were categorized and listed in Figure 4.15. This wealth of information generated strong themes regarding employee motivation, outstanding leadership for clear direction of the Center, high quality employees, consumer-oriented services, and financial stability.

More than anything else, the Center employees yearned for better salaries. One comment provided a clear reason: “Better salary will keep ‘good’ people in the Center. We have lost so many ‘good’ people because of poor salaries.” Similarly, another comment reported that “good quality care would stay if the pay were better.” A realistic workload, under which workers would be given sufficient time for helping all consumers in order to meet clinical goals, was another wish expressed. In other comments, the respondents reported that they would like to see the Center as “an employee-friendly agency” where individual employees are treated as valued assets for the Center.

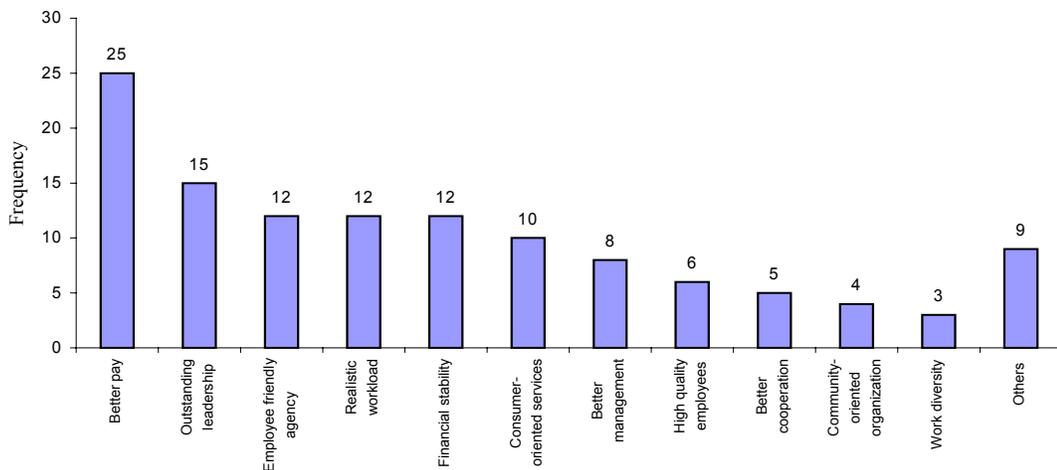


Figure 4.15. Desirable future state of the Center

While various motivational incentives came first for the desirable future state of the Center, employees also reported that they need to engage in best practices and establish teamwork between all programs in order to better serve consumers. One comment stated that the desirable Center is the one in which “all employees are working together to make the organization the best workplace possible.” Another employee commented that good training is vital for individual staff members to exercise best practices that better suit for the consumer’s needs. Still others believed that all employees work for “one common goal, serving consumers of our community.”

As identified in Figures 4.11 and 4.14, good leadership and financial stability are critical factors in achieving the desirable future state of the Center. The Center employees wanted “a healthy leadership that is in touch with and in communication with the employees and the communities.” Some employees sought to have leadership that is tougher on those who are not doing their jobs consistently. More importantly, a majority of respondents yearned for a leadership that provides clear direction for the organizational change in order to prevent confusion. For example, one employee pointed to “the consistency in instruction for change...so we can adjust to change without so much confusion.”

As identified previously, financial stability is an enduring problem at the Center because of the recent fiscal constraints imposed by the state of Georgia. One comment stated that “I would like to see that this agency become ‘sound in finances’ so we don’t have to worry about our jobs.” Another employee was more straightforward: “The governor and the legislature need to wake up and quit playing games with the budget.” This comment implies that the financial stability at the Center is in the hands of the state

policy makers, not the Center management, and consequently the solution must come from outside, not inside, the Center.

CHAPTER 5

DISCUSSIONS AND CONCLUSIONS

Quasi-government accountability has gained serious attention from both scholars and practitioners in public management because these entities supply important government services without clear political control, as contrasted with public agencies. Accountability is especially vulnerable in community mental health centers because these centers provide vital human services through federal and state grants but function outside the regular government structure in complicated arrangements.

Recent organizational change at the Center reflects the belief that the human service agencies must be accountable for their services when dealing with the most disadvantaged people in our society. The demand for accountability led the Center to launch a comprehensive program of organizational change interventions aimed at revitalizing employee attitudes, behaviors, and organizational performance. However, virtually no evaluation has been conducted regarding the results of the interventions; this lack of assessment creates uncertainty in the Center management. The main purpose of this dissertation is to examine the possibility that evaluation can serve as a major tool for ensuring accountability of the community mental health center as a form of quasi-government.

An analytical framework presented in chapter 3 provided a conceptual guideline for evaluating organizational change at the Center. The framework implied that successful organizational change would improve employees' attitudes, such as job satisfaction and organizational commitment. Similarly, the Center change would reduce employees' withdrawal behaviors as measured by employee turnover and absenteeism. The positive impacts on both employees' attitudes and behaviors would tend to increase organizational performance measured by four indicators, including employees' performance appraisals, state hospital utilizations, consumer complaints, and consumers' perceptions of service satisfaction.

This final chapter has six emphases. First, the reliability and validity of the data are discussed to provide context for the statistical significance of the research findings presented in chapter 4. The second section provides a summary of the results and the conclusions drawn from them. The third section suggests eight implications of this study. The fourth section sketches the desirable future state of the Center based on the implications of the research findings. The fifth section explores several limitations of the study. Finally, a discussion of the limitations of the study suggests directions for future research on evaluation of organizational change.

5.1. Reliability and validity of the data analysis

Establishing the reliability and validity of the data analyzed in this study is critical because the findings of statistical significance would otherwise be of little value (Hinkin, 1995). The main purpose of the data analysis in organizational change evaluation is to account for the changes in the dependent measures in terms of no systemic variables

other than the implementation of change interventions. The question of validity warrants major attention because of the one-group design utilized in this study.

5.1.1. Reliability

Reliability concerns the extent to which random errors account for changes in dependent measures. Systemic efforts to reduce random errors were made to establish the measurement reliability. For example, Cronbach's coefficient alpha established internal consistency of self-report data, including both the employee attitude and consumer satisfaction surveys. Overall alpha coefficients for these self-report measures were within acceptable boundaries, ranging from .80 to .93.

The behavioral data measuring the employee withdrawal behaviors—turnover and absenteeism—were collected by the researcher with careful attention to measurement consistency. For example, only voluntary turnover was included in the evaluations of changes in the pattern of employee turnover, and the types of voluntary turnover were matched longitudinally. With respect to the absenteeism rate, individual employees' records of total hours of absence were manually collected for the same six months in each of the three waves of measurement. Data utilized for analysis here included only the records that provided complete data from all three measurement waves to maintain the internal consistency of the data.

Work performance data, however, contain some systemic errors in collecting data. For example, rater subjectivity discounts the measurement reliability of performance appraisal data. After scoring each item in the performance appraisal form, evaluating supervisors give an overall grade on the basis of the majority scores among the items.

However, if an employee failed in an item that is considered by the evaluating supervisors as critical, the employee should receive a failing grade overall. This scoring method creates a problem of rater subjectivity because no standard weighting system exists to assess the importance of each individual item. Rather, the evaluating supervisors weigh individual items arbitrarily, although they must provide justification for their weighing of item significance.

The number of state hospital uses constitutes another problem of measurement reliability. The data used here were based on the monthly number of state hospital utilizations collected directly from state hospitals. Based on this data, the Center keeps a daily record of admissions and discharges in order to compare actual usage with the allowed numbers from the state on a monthly basis. However, the data only count what is reported to the Center from social workers and admission departments of hospitals. For instance, they sometimes reported different days rather than the day a consumer actually left the hospitals if discharge is delayed because of transportation or placement problems.

5.1.2. Validity

Reliable data are not necessarily valid, if only because we can reliably measure what we do not intend to measure. Invalid data could result in vulnerable findings, in which the impacts on dependent measures could be derived from systemic variables other than the interventions. Hence, many scholars have emphasized the importance of minimizing the effects of other systemic variables by employing strong research designs (e.g., Campbell & Stanley, 1963; Cook & Campbell, 1979). In this light, validity

deserves careful attention due to the limited one-group design utilized in this study. As shown below, however, several systemic efforts seem to reduce many validity problems, given the limitation of the research design.

First, employee self-report data were cross-validated with a variety of objective data based on a conceptual model introduced in chapter 3. The causal linkages of the conceptual model support a positive relationship between employees' attitudinal and behavioral changes, which tends to increase organizational performance. The results of the data analysis generally confirmed that the moderate level of employee satisfaction and decreased commitment to the Center encouraged employees' withdrawal behaviors, indicated by turnover and absenteeism rates. As expected, these pessimistic results from both attitudinal and behavioral measures produced only a modicum of positive changes in some of the organizational performance measures and decreased performance in other measures, such as employee performance appraisals. Overall, several dependent measures produced results that seem to be correlated with conceptually linked variables, which could be termed as construct validity.

Second, qualitative analysis based on open-ended questions in the employee attitude survey not only provided substantial evidence supporting the results from the closed-ended items, but also added substance to explanations of the employees' responses. For example, a result from the quantitative data—dissatisfaction with pay—is supported by qualitative data. The qualitative data also revealed that “poor pay” encouraged employee turnover, especially among quality staff. Furthermore, the qualitative data can unearth new issues that were not described by quantitative data as in the examples of “too much work” and “financial pressure” from the state regulators. In

effect, the qualitative analysis provided in-depth information that could validate the results from the quantitative data.

Third, longitudinal dependent measures—such as turnover, the number of state hospital utilizations, and the number of consumer complaints—control many threats to internal validity, such as maturation and statistical regression. In particular, these time series designs improve understanding of the delay effects that often appear in program evaluation. Similarly, an abbreviated time-series design that was employed for the analysis of employee absenteeism and performance appraisal also increased the explanatory power of the results by showing both the short- and long-run impacts of the interventions.

However, some longitudinal data—the number of state hospital utilizations and consumer complaints—are limited. These two monthly data should be adjusted by the number of consumers served each month in order to reflect the actual breadth of reduction in number over time after the intervention. Unfortunately, the monthly number of consumers served at the Center was not available at the time of data collection. However, yearly statistics show consistent increase in the number of Center consumers from 8,398 in FY 1998 to 10,213 in FY 2001. Presumably, therefore, the actual reductions in the number of state hospital uses and consumer complaints after the interventions are greater than they appear in the results.

Fourth, Macy and Mirvis (1976) argue that the major problem in validating behavioral data, such as turnover, centers on controlling for non-work-related variation such as the unemployment rate. Others also encourage use of economic indicators for validating turnover, with the assumption that turnover rates are not attributable to

economic recession. Many authors reported that economic recession discourages turnover movement, due to the low possibility of mobility to other employers (Macy & Mirvis, 1976, 1983; McEvoy & Cascio, 1987; Mobley et al., 1978).

In order to examine whether the turnover rate at the Center is attributable to the economic situation rather than to the intervention, the monthly unemployment rate in Georgia was collected longitudinally and compared with the turnover data at the Center. The product-moment correlation analysis indicated that the turnover rate at the Center is not significantly associated with the economic situation ($r = 1.33$), which undermines the hypothesized relationship between turnover and economic recession. The primary reason is that as a government-funded nonprofit agency, the Center is subject to relatively limited influence from conditions in the job market. A closer look at the financial trend in the Center reveals that government funds, as more than 95% of the Center's total revenue, has consistently increased for the last four years. In addition, the unemployment rate in Georgia appears to be evenly distributed from 3.7 to 4.0 during the study period and is unlikely to have had any significant effects on turnover at the Center.

Fifth, although the abbreviated time series design which employs the three waves of measurement in this study is better than a simple one-group design in explaining program effects, this design is vulnerable to the threat of selection bias due to the reduction of sample size during the matching process for all applicable measurement waves. For example, the absenteeism rate was computed based on 92 matched pairs, which consist of 48 percent of the 191 sample employees and only 27 to 29.2 percent of all salaried employees at the Center throughout the three measurement periods. The total number of salaried employees was 315 in FY 1998 (before), 343 in FY 2000 (during),

and 341 in FY 2001 (after the interventions). Employee performance appraisal data provide another such example; 169 matched pairs consist of 88.5 percent of the sample employees, but this number only constitutes approximately half (49.3 to 53.7%) of all salaried employees.

One way to rule out selection bias is to compare the pattern of change based on the matched pairs with the pattern based on all salaried employees (Armenakis & Smith, 1978). Selection bias can be ruled out if the results of difference tests in both groups suggest identical patterns of change. Earlier, the LGM approach found that the rate of absenteeism has slowly increased across the three waves of measurement. The separate pairwise t-tests were conducted for both groups for the three time periods in order to test whether this unexpected pattern of change was observed in all salaried employees as well. Table 5.1 shows the results of the t-tests.

Table 5.1. Comparisons of pairwise t-tests for employee absenteeism rates across the three waves of measurement

	FY00-FY98 (t-values)	FY01-FY00 (t-values)	FY01-FY98 (t-values)
92 matched pairs	1.30	-.28	1.04
All salaried employees ¹⁾	1.89	.01	1.89

1). Total usable absenteeism records collected for the test vary from 236 in FY 1998, to 275 in FY 2000, and to 257 in FY 2001, which constitutes approximately 75 to 80 % of all salaried employees.

The results indicate that the patterns of change in employees' absenteeism rates in both groups are generally identical, although absenteeism tends to level off from FY 2000 to FY 2001 in all salaried samples, while the reverse pattern was found in the matched pairs. In other words, absenteeism rates have moderately increased in both groups in

spite of the change interventions. This identical pattern of change demonstrates that 92 matched pairs successfully produce convincing evidence for increased absenteeism rates after the interventions.

Based on 169 matched pairs, employee performance appraisals have displayed a significant decline in average scores, which suggests an expected direction of change (see Table 4.7). To examine whether this decline can be found in all salaried employees, separate pairwise t-tests were conducted for both the 169 matched pairs and all salaried employees over the three waves of measurement.

As shown in Table 5.2, the separate pairwise t-tests generally produced identical patterns of change, which suggested that employee performance appraisals significantly decreased in both groups after the interventions. There is a nonsignificant decrease between FY 1998 and FY 2000 in the 169 matched pairs; otherwise, employee performance appraisal scores had consistently and significantly decreased over the three waves of measurement in both groups. This confirms the validity of the results from the 169 matched pairs.

Table 5.2. Comparisons of pairwise t-tests for employee performance appraisals across the three waves of measurement

	FY00-FY98 (t-values)	FY01-FY00 (t-values)	FY01-FY98 (t-values)
169 matched pairs	-1.77	-3.98**	-5.79**
All salaried employees ¹⁾	-3.29**	-3.54**	-6.61**

**p<.01

1). All salaried employees include 315 in FY1998, 343 in FY2000, and 341 in FY2001.

Finally, separate pairwise t-tests were conducted for consumers' self-report satisfaction data, but for a somewhat different purpose. Since the consumer satisfaction survey was launched, many advocacy groups such as the Georgia Consumer Network have questioned the survey results. The main argument is that, since many mentally ill people are illiterate, the Center staff could manipulate the survey results when they assist consumers in filling out the survey. Because of the concern about survey manipulation, consumer satisfaction survey data have been collected from both consumers and their family members and guardians. This study adopted the survey results from family members and guardians and compared them with those from consumers.

Figure 5.1 shows the comparison of service satisfaction scores of consumers and their family members in relation to before, short-post (9 months after), and long-post (21 months after) measures. Cronbach's alpha coefficients, ranging from .82 to .92, established internal consistency for the measures in both groups. As shown in the figure,

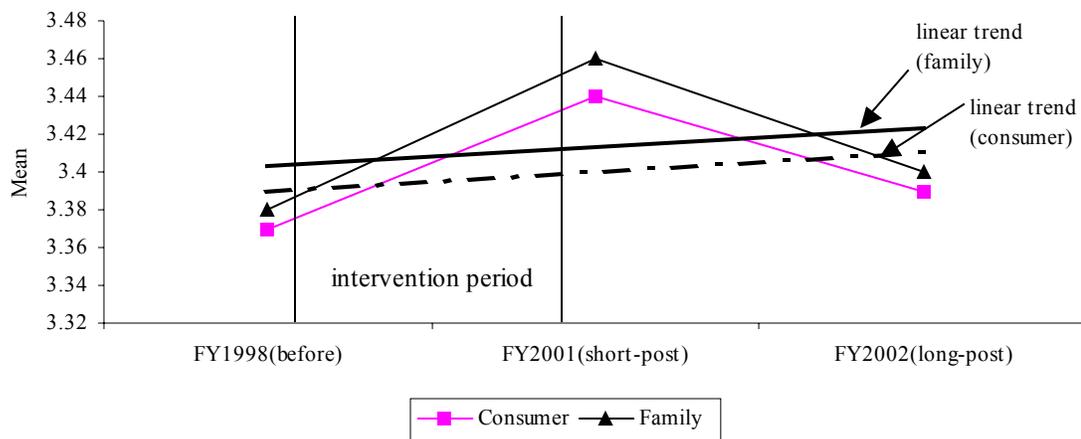


Figure 5.1. Comparison of service satisfaction between consumers and their family members

the groups produced identical patterns of change in mean satisfaction scores. Although the long-post satisfaction scores are slightly less than the short-post scores, the overall service satisfaction of both groups has increased longitudinally.

Separate pairwise t-tests shown in Table 5.3 support the identical patterns of shifts in satisfaction with Center services from both consumer and family respondents. The significant t-statistics in the consumer survey are probably due to the large sample size. The service satisfaction of both groups had increased in the short run, but decreased over time after the short-post measures. Overall, however, the change interventions had a positive impact on service satisfaction from both the consumer and family perspectives, which suggests the validity of the consumers' self report data.

Table 5.3. Comparisons of pairwise t-tests for consumer satisfaction between consumers and family respondents

	FY01-FY98 (t-values)	FY02-FY01 (t-values)	FY02-FY98 (t-values)
Consumer	2.47*	-2.1*	.53
Family	.63	-1.2	.17

There is no doubt that many other factors could contribute to the patterns of attitudinal, behavioral, and performance changes identified by the several dependent measures examined in this study. In particular, the one-group design utilized here cannot successfully rule out potential history effects in the analysis. Nonetheless, because of the various ways of ensuring the reliability and validity of the data analysis, it seems reasonable to conclude that comprehensive interventions implemented at the Center

produced intended or unintended directions of organizational change in terms of employee attitudes, employee withdrawal behaviors, and organizational performance.

5.2. Summary and conclusions

Table 5.4 shows a summary of the results of testing each of the dependent measures used in this study. Examination of the comprehensive interventions for transforming the Center implies three broad conclusions, three pieces of evidence related to the unintended directions of change, and two warnings about interpretation of the conclusions.

First, the effects of the change interventions on employee attitudes seem mixed. The interventions did not substantially shift patterns of employee satisfaction and thus, few cases of significant change were isolated—whether gamma, beta, or alpha change—from the intervention. Nonetheless, the pattern of change in employee satisfaction tended to be directionally consistent with hypothesis 1 as a result of the interventions. Some variations were found between intrinsic and extrinsic satisfaction. The levels of intrinsic satisfaction changed in the expected direction, whereas their extrinsic satisfaction moved in the contrary direction, especially regarding communication about policies and procedures, pay, and promotion opportunities.

Employee commitment, overall, seems to have declined moderately, undermining hypothesis 2. However, the three dimensions of organizational commitment showed different patterns of change. For example, significantly positive alpha change was observed in employees' involvement in the Center, whereas employee loyalty showed a negative pattern of alpha change at significant level. This pattern of change implies

Table 5.4. Summary of the results of the interventions on employee attitudes, behaviors, and organizational performance

Variables	Measures	Research hypothesis	Results	Intended directions of change?
Employee satisfaction	Intrinsic satisfaction	Ho 1. The interventions at the Center will generate a positive change in employee job satisfaction.	Modest increase	Yes
	Extrinsic satisfaction		Modest decrease	No
	General satisfaction		Modest increase	Yes
Organizational commitment	Identification	Ho 2. The interventions at the Center will generate a positive change in employee organizational commitment.	Modest decrease	No
	Involvement		Significant decrease*	No*
	Loyalty		Significant decrease***	No***
Employees' withdrawal behaviors	Absenteeism rate	Ho 3. The interventions at the Center will reduce withdrawal behaviors measured by employee absenteeism.	Modest increase	No
	Turnover rate	Ho 4. The interventions at the Center will reduce withdrawal behaviors measured by employee turnover.	Modest increase	No
Organizational performance	Performance appraisals	Ho 5. The interventions at the Center will lower the scores on employee performance appraisals.	Significant decrease**	Yes**, But?
	Number of state hospital utilizations	Ho 6. The interventions at the Center will reduce state hospital utilization by Center consumers.	Significant decrease**	Yes**
	Number of consumer complaints	Ho 7. The number of consumer complaints will increase immediately after the introduction of the interventions.	Significant increase*	Yes*
		Ho 8. The interventions at the Center will reduce the number of consumer complaints over time.	Modest decrease	Yes
	Client Satisfaction Questionnaire (CSQ-8)	Ho 9. The interventions at the Center will generate a positive impact on consumer satisfaction measured by consumers' self-reports on Center services.	Modest increase	Yes

*p<.05. **p<.01. ***p<.001

that employees' levels of involvement did not correlate with the levels of employee loyalty toward the Center because employees' willingness to work for the Center seem to rest on their altruism, not on their commitment to the Center as an institution.

Second, employees' withdrawal behaviors seem to have increased, although moderately, after the intervention, contrary to hypotheses 3 and 4. It appears that employee absenteeism increased slightly throughout the intervention period, and this unexpected pattern of change continued after the intervention. Similarly, the interventions resulted in change in an unexpected direction in the rate of voluntary turnover. The primary reason for the unexpected direction of change in turnover appears to be low salaries at the Center.

Finally, the comprehensive change interventions at the Center generally resulted in improvement of organizational performance, in terms of reduced state hospital utilizations and consumer complaints, and increased consumer satisfaction with the Center's services. For example, state hospital utilizations by Center consumers were reduced substantially, at an average of 201 DACEs, as a result of the intervention. These positive impacts on the performance measures confirm hypotheses 6 through 9.

Significantly declining scores on performance appraisals indicate change in an intended direction at least in the short run because organizational change and development could lower appraisals by making them more reliable and valid. Thus, declining of appraisals may be another sign of successful organizational change, supporting hypothesis 5. However, it is likely that the appraisal scores would increase in the long run, reflecting the improvement of organizational performance. Unfortunately,

the long-term effect of the interventions on performance appraisals cannot be tested due to data unavailability. This question requires continued attention.

In brief, the results of the data analysis seem mixed. The organizational change interventions at the Center have provided changes in employee satisfaction in the intended direction, but levels of employee commitment changed in the direction opposed to expectations. Contrary to expectations, employees' withdrawal behaviors appear to have increased, although moderately, in terms of both absenteeism and turnover rates. However, the Center interventions generated a pattern of shifts in the intended directions in all four performance measures.

Three pieces of evidence help to explain some of the change that occurred in the unintended direction. First, the employee self-reports tailored to examine employee perceptions of organizational change revealed that employee needs were not appropriately reflected in the change processes. Rather, employees reported that they felt anxious and insecure about the changes or overburdened with work engendered by the changes. This negative perception of the changes led to distrust of the Center management.

Second, qualitative data based on the four open-ended questions added depth in exploring the causes of the unintended results of the change interventions. Analysis of the data identified three problems that inhibited organizational change in the intended direction: external influences, lack of leadership, and lack of extrinsic incentives. In particular, the substantial amount of paperwork required by state regulators overburdened the Center employees, who allegedly have high levels of job stress from dealing with mentally ill people (Golembiewski & Munzenrider, 1988). In addition, financial pressure

from the state created uneasiness about job security and concern about the quality of service. The Center employees also blamed the lack of leadership by the Center management who seemed to lack working knowledge of daily operations and did not provide a clear direction of change. Pay is another enduring issue at the Center because low salaries are one of the major sources of high turnover.

Finally, the most important reason for the unintended direction of change is the lack of consistent value served or the absence of a useful learning theory/technology that would improve the chances for successful organizational change (Golembiewski, 1996). Although the Center's mission and values implicitly guide the change interventions, the likelihood of aggressive state actions has been the major driver of the Center change, which brought about rapid organizational transformation. In this light, several change interventions at the Center cannot be characterized by OD and are only loosely related to QWL. It may be that the decrease in organizational commitment and increase in employees' withdrawal behaviors are the consequences of the lack of normative guidelines, such as trust and openness in interactions, for various intervention efforts.

Interpretation of these findings should be made with caution for several reasons. First, the increase in the turnover rate may not be a negative effect of the change interventions, but it may be a sign of successful organizational change. Organizational change and development could increase employee turnover at least in the short run because employees of long standing tend to resist a new regime, especially when the organization previously has not been managed well as is the case with the Center. Higher turnover is also associated with the short-term decrease in performance appraisals at the Center, which may be considered a necessary outcome of successful organizational

change. In sum, the increase in turnover should receive close attention, but there must also be some flexibility in interpreting increasing turnover inasmuch as it is a temporary occurrence.

Another caution is related to the interpretation of the modest changes in the number of consumer complaints. The results of the monthly consumer complaints data indicated no significant reduction of the volume of complaints after the intervention. Note, however, that there is a noticeable shift in the types of complaints filed during the intervention periods. For example, the majority of complaints (75%) filed in FY 1998 concerned transportation problems or appointment time. As the complaint procedures were institutionalized during the intervention, the types of complaints became diverse and focused more on consumer rights as persons served. Of the total 49 complaints filed in FY 2001, seventeen complaints (34.7%) were related to violations of consumer dignity, and twelve complaints (24.5%) involved services that were not suited to consumer needs. Similarly, eleven (22.4%) complaints described the violation of the policy guaranteeing prompt and confidential services. In effect, although the change interventions did not result in significant reduction in the number of consumer complaints, the complaint procedures changed the behaviors of consumers as well as that of the Center employees. While consumers tend to focus more on their rights as persons served, the Center employees have become increasingly responsible for the consumers' needs in delivering services.

From a somewhat different perspective, the establishment of complaint procedures can be seen as a sign of consumer empowerment. Using complaint procedures, the Center consumers have begun to request service changes directly from

their service provider. More importantly, the Center began to change the ways it delivers human services in response to consumers' needs. During FY 2000, for example, two contract workers and one Center employee were terminated due to their alleged negligence and misconduct in residential facilities and one county mental health clinic. Another complaint related to the transportation problem resulted in the hiring of new staff for the Emergency Services Unit. These examples imply that the Center has begun to "listen to" consumer requests and conducted follow-up measures to change methods of service delivery, which was not the case before the intervention.

In sum, no concrete conclusions can be drawn based on the various types of data analyzed in this research. The results are mixed, and the Center is still in the process of organizational change. Nonetheless, the change intervention at the Center appears to have been successful because it was the first comprehensive change effort introduced into a chaotic situation in the organization. Before the change, there were no policies and procedures, no formal employee training, and no consumer complaint procedures at the Center. The comprehensive efforts for organizational change suddenly transformed the Center from "none" to "some."

The organizational change interventions at the Center were limited by design. The Center management, who designed and conducted many of the intervention programs, was not very prepared for the sudden demands for change, and persistent financial and management constraints from the state regulators weakened strong reform initiatives. The Center management had consultants from an outside consulting firm, but they only raised many issues without providing specific prescriptive answers to tackle them. Under these circumstances, it may be naïve to assume that the interventions at the

Center would have resulted in marked organizational change. Rather, smaller changes seem to be a reasonable outcome if the changes appear in the desired direction.

Moreover, these smaller changes may trigger greater impacts on organizational management in the long run. In July 2002, a Georgia DHR audit team conducted management reviews, which included evaluating client records, visiting clinics and residential sites, and interviewing staff and consumers of the Center. After the final review, the head of the DHR audit team praised the magnitude of change the Center had achieved in improving the quality of services. The review team leader complimented the “herculean endeavor” of the Center staff that produced “impressive” organizational changes in a short period of time (Georgia DHR, 2002). This remarkable achievement appeared immediately in a local newspaper (Shearer, 2002), which greatly improved the image of the Center in the community. Although the evaluation of the long-term impact of Center interventions remains an empirical question, it appears that various organization change efforts implemented by the Center are moving the organization toward achieving a model of excellence for human service agencies.

5.3. Implications of the findings

The results of this study suggest eight implications. First, an analytical framework established specifically for evaluating outcomes of organizational change at the Center works reasonably well for exploring the efficacy and effectiveness of the change interventions. The results of the data analysis generally resulted in patterns of change that were illustrated by an analytical framework presented in chapter 3, although some anomalies were found regarding the modest increase in employees’ withdrawal

behaviors and performance improvements. Moreover, several dependent measures in the framework were drawn from theoretical models used in previous research on organizational change, increasing the generalizability of the framework for the evaluation of organizational change in other quasi-government agencies and other organizational settings.

Second, the results of both quantitative and qualitative data imply that declining employee commitment is related to the consistent increase in employee turnover and absenteeism. This increasing trend in employee withdrawal behaviors may have a significant impact on organizational performance, especially on consumer satisfaction with Center services. For example, although the data showed a modest increase in consumer satisfaction after the interventions, consistent high turnover could cause the type of disruption in the flow of service provisions that tends to make consumers unhappy with Center services. To illustrate, the manager of the Severely Emotionally Disturbed (SED) program, a program dealing with children and adolescents who experience emotional and behavioral difficulties, claimed that many clients and their family members complain about Center services because they have to see three to five different clinicians during the treatment process due to employee turnover.

Third, the roots of the high turnover rate seem to lie more in the lack of extrinsic incentives, such as low salaries, communication problems, and limited promotion opportunity than in declining employee commitment. Public employees may have low levels of commitment because they put more emphasis on serving clients than on identifying themselves with the organization (Romzek & Hendricks, 1982). In sum, low commitment may reflect problems, but not necessarily indicate weak levels of work

motivation (Rainey, 1997). Supporting this view, many program managers at the Center stated that they want to stay in the agency, not because they have loyalty to the Center, but because they love their staff and the work itself. Nonetheless, it is still unknown how much the Center employees can tolerate low salaries and other limited benefits. Without massive withdrawals, it may be difficult to retain quality staff with no advantages to work at the Center rather than elsewhere.

Fourth, the increasing turnover, as well as the low levels of commitment, may also be associated with the declining performance appraisals, because low appraisals imply that an employee will lose his or her chance to receive salary increases. As discussed in the previous section, the declining appraisals may reflect successful organizational change, but lack of opportunity to receive salary increases seems to be sufficient reason for employees to look for other employers, given that Center employees have been receiving low salaries compared with those in other government agencies as well as in private healthcare providers.

Fifth, qualitative data revealed that conflict exists between administrative and clinical staff, which is no surprise. The Center has been suffering from an “us-against-them” culture in which clinicians often feel isolation and alienation from the Center management. One major cause of this conflict stems from the lack of leadership from the Center management, who required compliance with the state mandates without much thought for the consequences for consumers and staff. Moreover, inconsistent policies and procedures, with no clear direction of change, created considerable confusions in administration.

One obvious consequence of the “us-against-them” organizational culture is encouragement of a “degenerative interaction” between administrative staff and clinicians, characterized by low trust and association of high risk with openness to authentic ideas, feeling, and issues (Golembiewski, 1995). This conflict relationship implies that the Center needs transformational leadership to generate “regenerative interaction” in which the Center management values individual employees and motivates them by recognizing their needs. In effect, loyalty must go both ways between the Center management and clinical staff.

Sixth, a financial deficit has been seen as a major obstacle for successful organizational change at the Center. Contrary to common belief, government funds, which make up more than 95 percent of the Center’s total revenue, have consistently increased during the fiscal years of 1998 through 2001. However, the number of Center consumers has also increased during the same period, and thus government funds per consumer were actually reduced from \$2,175 in FY 1998 to \$ 2,118 in FY 2001. Furthermore, the state of Georgia cut 3 million dollar from FY 2002 budget, which imposed greater financial difficulties on the Center.

The primary reason for the financial deficit is not the government budget cut, but excessive expenditures due to the growing number of Center consumers. In the public sector, additional consumers do not necessarily bring additional financial resources, and consequently employees are expected to do more work with fewer resources to serve the additional consumers (Rago, 1994). The Center cannot reject consumers who are not able to pay for its services, nor has it the right to refuse consumers who require expensive services. For example, violent and uncontrollable consumers cost nearly a quarter of a

million dollars a year, as well as the cost of at least three staff to take care of them, according to the director of the Center's business office.

The financial deficit has consistent negative effects on successful organizational transformation. On the one hand, inadequate salaries and job insecurity accompanied by increasing government contracting requirements decrease employee morale. On the other hand, insufficient financial resources hinder the provision of quality care for consumers. Unfortunately, legislatures spend dollars for "oversight" but not for the Center, which suggests a lingering problem of lack of trust. Moreover, the public's ignorance about the segment of society who need psychiatric care and services would continue to result in lack of legislative awareness of the greater need for financial support in mental health areas. Given the resource constraints in the public sector and the public's ignorance of the segment of psychiatric society, financial pressure for the Center will remain a consistent problem.

The Center has not merely accepted this state of affairs. The Center attempts to make up the financial deficit by identifying more Medicaid clients and developing new fee-based services. However, these constitute only a minor portion (less than 3%) of total revenue. Solicitation of contributions from donors would seem to be a better way to overcome financial difficulty because the larger public may be more interested in how well the Center sells itself to them, rather than how efficiently it accomplishes its goals (Frumkin & Kim, 2001). Legally, however, the Center cannot invite donations from the public because it is not a charity. Given the increasing demand for mental health services from consumers and the limited government support to meet all community needs, lifting

the ban on fundraising activity may provide the Center with a viable way of overcoming its financial deficit.

Seventh, the increase in employee workload to comply with various types of state requirements was a major cause of the unintended results of organizational change. The state of Georgia mandates various kinds of documentations and operational procedures in the name of “performance-based contracting (PBC)” with the purpose of improving the quality and effectiveness of government service delivery. Contrary to the initial purpose of the PBC, micro-management by the state has produced a substantial amount of paperwork, which shortens the quality time clinical staff can devote to consumers. For example, the state of Georgia hired American Psychiatric System, a Maryland-based private auditing company, to monitor every single treatment plan for Medicaid clients at the Center to prevent possible abuse of government funds. However, too many accountability requirements may shift the Center’s direction to focus more on compliance with the state regulations than on consumer-oriented service provisions, as illustrated in the seminal work done by Smith and Lipsky (1993). It may be true that PBC changed the behavior of the Center to focus more on performance (Martin, 2002), but in the long run it may not necessarily increase performance in terms of quality of services to consumers.

Finally, however, the state regulations were aimed at keeping the ship from sinking rather than at moving to an ideal agency in one leap. Before the interventions, the Center could be seen as a “laissez-faire organization” because it was so disorganized and poorly managed, and even policies and procedures were not functioning for daily operations. Thus, although the state regulations may create problems in the long run, in the short run, the change interventions initiated by the state actions saved the Center as it

was on the verge of losing annual contract. Presently, the Center policies and procedures are functioning, its organizational structures are integrated into a “one stop shopping” system, and the Center staff have begun to be recognized as important resources for the provision of quality services. In sum, the change interventions made the Center a better place, and better still, improvements are likely to continue as the Center attempts to move forward.

5.4. The desirable future state of the Center

Based on the implications of these findings and other considerations, Table 5.5 suggests ways of bringing about the desirable future state of the Center as an alternative to the traditional, bureaucratic model of organizations. It is important to note that these suggestions are not definitive because the Center is still in a transitional state from a “laissez-faire organization” to a more organized entity. Rather, this study attempts to make general statements about the future state of the organization. The major features of the new organizational state include a clear vision for the future state of organization, a clear sense of organizational identification, regenerative interaction, an integrative service structure, performance-based accountability, adequate rewards, and partnership with the state. The following bullets illustrate the major features of the desirable future state of the Center.

- Consistent changes for the last four years have created considerable uncertainty in management. A clear vision of what the Center should look like and how the new state of the organization can be created needs to be established.

Table 5.5. Successful organizational transformation at the Center

Old practices	Future state
Lack of organizational direction	Clear vision for the future state of organization
Lack of organizational identity	Clear sense of the organization's identity
Degenerative interaction	Regenerative interaction
Functional separateness in structure	Integrative service structure
Particularistic work roles	Teamwork
Compliance-based accountability	Performance-based accountability
Inadequate rewards	Adequate rewards
Principal-agent relationship	Partnership with the state

- Despite the high degree of commitment to co-workers and work itself, Center employees do not consider themselves as parts of “the organization.” Employee training is a way of educating employees about who they are and what they do. An increase in organizational identification may relieve high turnover movement at the Center.
- Removing degenerative interaction between Center management and individual employees is the way to establish an employee-friendly agency. The Center management must value employees as a key resource and appreciate their efforts and contributions so that employees feel respected. This could break down the

“us-against-them” culture and create “we” values in order to establish regenerative interaction in which high trust and low risk encourage free communication and facilitate creative knowledge (Golembiewski, 1995).

- An integrative service structure was established, but geographical distance between the Center and other service units, such as the substance abuse treatment unit, creates considerable inconvenience and travel costs. However, the public may not tolerate establishing a “big” government agency.
- Program quality teams are now working in every work unit. It seems, however, that neither employees nor supervisors have been trained as team players. Individual team members should be seen as “problem solvers,” not merely as “listeners.”
- The accountability of the Center must rest on performance, not on compliance with contractual requirements. Therefore, “performance-based accountability” to consumers should be established. Center performance can substantially be defined by quality of service and judged by consumers’ satisfaction with Center services.
- Adequate rewards that appropriately reflect recognition of employee contributions and dignity will no doubt result in positive effects on employee attitudes, behaviors, and performance. The Center’s tuition reimbursement policy must be praised, for example. However, it seems to have minimal effects, due to the small number of beneficiaries. Despite the importance of adequate rewards, this issue is likely to remain unresolved until the state legislature takes the initiative.

- In the future, the Center should be seen as a partner with, not as an agent of, the state government. One practical way of achieving such a partnership is to be more financially independent from government funds. Fundraising must be given priority over developing a fee-for-service arrangement because the latter is fundamentally limited in public sector organizations. To accomplish this goal, it is recommended that the state of Georgia lifts the ban on fundraising of government funded nonprofit organizations such as this Center.

In a time of increasing accountability, change now becomes a way of life. The question is not whether the Center has to change, but how to change the Center to be more responsive to internal and external challenges (Light, 1998). The Center must go through a transitional state to get to the desirable future state of the organization. In the meantime, there could be considerable confusion about the means by which it can reach the desirable state of organization. For purpose of closure, the ultimate goal of the Center seems to be encapsulated in one employee's expression of hope: "I would like to see that the Center becomes the premier provider of mental health care for the ten counties of this community service board and achieve recognition as the model of excellence for community mental health care in the state."

5.5. Limitations of the research

Six limitations may weaken the findings of this research. First, the generalizability of the study seems weak due to the unique characteristics of the research setting. The sample characteristics and the organizational culture may have directly

affected the findings. Nonetheless, the Center experience is not uncommon among those organizations in which changes must be made under pressure for better performance.

Second, the limitations of the research design (one-group design) militate against establishing robust conclusions from the findings. However, it is also true that research findings never prove clear causal relationships. Rather, they furnish evidence concerning one or more hypotheses (Lawler et al., 1983; O'Sullivan & Rassel, 1995; Paul & Gross, 1981). For example, while many scholars advocate the use of a comparison group or control group to prevent internal validity problems such as history (e.g., Armenakis & Smith, 1978), others have questioned the absolute necessity of comparison groups (Golembiewski et al., 1974; Nicholas & Katz, 1985; Porras & Berg, 1978). Furthermore, selection bias is always relevant whenever there is a comparison group (Mohr, 1995).

Third, this study could not test the analytical framework used for evaluating organizational change at the Center because of respondent anonymity in the administration of the employee attitude survey. Comparison of self-report data and relevant organizational records was not possible with anonymous respondents (Seashore, 1987). Thus, there was no way to assess the associations of the conceptually linked dependent variables, thereby limiting our understanding about the relationships between employees' attitudes, employees' behaviors, and organizational performance.

Fourth, the difference tests of sample means utilized in several dependent measures in this study may have a built-in bias to the extent that there is a correlation between pre- and post measures (Linn & Slinde, 1977; Macy & Peterson, 1983). Linn and Sline (1977) found that the simple difference scores typically produce a negative correlation with the pretest, and this may inflate positive findings. However, other

research has reported that the simple difference tests are as good as the more complicated methods such as analysis of covariance (Overall & Woodward, 1975; Richards, 1975). It seems that bias in the research findings depends more on the reliability and validity of data than the degree of complexity in statistical methods.

Fifth, the results of the organizational change need to be interpreted in terms of both statistical significance and the meaningfulness of the substantive features of the change effects (Minzberg, 1979; Woodman, 1989). Statistics do not always render the complete picture of the change, but only tell us the likelihood that the observed change can or cannot be seen as random. Statistical results and the meaningfulness of the change are always a matter of perspective.

Finally, it seems too early to say whether the changes in the Center are successful. Periodic follow-on evaluation of the changes is important because it gives us a sense of direction about where the Center is, where it should be going, and how to get there.

5.6. Directions for future research

The limitations of the study shed some light on directions for future research on organizational change evaluation. The seven suggestions below are not definitive, but they could be reasonable ways to surmount research limitations presented above and improve future research on the evaluation of organizational change.

First, the internal validity and generalizability of the research findings can be improved by replicating the change interventions and the analytical framework in different settings with different samples. Replication of the study would not only provide

more solid evidence for the patterns of change, but also could benefit other community mental health centers that must transform their organizations from past experiences.

Second, testing the analytical framework would improve our understanding about the relationships between employee attitudes and behaviors that seem to be conceptually and practically linked to each other. In addition, testing the analytical framework may identify an alternative model or models that could work better for the present purpose of the study. It would be a mistake to assume that the present framework is the only appropriate one for evaluating organizational change.

Third, scholarly attention must be given to determine the optimal rate of employee turnover at the community mental health centers. High turnover may be good if it provides new energy and brings highly motivated people into the organization. However, approximately 40 percent of the turnover movement at the Center could be disruptive for providing seamless quality services. Employees' reason for leaving and the consequences of employee turnover require in-depth attention. For example, exit interviews seem justified.

Fourth, future research should examine the effects of employee absenteeism on organizational performance. Employee absenteeism can be as costly to the organization as employee turnover. A report published by the International Personnel Management Association (IPMA) found that in a private company, a rough estimation of unscheduled absenteeism costs can average as much as \$602 per employee annually. This dollar figure seems low, but this estimate excludes all indirect costs, such as overtime pay for other employees and the hiring of temporary workers (IPMA, 2002). In particular, sick leave abuse becomes "a chronic workplace ill." Accordingly, attention should be

directed to the reasons why employees abuse sick leave and other leaves and ways to discourage employees from exploiting leave policies.

Fifth, methodological sophistication requires continued attention, despite the fact that statistical results must be weighed against practical importance. Comparison of simple difference tests must be conducted after testing measurement equivalence between latent constructs to be measured. In addition, interpretation of simple difference tests should be made with caution if preexisting differences are found between the treatment and comparison groups. Most importantly, the reliability and validity of the data analysis should be given first priority in order to comprehend change effects, while discounting any spurious variables.

Sixth, continued scholarly attention should also be given to the identification of multiple forms of change—alpha, beta, and gamma change—using larger samples and more diverse research settings. This study attempted to identify the types of change based on employee attitude surveys, but job satisfaction data did not permit appropriate analysis due to the small size of the sample. Presently, only the CFA approach seems available for researchers, but few have utilized it in public administration because of unfamiliarity with the statistical tool. This lack of research on multiple forms of change weakens understanding of the complex change dynamics occurring in many public sector organizations.

Finally, many change interventions employ post-hoc evaluation procedures, which substantially limit selections of dependent variables and relevant data for measurement. Most of the data used in this study were collected by existing agency records, which are what was available in the Center at the time of data collection.

Therefore, future evaluation research should be focused more on the usefulness of pre-evaluation, where evaluation designs and relevant data are selected in advance of the change interventions.

REFERENCES

- Advantage Behavioral Health Systems (1997). FY 1997 quarterly continuous quality improvement efficiency and effectiveness report. Athens, GA: Author.
- Advantage Behavioral Health Systems (1998a). FY 1998 quarterly continuous quality improvement efficiency and effectiveness report. Athens, GA: Author.
- Advantage Behavioral Health Systems (1998b). Advantage Behavioral Health Systems Community Service Board 1998 annual report. Athens, GA: Author.
- Advantage Behavioral Health Systems (1999a). Advantage Behavioral Health Systems Community Service Board 1999 annual report. Athens, GA: Author.
- Advantage Behavioral Health Systems (1999b). FY 1999 quarterly continuous quality improvement efficiency and effectiveness report. Athens, GA: Author.
- Advantage Behavioral Health Systems (2000a). FY 2000 quarterly continuous quality improvement efficiency and effectiveness report. Athens, GA: Author.
- Advantage Behavioral Health Systems (2000b). Regional board contractual outcomes report to the Northeast Georgia Regional Board. Athens, GA: Author.
- Advantage Behavioral Health Systems (2000c). FY 2001 action plan. Athens, GA: Author.
- Advantage Behavioral Health Systems (2000d). Advantage Behavioral Health Systems 2000 orientation manual. Athens, GA: Author.
- Advantage Behavioral Health Systems (2001). Advantage Behavioral Health Systems personnel policy manual. Athens, GA: Author.
- Ahmavaara, Y. (1952). Transformation analysis of factorial data. Annals of the Academy of Science Fennicae, Series B, 881, 54-59.
- Anderson, J. C. & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bulletin 103, 411-443.

- Armenakis, A. A. (1988). A review of research on the change typology. In R. W. Woodman and W. A. Pasmore (Eds.), Research in organizational change and development (Vol 2, pp. 163-194). Greenwich, CT: JAI.
- Armenakis, A. A., & Smith, L. (1978). A practical alternative to comparison group designs in OD evaluations: The abbreviated time series design. Academy of Management Journal, *21*, 499-507.
- Armenakis, A. A., & Zmud, R. W. (1979). Interpreting the measurement of change in organizational research. Personnel Psychology, *32*, 709-723.
- Ash, P. (1972) Review of work in America. Personnel Psychology, *26*, 597-604.
- Babbie, E. (1995). The practice of social research. Belmont, CA: Wadsworth.
- Bader, B. S. (1992, April). Continuous quality improvement: Learning from the innovators. Trustee, *45* (4), 4-6.
- Bateman, T. S., & Strasser, S. (1984). A longitudinal analysis of the antecedents of organizational commitment. Academy of Management Review, *27*, 95-112.
- Beckhard, R., & Harris, R. T. (1987). Organizational transitions: Managing complex change. Cambridge, MA: Addison-Wesley.
- Behn, R. D. (1993). Case-analysis research and managerial effectiveness: Learning how to lead organizations up sand dunes. In B. Bozeman (Ed.), Public management: The state of the art (pp. 40-54). San Francisco: Jossey-Bass.
- Behn, R. D., & Kant, P. A. (1999). Strategies for avoiding the pitfalls of performance contracting. Public Productivity & Management Review, *22*, 470-489.
- Benjamin, E. R. (1982, November). Using the 'post-then' method of evaluation. Training, *19*(11), p. 72.
- Bennis, W. (1965) Theory and method in applying behavioral science to planned organizational change. The Journal of Applied Behavioral Science, *1*, 337-360.
- Berg, B. L. (1989). Qualitative research methods for the social sciences. Needham Heights, MA: Allyn and Bacon.
- Berman, E. M. (1998). Productivity in public and nonprofit organizations: Strategies and techniques. Thousand Oaks, CA: Sage.
- Blau, G. J., & Boal, K. B. (1987). Conceptualizing how job involvement and organizational commitment affect turnover and absenteeism. Academy of Management Review, *12*, 288-300.

- Bollen, K. A. (1989). Structural equations with latent variables. New York: John Wiley & Sons.
- Bozeman, B. (1987). All organizations are public: Bridging public and private organizational theories. San Francisco: Jossey-Bass.
- Brayfield, A. H., & Crockett, W. H. (1955). Employee attitudes and employee performance. Psychological Bulletin, *52*, 396-424.
- Brief, A. P. (1998). Attitudes in and around organizations. Thousand Oaks, CA: Sage.
- Butler, S. (1985). The privatization option: A strategy to shrink the size of government. Washington, D.C.: Heritage Foundation.
- Campbell, D., & J. Stanley (1963). Experimental and quasi-experimental designs for research. Chicago: Rand McNally.
- Cammann, C., Fichman, M., Jenkins, Jr., G. D., & Klesh, J. R. (1983). Assessing the attitude and perceptions of organizational members. In S. E. Seashore, E. E. Lawler III, P. H. Mirvis, & C. Cammann (Eds.), Assessing organizational change (pp. 71-137). New York: John Wiley & Sons.
- Carnall, C. A. (1980). The evaluation of work organization change. Human Relations, *33*, 885-916.
- Center in Elbert County allegedly abused disabled. (1998, May 29). The Atlanta Journal and Constitution, p. 4D.
- Charitable giving drops sharply amid recession, United Way scandal: Poll finds donor's confidence in non-profit groups is slipping. The Washington Post, p. A16.
- Cheloha, R. S., & J. L. Farr (1980). Absenteeism, job involvement, and job satisfaction in an organizational setting. Journal of Applied Psychology, *65*, 467-473.
- Clark, L. P. (1987). Designs for evaluating social programs. Croton-on-Hudson, NY: Policy Studies Associates.
- Clary, B., Ebersten, S., & Harlor, S. (2000). Organizational change issues in performance government. Public Productivity & Management Review, *23*, 282-296.
- Clegg, C. W. (1983). Psychology of employee lateness, absence, and turnover: A methodological critique and an empirical study. Journal of Applied Psychology, *68*, 88-101.

- Cohen, S. (2001). A strategic framework for devolving responsibility and functions from government to the private sector. Public Administration Review, 61, 432-440.
- Cohen, S. & Eimick, W. (1994). Project-focused total quality management in the New York City Department of Parks and Recreation, Public Administration Review, 54, 450-456.
- Cook, T. D., & Campbell, D. T. (1979). Quasi-experimentation: Design & analysis issues for field settings. Chicago: Rand McNally.
- Cook, J. D., Hepworth, S. J., Wall, T. D., & Warr, P. B. (1981). The experience of work: A compendium and review of 249 measures and their use. Orlando, FL: Academic.
- Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfillment. Journal of Occupational Psychology, 53, 39-52.
- Counte, M. A., Glandon, G. L., Denise, M., & Hill, J. P. (1995). Improving hospital performance: Issues in assessing the impact of TQM activities. Hospital & Health Services Administration, 40, 80-94.
- Coyle-Shapiro, J. A. M. (1999). Employee participation and assessment of an organizational change intervention: A three-wave study of total quality management. The Journal of Applied Behavior, 35, 439-456.
- Crocker, L., & Algina, J. (1986). Introduction to classical and modern test theory. Orlando, FL: Harcourt Brace Jovanovich.
- Cummings, T. G. (2000). Sociotechnical systems consultation. In R. T. Golembiewski (Ed.), Handbook of organizational consultation (pp. 235-242). New York: Marcel Dekker.
- Curry, J. P., Wakefield, D. S., Price, J. L., & Mueller, C. W. (1986). On the causal ordering of job satisfaction and organizational commitment. Academy of Management Journal, 29, 847-858.
- Cutt, J., & Murraray, V. (2000). Accountability and effectiveness evaluation in non-profit organizations. London: Routledge.
- Day, D. V., & Lance, C. E. (2001). Understanding the development of leadership complexity through latent growth modeling. White paper prepared for the U.S. Army Research Institute's Consortium Research Fellows Program (Work Package No. DEVCOM 1141).
- Daft, R. L. (1998). Organization theory and design. Cincinnati, OH: South-Western.

- Dewan, N. A., Daniels, A., Ziemann, G., & Kramer, T. (2000). The national outcomes management project: A benchmarking collaborative. The Journal of Behavioral Health Services & Research, 27, 431-436.
- Dobbs, M. F. (1994). Continuous improvement as continuous implementation: Implementing TQM in the city of Santa Ana. Public Productivity & Management Review, 18, 89-100.
- Donahue, J. D. (1989). The privatization decision. New York: Basic Books.
- Downie, J., & Pastoria, G. (1997, June). Measuring change at Conair-Franklin. Management Accounting, 78 (12), 30-35.
- Duncan, T. E., & Duncan, S. C. (1995). Modeling the processes of development via latent variable growth curve methodology. Structural Equation Modeling, 2, 187-213.
- Farrell, D., & Stamm, C. L. (1988). Meta-analysis of the correlates of employee absence. Human Relations, 41, 211-227.
- Feldman, D. C., & Arnold, H. J. (1983). Managing individual and group behavior in organizations. Singapore: McGraw-Hill.
- Fine, A. H., Thayer, C. E., & Coghlan, A. T. (2000). Program evaluation practice in the nonprofit sector. Nonprofit Management & Leadership, 10, 331-339.
- French, W. L., & Bell, Jr., C. H. (1995). Organization development: Behavioral science interventions for organization improvement. Englewood Cliffs, NJ: Prentice Hall.
- Frumkin, P., & Kim, M. T. (2001). Strategic positioning and the financing of nonprofit organizations: Is efficiency rewarded in the contributions marketplace? Public Administration Review, 61, 266-275.
- Gaynor, M. (1990). Incentive contracting in mental health: State and local relations. Administration and Policy in Mental Health, 18, 33-42.
- Georgia Department of Human Resources. (2002, July 10). Special review of Advantage Behavioral Health Systems. Atlanta, GA: Author.
- Gilmour, R. S., & Jensen, L. S. (1998). Reinventing government accountability: Public functions, privatization, and the meaning of "state action." Public Administration Review, 58, 247-258.
- Golembiewski, R. T. (1962). Organization as a moral problem. Public Administration Review, 22, 51-58.

- Golembiewski, R. T. (1969). Organization development in public agencies: Perspectives on theory and practice. Public Administration Review, 29, 367-378.
- Golembiewski, R. T. (1985). Humanizing public organizations: Perspectives on doing-better-than-average ain't at all. Mt. Airy, MD: Lomond.
- Golembiewski, R. T. (1989). Organization development: Issues and ideas. New Brunswick, NJ: Transaction.
- Golembiewski, R. T. (1990). Ironies in organizational development. New Brunswick, NJ: Transaction.
- Golembiewski, R. T. (1994). MARTA in the 1990s: The challenge continues. Public Administration Quarterly, 18, 151-175.
- Golembiewski, R. T. (1995). Managing diversity in organizations. Tuscaloosa, AL: The University of Alabama.
- Golembiewski, R. T. (1996). Facilitating organizational development and change. In J. Perry (Ed.), Handbook of Public Administration (pp. 511-526). San Francisco: Jossey-Bass.
- Golembiewski, R. T. (2002). Cacophonies in the contemporary chorus about change at public worksites, as contrasted with some straight-talk from a planned change perspective. International Journal of Public Administration, 25, 111-137.
- Golembiewski, R. T., Billingsley, K., & Yeager, S. (1976a). Measuring change and persistence in human affairs. Journal of Applied Behavioral Science, 12, 133-157.
- Golembiewski, R. T., Billingsley, K., & Yeager, S. (1976b). The congruence of factor-analytic structures: Comparisons of four procedures and their solutions. Academy of Management Review, 1, 27-35.
- Golembiewski, R. T., & Billingsley, K. (1980). Measuring change in OD panel designs: A response to my critics. Academy of Management Review, 5, 97-103.
- Golembiewski, R. T., Hilles, R., & Kagno, M. S. (1974). A longitudinal study of flexi-time effects: Some consequences of an OD structural intervention. The Journal of Applied Behavioral Science, 10, 503-532.
- Golembiewski, R. T., & Kiepper, A. (1976). MARTA: Toward an effective open giant. Public Administration Review, 36, 46-60.
- Golembiewski, R. T., & Munzenrider, R. F. (1988). Phases of burnout: Developments in concepts and applications. New York: Praeger.

- Golembiewski, R. T., & Proehl, C. W., Sink, D. (1981). Success of OD applications in the public sector: Toting up the score for a decade, more or less. Public Administration Review, 41, 679-682.
- Golembiewski, R. T., & Proehl, C. W., Sink, D. (1982). Estimating the success of OD applications. Training and Development Journal, 36, 86-95.
- Golembiewski, R. T., & Rountree, B. H. (1998). System redesign in nursing: Preexperimental action planning in a medical-surgical ward. In M. A. Rahim, R. T. Golembiewski, & K. D. Mackenzie (Eds.), Current Topics in Management (Vol 3, pp. 237-252). Greenwich, CT: JAI.
- Golembiewski, R. T. & Rountree, B. H. (1999). System redesign in nursing II: Impacts of interventions on worksite, stakeholders, and costs. In M. A. Rahim, R. T. Golembiewski, & K. D. Mackenzie (Eds.), Current Topics in Management (Vol 4, pp. 197-211). Greenwich, CT: JAI.
- Golembiewski, R. T., & Stevenson, J. G. (1998). Cases and applications in nonprofit management. Itasca, IL; F.E. Peacock.
- Golembiewski, R. T., & Sun, B. C. (1990). Positive-findings bias in QWL studies: Rigor and outcomes in a large sample. Journal of Management, 16, 665-674.
- Goodsell, C. T. (1994). The case for bureaucracy: A public administration polemic. Chatham, NJ: Chatham House.
- Greve, C. (2001). New avenues for contracting out and implications for a theoretical framework. Public Productivity & Management Review, 24, 270-284.
- Hackett, R. D., & Guion, R. M. (1985). A reevaluation of the absenteeism-job satisfaction relationship. Organizational Behavior and Human Decision Processes, 35, 340-381.
- Hackman, J. R., & Oldham, G. R. (1980). Work redesign. Reading, MA: Addison-Wesley.
- Hackman, J. R., & Wageman, R. (1995). TQM: Empirical, conceptual, and practical issues. Administrative Science Quarterly, 40, 309-342.
- Haque, M. S. (2001). Are diminishing publicness of public service under the current mode of governance. Public Administration Review, 61, 65-82.
- Hays, S. W., & Kearney, R. C. (2001). Anticipated changes in human resource management: Views from the field. Public Administration Review, 61, 585- 597.

- Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. Journal of Management, 21, 967-988.
- Hoefler, R. (2000). Accountability in action?: Program evaluation in nonprofit human service agencies. Nonprofit Management & Leadership, 11, 167-177.
- Hom, P. W., Caranikas-Walker, F., Prussia, G. E., & Griffeth, R. (1992). A meta-analytical structural equations analysis of a model of employee turnover. Journal of Applied Psychology, 77, 890-909.
- Hom, P. W., & Griffeth, R. (1991). Structural equations modeling test of a turnover theory: Cross-sectional and longitudinal analyses. Journal of Applied Psychology, 76, 350-366.
- Howard, G. S., & Dailey, P. R. (1979). Response-shift bias: A source of contamination of self-report measures. Journal of Applied Psychology, 64, 144-150.
- Howard, G. S., Ralph, K. M., Gulanick, N. A., Maxwell, S. E., Nance, D. W., & Gerber, S. K. (1979). Internal invalidity in pretest-posttest self-report evaluations and a re-evaluation of retrospective pretests. Applied Psychological Measurement, 3 (1), 1-23.
- Huse E., & Beer, M. (1971). Eclectic approach to organization development. Harvard Business Review, 49 (5), 103-112.
- Iaffaldano, M. T., & Muchinsky, P. M. (1985). Job satisfaction and job performance. A meta-analysis. Psychological Bulletin, 97, 251-273.
- Ingraham, P. W., Thompson, J. R., & Sanders, R. P. (1998). Transforming government: Lessons from the reinvention laboratories. San Francisco: Jossey-Bass.
- International Personnel Management Association. (2002, April). Sick leave abuse: A chronic workplace ill? PA Times, 25 (4), p. 1 & 9.
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. Administrative Science Quarterly, 24, 602-611.
- Jöreskog, K. G., & Sörbom, D. (1996). Lisrel-8 user's guide. Chicago: Scientific software.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. Psychological Bulletin, 127, 376-407.
- Kamensky, J. M. (1998). The best-kept secret in government: How the NPR translated theory into practice. In, P. W. Ingraham, J. R. Thomas, & R. P. Sanders (Eds.),

Transforming government: Lessons from the reinvention laboratories. San Francisco: Jossey-Bass.

Katzell, R. A., Thompson, D. E., & Guzzo, R. A. (1992). How job satisfaction and job performance are and are not linked. In C. J. Cranny, P. C. Smith, & E. F. Stone (Eds.), Job satisfaction: How people feel about their jobs and how it affects their performance. New York: Lexington Books.

Kearns, K. P. (1996). Managing for accountability: Preserving the public trust in public and nonprofit organizations. San Francisco: Jossey-Bass.

Kearney, R. C., & Berman, E. M. (1999). Public sector performance: Management, motivation, and measurement. Boulder, CO: Westview.

Kettl, D. F. (1988). Performance and accountability: The challenge of government by proxy for public administration. American Review of Public Administration, 18, 9-28.

Kettl, D. F. (1993). Sharing power. Washington, D. C.: Brookings.

Kettl, D. F. (1994). Reinventing government?: Appraising the National Performance Review (CPM Rep. No. 94-2). Washington, D. C.: Brookings.

Kettl, D. F. (1998). Reinventing government: A fifth-year report card. (CPM Rep. No. 98-1). Washington, D. C.: Brookings.

Kettl, D. F., & DiIulio, Jr., J. J. (1995). Inside the reinvention machine: Appraising governmental reform. Washington, D. C.: Brookings.

Kimberly, J. R., & Nielsen, W. R. (1975). Organization development and change in organizational performance. Administrative Science Quarterly, 20, 191- 206.

Koppell, J. G. S. (2001). Hybrid organizations and the alignment of interests: The case of Fannie Mae and Freddie Mac. Public Administration Review, 61, 468-481.

Kossoris, M. D. (March, 1948). Illness absenteeism in manufacturing plant in 1947. Monthly Labor Review, 66, 265-267.

Lance, C. E., Meade, A. W., & Williamson, G. M. (2000). We should measure change – And here's how. In G. M. Williamson & D. R. Shaffer (Eds.), Physical illness and depression in older adults: Theory, research, and practice, (pp. 201-235). New York: Plenum.

Lance, C. E., Vandenberg, R. J., & Self, R. M. (2000). Latent growth models of individual change: The case of newcomer adjustment. Organizational Behavior and Human Decision Processes, 83, 107-140.

- Langbein, L. I. (1980). Discovering whether programs work: A guide to statistical methods for program evaluation. Santa Monica, CA: Goodyear.
- Lawler III, E. E., Nadler, D. A., & Mirvis, P. H. (1983). Organizational change and the conduct of assessment research. In S. E. Seashore, E. E. Lawler III, P. H. Mirvis, & C. Cammann (Eds.), Assessing organizational change (pp. 19-47). New York: John Wiley & Sons.
- Light, P. C. (1998, March). Change should be a natural process. Government Executive, 30 (3), p. 46.
- Linn, R. L., & Slinde, J. A. (1977). The determination of the significance of change between pre- and posttesting periods. Review of Educational Research, 47, 121-150.
- Lippitt, G. L., Langseth, P., & Mossop, J. (1985). Implementing organizational change: A practical guide to managing change effects. San Francisco: Jossey-Bass.
- Lovelady, L. (1980). Evaluation of planned organizational change: Issues of knowledge, context and politics. Personnel Review, 9, 5-14.
- Lovrich, JR., N. P. (1995). Performance appraisal: Seeking accountability and efficiency through individual effort, commitment, and accomplishment (3rd ed). In S. W. Hays & R. C. Kearney (1995). Public Personnel Administration (pp. 105-120). Englewood Cliffs, NJ: Prentice Hall.
- Luthans, B. C. (1996). A longitudinal study of the impact of TQM and downsizing on a health care organization. Unpublished doctoral dissertation, University Nebraska, Lincoln.
- Macy, B. A., & Mirvis, P. H. (1976). A methodology for assessment of quality of work life and organizational effectiveness in behavioral-economic terms. Administrative Science Quarterly, 21, 212-226.
- Macy, B. A., & Mirvis, P. H. (1983). Assessing rates and costs of individual work behaviors. In S. E. Seashore, E. E. Lawler III, P. H. Mirvis, & C. Cammann (Eds.), Assessing organizational change (pp. 139-176). New York: John Wiley & Sons.
- Macy, B. A., & Peterson, M. F. (1983). Evaluating attitudinal change in a longitudinal quality of work life intervention. In S. E. Seashore, E. E. Lawler III, P. H. Mirvis, & C. Cammann (Eds.), Assessing organizational change (pp. 453-476). New York: John Wiley & Sons.

- Margie Youngblood, Gdn. v. Gwinnett Rockdale Newton Community Service Board et al. No. S00A1784 (Ga. Filed April 12, 2001).
- Marrow, A. J., Bowers, D. G., & Seashore, S. E. (1967). Management by participation: Creating a climate for personal and organizational development. New York: Harper & Row.
- Martin, L. L. (2002). Performance-based contracting for human services: Does it work? Paper presented at the 2002 Annual Conference of the American Society for Public Administration, Phoenix, AZ, March 23-26, 2002.
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. Psychological Bulletin, 108, 171-194.
- Mays, N., & Pope, C. (2000). Assessing quality in qualitative research. British Medical Journal, 320, 50-52.
- McArdle, J. J. (1988). Dynamic but structural equation modeling of repeated measures data. In J. R. Nesselroade & R. B. Cattell (Eds.), Handbook of multivariate experimental psychology (2nd ed., pp. 561-614). New York: Plenum
- McEvoy, G. M., & Cascio, W. F. (1987). Do good or poor performers leave?: A meta-analysis of the relationship between performance and turnover. Academy of Management Journal, 30, 744-762.
- Meier, K. J. (1993). Politics and the bureaucracy: Policymaking in the fourth branch of government. Belmont, CA: Wadsworth.
- Meredith, W., & Tisak, J. (1990). Latent curve analysis. Psychometrika, 55, 107-122.
- Millsap, R. E., & Hartog, S. B. (1988). Alpha, beta, and gamma change in evaluation research: A structural equation approach. Journal of Applied Psychology, 73, 574-584.
- Milward, H. B., Provan, K. G., & Else, B. A. (1993). What does the 'hollow state' look like? In B. Bozeman (Ed.), Public management: State of the art. San Francisco: Jossey-Bass.
- Mintzberg, H. (1979). An emerging strategy of 'direct' research. Administrative Science Quarterly, 24, 582-589.
- Mobley, W. H. (1977). Intermediate linkage in the relationship between job satisfaction and employee turnover. Journal of Applied Psychology, 62, 237-240.

- Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. Journal of Applied Psychology, *63*, 408-404.
- Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. Psychological Bulletin, *86*, 493-522.
- Moe, R. C. (1987). Exploring the limits of privatization. Public Administration Review, *47*, 453-460.
- Moe, R. C. (2001). The emerging federal quasi government: Issues of management and accountability. Public Administration Review, *61*, 290-309.
- Mohr, L. B. (1995). Impact analysis for program evaluation. Thousand Oaks, CA: Sage.
- Morse, R., & Pandey, S. M. (2000). Using qualitative analysis to evaluate organizational restructuring: Results from an implementation evaluation as a VA hospital. Paper presented at the SECOPA 2000 Conference, Greensboro, North Carolina.
- Mosher, F. C. (1980). The changing responsibilities and tactics of the federal government. Public Administration Review, *40*, 541- 548.
- Motwani, J., Klein, D., & Navitskas, S. (1999). Striving toward continuous quality improvement: A case study of Saint Mary's hospital. Health Care Manager, *18* (2), 33-40.
- Moxley, D. P., & Manela, R. W. (2000). Agency-based evaluation and organizational change in the human services. The Journal of Contemporary Human Services, *81*, 316-327.
- Muchinsky, P. M., & Morrow, P. C. (1980). A multidisciplinary model of voluntary employee turnover. Journal of Vocational Behavior, *17*, 263-290.
- Murphy, L. R., & Sorenson, S. (1988). Employee behaviors before and after stress management. Journal of Organizational Behavior, *9*, 173-182.
- Nguyen, T. D., Attkisson, C. C., & Stegner, B. L. (1983). Assessment of patient satisfaction: Development and refinement of a service evaluation questionnaire. Evaluation and Program Planning, *6*, 299-314.
- Nicholas, J. M. (1979). Evaluation research in organizational change interventions: Considerations and some suggestions. The Journal of Applied Behavioral Science, *15*, 23- 40.

- Nicholas, J. M., & Katz, M. (1985). Research methods and reporting practices in organization development: A review and some guidelines. Academy of Management Review, 10, 737-749.
- Northeast Georgia Regional Board (2000, May). FY2001 performance contracts. Commerce, GA: Author.
- Osborne, D., & Gaebler, T. (1992). Reinventing government: How the entrepreneurial spirit is transforming the public sector. Reading, MA: A William Patrick Book.
- Ostroff, C. (1992). The relationship between satisfaction, attitudes, and performance: An organizational level analysis. Journal of Applied Psychology, 77, 963-974.
- O'Sullivan, E., & Rassel, G. R. (1995). Research methods for public administrators. White Plains, NY: Longman.
- Overall, J. E., & Woodward, J. A. (1975). Unreliability of difference scores: A paradox for measurement of change. Psychological Bulletin, 82, 85-86.
- Paul, C. F., & Gross, A. C. (1981). Increasing productivity and morale in a municipality: Effects of organization development. The Journal of Applied Behavioral Science, 17, 59-78.
- Pettijohn, C. E., Pettijohn, L. S., & Tayler, A. J. (2000). Research Note: An exploratory analysis of salesperson perceptions of the criteria used in performance appraisals, job satisfaction, and organizational commitment. The Journal of Personal Selling & Sales Management, 20, 77-80.
- Petty, M. M., McGee, G. W., & Cavender, J. W. (1984). A meta-analysis of the relationships between individual job satisfaction and individual performance. Academy of Management Review, 9, 712-721.
- Poister, T. H. (1989). Public agency revitalization: How and when does organization development fit in? Public Administration Quarterly, 13, 66-90.
- Pope, C., Ziebland, S., & Mays, N. (2000, January 8). Analyzing qualitative data. British Medical Journal, 320, 114-116.
- Porras, J. I., & Berg, P. O. (1978). Evaluation methodology in organization development: An analysis and critique. The Journal of Applied Behavioral Science, 14, 151-173.
- Porter, L. W., & Steers, R. M. (1973). Organizational, work, and personal factors in employee turnover and absenteeism. Psychological Bulletin, 80, 151-176.

- Price, J. L., & Mueller, C. W. (1986). Handbook of organizational measurement. Marshfield, MA: Pitman.
- Rainey, H. G. (1997). Understanding & managing public organizations. San Francisco: Jossey-Bass.
- Rago, W. V. (1994) Adapting total quality management (TQM) to government: Another point of view. Public Administration Review, 54, 61-64.
- Randolph, W. A. (1982). Planned organizational change and its measurement. Personnel Psychology, 35, 117-139.
- Reichers, A. E. (1985). A review and reconceptualization of organizational commitment. Academy of Management, 10, 465-476.
- Richards, Jr., J. M. (1975). A simulation study of the use of change measures to compare educational programs. American Educational Research Journal, 12, 299-311.
- Robertson, P. J., Roberts, D. R., & Porras, J. I. (1993). An evaluation of a model of planned organizational change: Evidence from a meta-analysis. In R. W. Woodman and W. A. Pasmore (Eds.), Research in organizational change and development (Vol 7, pp. 1-39). Greenwich, CT: JAI.
- Rohs, F. R., Langone, C. A., & Coleman, R. K. (2001). Response shift bias: A problem in evaluating nutrition training using self-report measures. Journal of Nutrition Education, 33, 165-170.
- Romzek, B. S. (1990). Employee investment and commitment: The ties that bind. Public Administration Review, 50, 374-382.
- Romzek, B. S., & Hendricks, J. S. (1982). Organizational involvement and representative bureaucracy: Can we have it both ways? The American Political Science Review, 76, 75-82.
- Royse, D., Thyer, B. A., Padgett, D. K., & Logan, T. K. (2001). Program evaluation: An introduction. Belmont, CA: Books/Cole Thomson Learning.
- Salamon, L. M. (1990). Nonprofit organizations: The lost opportunity. In D. L. Gies, J. S., Ott, & J. M. Shafritz (Eds.), The nonprofit organization: Essential readings (pp. 108-126). Pacific Grove, CA: Brooks/Cole.
- Salancik, G. R. (1995). Organizational socialization and commitment. In B. M. Shaw (Ed.), Psychological dimensions of organizational behavior (pp. 284-290). Upper Saddle River, NJ: Prentice Hall.

- Sanders, L. M., Trinh, C., Sherman, B. R., & Banks, S. M. (1998). Assessment of client satisfaction in a peer counseling substance abuse treatment program for pregnant and postpartum women. Evaluation and Programming Planning, 21, 287-296.
- Savas, E. S. (1987). Privatization: The key to better government. Chatham, N. J.: Chatham House.
- Sawhill, J. C., & Williamson, D. (2001). Mission impossible?: Measuring success in nonprofit organizations. Nonprofit Management & Leadership, 11, 371-386.
- Schaie, K. W., & Hertzog, C. (1985). Measurement in the psychology of adulthood and aging. In J. E. Birren & K. W. Schaie (Eds.), Handbook of the psychology of aging (2nd ed.) (pp. 61-92). New York: Von Nostrand Reinhold.
- Schmitt, N. (1982). The use of analysis of covariance structures to assess beta and gamma change. Multivariate Behavioral Research, 17, 343-358.
- Schmitt, N., Pulakos, E. D., & Lieblein, A. (1984). Comparison of three techniques to assess group-level beta and gamma change. Applied Psychological Measurement, 8, 249-260.
- Scott, K. D., & Taylor, G. S. (1985). An examination of conflicting findings on the relationship between job satisfaction and absenteeism: A meta-analysis. Academy of Management Journal, 28, 599-612.
- Seashore, S. E. (1983). Issues in assessing organizational change. In S. E. Seashore, E. E. Lawler III, P. H. Mirvis, & C. Cammann (Eds.), Assessing organizational change (pp. 19-47). New York: John Wiley & Sons.
- Seashore, S. E. (1987). Surveys in organizations. In J. W. Lorsch (Ed.), Handbook of organizational behavior (pp. 140-154). Englewood Cliffs, NJ: Prentice-Hall.
- Seidman, H. (1988). The quasi world of the federal government. The Brookings Review 2 (2), 23-27.
- Seidman, H., & Gilmour, R. (1986). Politics, position, and power. New York: Little Brown.
- Shaw, J. D., Delery, J. E., Jenkins, Jr., G. D., & Gupta, N. (1998). An organization-level analysis of voluntary and involuntary turnover. Academy of Management Journal, 41, 511-525.
- Shearer, L. (2002, June 12). Health agency makes the grade after problems. Athens Banner-Herald [On-line]. Available: www.onlineathens.com/stories/061302/new_20020613031.shtml.

- Shield, J. P. (1999). Evaluating the effects of Georgia House Bill 100 on psychiatric hospitalization: A time series analysis. Unpublished doctoral dissertation, The University of Georgia.
- Shore, L. M., & Martin, H. J. (1989). Job satisfaction and organizational commitment in relation to work performance and turnover intentions. Human Relations, 42, 625-638.
- Smith, S. R., & Lipsky, M. (1993). Nonprofits for hire: The welfare state in the age of contracting. Cambridge, MA: Harvard University.
- Sonnichsen, R. C. (1989). Producing evaluations that make an impact. In J. S. Wholey, K. E. Newcomer, & Associates (Eds.), Improving government performance (pp. 49-66). San Francisco: Jossey-Bass.
- Sprangers, M., & Hoogstraten, J. (1989). Pretesting effects in retrospective pretest-posttest designs. Journal of Applied Psychology, 74, 265-272.
- State Commission on Mental Health, Mental Retardation, and Substance Abuse Service Delivery. (1992). Call for change: Empowering consumers, families, and communities. Atlanta, GA: Georgia State Assembly.
- State Commission on Mental Health, Mental Retardation, and Substance Abuse Service Delivery. (1996). Call for resolve: Fulfilling our promise to consumers, families, and communities. Atlanta, GA: Georgia State Assembly.
- Steenkamp, J. E. M., & Baumgartner, H. (1998). Assessing measurement invariance in cross national consumer research. Journal of Consumer Research, 25, 78-90.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.). Thousand Oaks, CA: Sage.
- Taris, T. W., Bok, I. A., & Meijer, Z. Y. (1998). Assessing stability and change of psychometric properties of multi-item concepts across different situations: A general approach. The Journal of Psychology, 132, 301-316.
- Taylor, J. C., & Bowers, D. G. (1972). Survey of organizations. Ann Arbor, MI: Institute for Social Research, the University of Michigan.
- Technical Assistance Collaborative (1998, September). Management review and recommendations to the Advantage Behavioral Health Systems Community Service Board.
- Technical Assistance Collaborative (1999, February). Management review follow-up of site visit report to the Advantage Behavioral Health Systems Community Service Board.

- Terborg, J. R., & Davis, G. A. (1982). Evaluation of a new method for assessing change in planned job redesign as applied to Hackman and Oldham's job characteristics model. Organizational Behavior and Human Performance, 29, 112-128.
- Terborg, J. R., Howard, G. S., & Maxwell, S. E. (1980). Evaluating planned organizational change: A method for assessing alpha, beta, gamma change. Academy of Management Review, 5, 109-121.
- Terpstra, D. E. (1981). Relationship between methodological rigor and reported outcomes in organization development evaluation research. Journal of Applied Psychology, 66, 541-543.
- Terpstra, D. E. (1982). Evaluating selected organization development interventions: The state of the art. Group & Organization Studies, 7, 402-417.
- Testa, M. R. (2001). Organizational commitment, job satisfaction, and effort in the service environment. The Journal of Psychology, 135, 226-236.
- Tziner, A. E., & Vardi, Y. (1984). Work satisfaction and absenteeism among social workers: The role of altruistic values. Work and Occupations, 11, 461-470.
- United Way on way back charity sheds scandal's effects. (1997, November 12). Denver Post, p. B1:5.
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. Organizational Research Methods, 3, 4-69.
- Vandenberg, R. J., & Self, R. M. (1993). Assessing newcomers' changing commitments to the organization during the first 6 months of work. Journal of Applied Psychology, 78, 557-568.
- Weinstein, M. (2000). FY2001 quality plan. Advantage Behavioral Health Systems, Athens, GA.
- Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). Manual for the Minnesota Satisfaction Questionnaire. University of Minnesota: Industrial Relations Center Work Adjustment Project.
- Wholey, J. S. (1989). How evaluation can improve agency and program performance. In J. S. Wholey, K. E. Newcomer, & Associates (Eds.), Improving government performance (pp. 1-11). San Francisco: Jossey-Bass.

- Willett, J. B., & Sayer, A. G. (1994). Using covariance structure analysis to detect correlates and predictors of individual change over time. Psychological Bulletin, 116, 363-381.
- Williams, L. J., & Hazer, J. T. (1986). Antecedents and consequences of satisfaction and commitment in turnover models: A reanalysis using latent variable structural equation methods. Journal of Applied Psychology, 71, 219-231.
- Wilson, J. Q. (1989). Bureaucracy: What government agencies do and why they do it. New York: Basic Books.
- Wolf, J. (1990). Managing change in nonprofit organizations. In D. L. Gies, J. S., Ott, & J. M. Shafritz (Eds.), The nonprofit organization: Essential readings (pp. 241-257). Pacific Grove, CA: Brooks/Cole.
- Woodman, R. W. (1989). Evaluation research on organizational change: Arguments for a 'combined paradigm' approach. In R. W. Woodman and W. A. Pasmore (Eds.), Research in organizational change and development (Vol 3, pp. 161-180). Greenwich, CT: JAI.
- Yin, R. K. (1994). Case study research: Design and methods (2nd ed.). Thousand Oaks, CA: Sage.
- Zand, D. E., Steele, F. I., & Zalkind, S. S. (1969). The impact of an organizational development program on perceptions of interpersonal, group, and organization functioning. The Journal of Applied Behavioral Science, 5, 393-410.
- Zmud, R. W., & Armenakis, A. A. (1978). Understanding the measurement of change. Academy of Management Review, 3, 661-669.

**APPENDIX I. THE CHRONICLES OF MAJOR ORGANIZATIONAL CHANGES
AT THE CENTER**

Dates	Major organizational changes
Feb., 1998	The Elbert county incident began to receive attention from several legal authorities, including Georgia Bureau of Investigation.
Apr., 1998	The executive director resigned and acting director took office. New director of quality improvement was appointed.
May, 1998	Several program directors were terminated, including the directors of mental retardation, quality improvement, and alcohol & drug.
July –Sep., 1998	Policies and procedures were completely revised and rewritten - established an employee code of ethics, and consumer complaint report system, variance report, quality grievance, and incident report system, etc. Revised and rewritten each program’s performance goals based on contractual obligations with the regional board. Developed efficiency and effectiveness measures for each individual program.
Aug., 1998	Management consultation: The Technical Assistance Collaboration (TAC), a Boston-based private consulting firm, performed a 2.5 days on-site management review.
Oct., 1998	Established Program Quality Teams (PQTs) in every work unit. Established and maintained organizational chart. Established and maintained continuous evaluation for organizational outcomes using standardized measurement instruments.
Oct. – Dec., 1998	Conducted four-hour training sessions for new policies and procedures.
Nov., 1998	The new executive director was appointed.
Dec., 1998-present	Instituted mandatory 3-days training for all new employees.

Jan. – Dec., 1998	<p>Tested and developed environment to install the UNICARE system (a client information system to manage clients' demographic and billing information).</p> <p>Identified and designed the Local Area Network (LAN) system and established the Wide Area Network (WAN) system by connecting LANs. Most staff members have received basic computer software training and email operations.</p>
Feb., 1999	<p>Conducted follow-up 2-days TAC management review with the purpose of assessing progress made since the first management review.</p>
Mar., 1999	<p>Separated administrative functions from clinical services. The Department of Management Information System, the Department of Human Resources, and the Business Office came under the Director of Administrative Services. All clinical functions came under the Director of Clinical Services. Established the Department of Continuous Quality Improvement (CQI).</p>
Apr., 1999	<p>The new top management team was formed. Three major directors were hired from outside the agency, including the directors of Clinical Services, CQI, and Administration.</p>
July, 1999	<p>Established an intake team for triage in each clinic in order to launch a fully integrated interdisciplinary approach for developing individual service plan.</p>
Sep., 1999	<p>Reorganized Emergency Services – reduce response time for emergency assessments and provide a consistent emergency response—24 hours 7 days—by shifting staff.</p> <p>Created the CQI department home page through which internal communication channels were established to exchange information and, especially changes in policies and procedures.</p> <p>Developed data gathering system to manage several outcome data.</p>
Nov., 1999	<p>Reorganized Clinical Services into four divisions: Administration, Outpatient, Rehabilitation, and Residential in order to provide integrated clinical services to dually-diagnosed consumers.</p>
Dec., 1999	<p>Combined four different programs – mental health (MH), severely emotionally disturbed (SED)/alcohol & drug (A&D), mental retardation (MR) service center, residential services - in Elbert county for service integration.</p>

Jan., 2000	Reorganized residential services – combined MH and MR programs in residential service. Established employee recognition program. Established employee educational (tuition) reimbursement program
------------	---

APPENDIX II. EMPLOYEE ATTITUDE SURVEY

EMPLOYEE ATTITUDE SURVEY

This survey inquires about your reaction to your work within the Advantage Behavioral Health Systems. Before you begin, please **SIGN** the two voluntary consent forms.

Save one consent form for yourself and return the other and the completed surveys in the enclosed postage-paid envelope to:

Seok-Eun Kim
The University of Georgia
P.O. BOX 2957
Athens, GA 30612-0957

If you have any questions about individual survey items or others, please feel free to contact Seok-Eun Kim either by phone at 542-9735/9482 or by email at seokeun@hotmail.com.

Thank you for your time and attention.

Consent Form

I agree to take part in the research program “Quasi-government accountability: An evaluation of organizational change in a community mental health center in Georgia.”

1. I understand that participation in this research is strictly voluntary, and that I can decline to participate if I feel uncomfortable answering the questions.
2. I understand that I will not benefit directly from this research. However, participation in this research may provide useful information for my work environment in the Advantage Behavioral Health Systems (ABHS).
3. The procedure is quite simple:
 - Questionnaires will be distributed at work and returned directly to Seok-Eun Kim when completed at my convenience.
 - The questions should take about 10-15 minute to complete.
4. I understand that the Principal Investigator will collect my survey responses as well as archival data such as absenteeism and performance appraisal. However, I also understand that **any information that is obtained in connection with this study will remain confidential and that study result will be disclosed only for the whole organization. Individual responses will NOT be shared with ABHS.**
5. I understand that survey responses will be used to complete dissertation requirements of the Principal Investigator.
6. The investigator will answer any further questions, now or during the course of the research. Please feel free to contact Seok-Eun Kim either by phone at (706) 542-9735, or by email at seokeun@hotmail.com.

I understand that the procedures described above. The questions have been answered voluntarily for this research.

Signature of
Investigator

Date

Signature of
Participant

Date

For questions or problems about your rights please call or write: Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-6514; E-Mail Address IRB@uga.edu.

Section A. The following statements ask for your feelings about your present job. Please read EACH statement carefully and **CHECK the BOX** that best represents your feelings about your work in ABHS, **AS OF TODAY.**

On my present job, this is how I feel about:

	Very Dissatisfied	Dissatisfied	Not Sure	Satisfied	Very Satisfied
1. Being able to keep busy all the time	<input type="checkbox"/>				
2. The chance to work alone on the job	<input type="checkbox"/>				
3. The chance to do different things from time to time	<input type="checkbox"/>				
4. The chance to be “somebody” in the community	<input type="checkbox"/>				
5. The way my boss handles his/her staff	<input type="checkbox"/>				
6. The competence of my supervisor in making decisions	<input type="checkbox"/>				
7. Being able to do things that don’t go against my conscience	<input type="checkbox"/>				
8. The way my job provides for steady employment	<input type="checkbox"/>				
9. The chance to do things for other people	<input type="checkbox"/>				
10. The chance to tell people what to do	<input type="checkbox"/>				
11. The chance to do something that makes use of my abilities	<input type="checkbox"/>				
12. The way the Center policies are put into practice	<input type="checkbox"/>				
13. My pay and the amount of work I do	<input type="checkbox"/>				
14. The chances for advancement on this job	<input type="checkbox"/>				
15. The freedom to use my own judgment	<input type="checkbox"/>				
16. The chance to try my own methods of doing the job	<input type="checkbox"/>				
17. The working conditions	<input type="checkbox"/>				
18. The way my co-workers get along with each other	<input type="checkbox"/>				
19. The praise I get for doing a good job	<input type="checkbox"/>				
20. The feeling of accomplishment I get from the job	<input type="checkbox"/>				

Section B. The following statements look at what it means to be an employee of ABHS. Please **CHECK the NUMBER** on this scale how much you agree or disagree with each statement, **AS OF TODAY**.

- 1 = No, I strongly disagree
- 2 = No, I disagree quite a lot
- 3 = No, disagree just a little
- 4 = I'm not sure
- 5 = Yes, I agree just a little
- 6 = Yes, I agree quite a lot
- 7 = Yes, I strongly agree

	Strongly Disagree	←	→	Strongly Agree				
1. I am quite proud to be able to tell people who it is I work for.	1	2	3	4	5	6	7	
2. I sometimes feel like leaving this employment for good.	1	2	3	4	5	6	7	
3. I'm not willing to put myself out just to help the organization.	1	2	3	4	5	6	7	
4. Even if the firm were not doing well financially, I would be reluctant to change to another employer.	1	2	3	4	5	6	7	
5. I feel myself to be part of the organization.	1	2	3	4	5	6	7	
6. In my work I like to feel I am making some effort, not just for myself, but for the organization as well.	1	2	3	4	5	6	7	
7. The offer of a bit more money with another employer would not seriously make me think of changing my job.	1	2	3	4	5	6	7	
8. I would not recommend a close friend to join our staff.	1	2	3	4	5	6	7	
9. To know that my own work had made a contribution to the good of the organization would please me.	1	2	3	4	5	6	7	

Section C. Demographic Information

1. Gender? Male _____ Female _____

2. Ethnicity? White/Caucasian _____ African-American _____
Hispanic/Latino _____ Asian _____ Other _____

3. Age? Under 20 _____ 20-29 _____ 30-39 _____
40-49 _____ 50-59 _____ 60 or over _____

4. Your work division?

Outpatient Clinics/SED/C&A _____

Residential/Supported Employment _____

Emergency Services/Assessment & Referral _____

Case Management/Day Programs/ACT/Special Needs/MRSC _____

Administration/Other _____

5. Your employee ID number? (For identification purpose only) _____

6. Approximate start date of employment? (e.g., April, 1998) _____

If you were employed prior to July 1998, please **proceed** with the following questions. You will be asked to complete **the same surveys** you just filled out, however, **please THINK BACK to THEN, BEFORE JULY 1998**. We are attempting to gain a sense of how our organization **WAS** prior to July 1998.

Please THINK BACK to THEN, BEFORE JULY 1998. IMAGINE as if you are working at the ABHS those days. With that in mind, please answer the following questions.

Section D. The following statements ask for your feelings about your present job. Please read EACH statement carefully and **CHECK the BOX** that best represents your feelings about your work in ABHS.

On my present job, this is how I feel about:

	Very Dissatisfied	Dissatisfied	Not Sure	Satisfied	Very Satisfied
1. Being able to keep busy all the time	<input type="checkbox"/>				
2. The chance to work alone on the job	<input type="checkbox"/>				
3. The chance to do different things from time to time	<input type="checkbox"/>				
4. The chance to be "somebody" in the community	<input type="checkbox"/>				
5. The way my boss handles his/her staff	<input type="checkbox"/>				
6. The competence of my supervisor in making decisions	<input type="checkbox"/>				
7. Being able to do things that don't go against my conscience	<input type="checkbox"/>				
8. The way my job provides for steady employment	<input type="checkbox"/>				
9. The chance to do things for other people	<input type="checkbox"/>				
10. The chance to tell people what to do	<input type="checkbox"/>				
11. The chance to do something that makes use of my abilities	<input type="checkbox"/>				
12. The way the Center policies are put into practice	<input type="checkbox"/>				
13. My pay and the amount of work I do	<input type="checkbox"/>				
14. The chances for advancement on this job	<input type="checkbox"/>				
15. The freedom to use my own judgment	<input type="checkbox"/>				
16. The chance to try my own methods of doing the job	<input type="checkbox"/>				
17. The working conditions	<input type="checkbox"/>				
18. The way my co-workers get along with each other	<input type="checkbox"/>				
19. The praise I get for doing a good job	<input type="checkbox"/>				
20. The feeling of accomplishment I get from the job	<input type="checkbox"/>				

Please THINK BACK to THEN, BEFORE JULY 1998. IMAGINE as if you are working at the ABHS those days. With that in mind, please answer the following questions.

Section E. The following statements look at what it means to be an employee of ABHS. Please **CHECK the NUMBER** on this scale how much you agree or disagree with each statement.

- 1 = No, I strongly disagree
- 2 = No, I disagree quite a lot
- 3 = No, disagree just a little
- 4 = I'm not sure
- 5 = Yes, I agree just a little
- 6 = Yes, I agree quite a lot
- 7 = Yes, I strongly agree

	Strongly Disagree ←			→ Strongly Agree			
1. I am quite proud to be able to tell people who it is I work for.	1	2	3	4	5	6	7
2. I sometimes feel like leaving this employment for good.	1	2	3	4	5	6	7
3. I'm not willing to put myself out just to help the organization.	1	2	3	4	5	6	7
4. Even if the firm were not doing well financially, I would be reluctant to change to another employer.	1	2	3	4	5	6	7
5. I feel myself to be part of the organization.	1	2	3	4	5	6	7
6. In my work I like to feel I am making some effort, not just for myself, but for the organization as well.	1	2	3	4	5	6	7
7. The offer of a bit more money with another employer would not seriously make me think of changing my job.	1	2	3	4	5	6	7
8. I would not recommend a close friend to join our staff.	1	2	3	4	5	6	7
9. To know that my own work had made a contribution to the good of the organization would please me.	1	2	3	4	5	6	7

Section F. The following statements specifically deal with **your perceptions of ABHS's organizational changes SINCE July 1998**, e.g., the hiring of new management team, new policies and procedures, and additional employee training, etc.

For EACH statement, please **CHECK the NUMBER** on this scale how much you agree or disagree with EACH statement.

	Strongly Disagree	Disagree	Not sure	Agree	Strongly Agree
1. The changes appropriately reflect employees' needs.	1	2	3	4	5
2. I believe the changes benefit me.	1	2	3	4	5
3. I believe the changes benefit our clients by improving quality of care.	1	2	3	4	5
4. I feel anxious and insecure about the changes that are taking place in the organization.	1	2	3	4	5
5. I feel overburdened with work because of the changes.	1	2	3	4	5
6. The changes have helped build trust in ABHS.	1	2	3	4	5
7. The changes have helped build trust in my work units.	1	2	3	4	5
8. The changes have helped build my trust in the management team.	1	2	3	4	5
9. I believe current changes are on the right track.	1	2	3	4	5

10. What problems, if any, do you think have been raised during the course of organizational change in ABHS? Please explain why.

11. What successes, if any, do you think that ABHS has achieved in its organizational change movement? Please explain why.

12. If you could make any improvements to ABHS or your specific program, what would you like to change? Please explain.

13. What would you like to see in the future for ABHS? Please explain.

Thank you for your time and participation.

APPENDIX III. APPROVAL FORM FOR EMPLOYEE ATTITUDE SURVEY

Office of The Vice President for Research
DHHS Assurance ID No: M1047

Institutional Review Board
Human Subjects Office
606A Graduate Studies Research Center
Athens, GA 30602-7411

APPROVAL FORM

Date Proposal Received: 2001-03-15

Project Number: H2001-10553-0

Name	Title	SS Number	Dept/Phone	Address	Email
Mr. Seok Eun Kim	MI	478252258	Political Science Baldwin Hall +1615	103 College Station Road #B-203 Athens, GA 30605	seokeun@arches.uga.edu
Dr. Robert T. Golembiewski	CO	142242076	Political Science Baldwin Hall +1615	542-9735 542-2962	

Title of Study: Quasi-Government Accountability: An Evaluation of Organizational Change in A Community Mental Health Center in Georgia

45 CFR 46 Category: Expedite 7 Modifications Required for Approval and Date Completed: 2001-05-03
Explicate procedures followed to ensure confidentiality, modify consent form

Approved: 2001-05-07 Begin date: 2001-05-07 Expiration date: 2001-07-07

NOTE: Any research conducted before the approval date or after the end data collection date shown above is not covered by IRB approval, and cannot be retroactively approved.

Number Assigned by Sponsored Programs: Funding Agency:

Form 310 Provided: No

Your human subjects study has been approved as indicated under IRB action above.

Copy:
Dr. Thomas P. Lauth

Chris A. Joseph, Ph. D.

Chairperson, Institutional Review Board

APPENDIX IV. A SAMPLE OF CONSUMER COMPLAINT FORM

COMPLAINT OF PERSON SERVED

Program Name: _____ Disability Group: _____

Step 1

Person Served: _____

Complaint (if other than person served): _____

Address: _____ Phone: _____

Describe complaint, giving all facts:

Date of incident: _____ Time of incident: _____

Location of incident: _____

Witness or others involved (name):

1. _____
2. _____
3. _____

Specific action requested by complainant:

If you would like to mail this form, sent it to:

UM Dept, Advantage Behavioral Health Systems

250 North Avenue, Athens, GA 30601

Or contact us by phone: (706) 583-2835

Interviewer: _____ Date: _____

Specific action taken by staff to resolve complaint:

Was issue resolved to satisfaction of complaint? Yes _____ No _____

Signature: _____ Date: _____

APPENDIX V. CLIENT SATISFACTION QUESTIONNAIRE (CSQ-8)

1. Male ___ Female ___
 2. Caucasian ___ African-American ___ Latino ___
 Native American ___ Asian ___ Other ___

3. How would you rate the quality of service you are receiving?

- Excellent Good Fair Poor

4. Do you get the kind of service you want?

- Yes, Definitely Yes, Generally No, Not Really No, Definitely Not

5. To what extent has our program met your needs so far?

- Almost All of My Needs Have Been Met Most of My Needs Have Been Met Only a Few of My Needs Have Been Met None of My Needs Have Been Met

6. If a friend were in need of similar help, would you recommend our program to him/her?

- Yes, Definitely Yes, I Think So No, I Don't Think So No, Definitely Not

7. How satisfied are you with the amount of help you have received so far?

- Very Satisfied Mostly Satisfied Mildly Dissatisfied Quite Dissatisfied Or Indifferent

8. Have the services you are receiving helped you deal more effectively with your problems?

- Yes, They Are Helping a Great Deal Yes, They Are Helping Somewhat No, They Really Are Not Helping No, They've Seemed to Make Things Worse

9. In an overall, general senses, how satisfied are you with the services you have received so far?

- Very Satisfied Mostly Satisfied Mildly Dissatisfied Quite Dissatisfied Or Indifferent

10. You came to this agency with certain problems. How are they now?

- A Great Deal Better Somewhat Better No Change Worse or Much Worse

**APPENDIX VI. LISREL CODE FOR OMNIBUS TEST OF EQUALITY OF
COVARIANCE MATRICES: INVOLVEMENT**

DA NI=6 NG=1 NO=94 MA=CM
KM SY
*
1.0000
.2945 1.0000
.2730 .3846 1.0000
.2213 .1211 -.0246 1.0000
.2380 .2009 .0654 .2982 1.0000
.1035 .0945 .0805 .4231 .4837 1.0000
SD
*
1.7218 1.4037 1.1730 1.5548 1.1307 1.0933
LA
*
OIV1 OIV2 OIV3 NIV1 NIV2 NIV3
MO NX=6 NK=6 LX=ID TD=ZE PH=SY,FR
PA PH
*
99
2 98
3 4 97
5 6 7 99
8 9 10 2 98
11 12 13 3 4 97
OU AD=OFF SS SC SE TV IT=600

APPENDIX VII. LISREL CODE FOR LINEAR-HOMOSCEDASTIC MODEL:

ABSENTEEISM

DA NI=3 NO=92 MA=CM
KM SY
*
1.0000
.4934 1.0000
.1532 .4213 1.0000
SD
*
6.8853 5.7453 5.8464
ME
*
8.5978 9.8153 9.5761
LA
*
T1ABS T2ABS T3ABS
MO NY=3 NE=2 TE=DI,FR PS=SY,FR LY=FU,FI TY=ZE AL=FR
LE
*
ABSENT-IN ABSENT-CH
PA LY
*
1.0 0.0
1.0 2.0
1.0 3.0
PA PS
*
1
1 1
EQ TE 1 1 TE 2 2 TE 3 3
ST .4 ALL
OU TV SE SS TO AD=OFF

**APPENDIX VIII. LISREL CODE FOR OMNIBUS TEST OF EQUALITY
OF COVARIANCE MATRICES (MULTISAMPLE ANALYSIS): CONSUMER
SATISFACTION**

DA NI=8 NG=3 NO=493 MA=CM
CM SY
*
.5077
.2328 .4716
.1674 .1808 .6508
.1691 .1692 .1621 .3995
.1822 .2242 .1799 .1528 .4738
.2190 .2067 .2696 .1465 .1565 .5020
.2518 .2140 .2532 .1886 .2107 .2591 .5391
.1169 .1010 .1981 .1131 .1347 .1902 .1569 .5795
ME
*
3.28 3.36 3.18 3.57 3.43 3.48 3.39 3.27
LA
*
Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8
MO NX=8 NK=8 LX=ID TD=ZE PH=SY,FR
ST .5 ALL
OU AD=OFF SS SC SE NS TV IT=600
DA NI=8 NG=3 NO=770 MA=CM
CM SY
*
.4523
.2553 .3772
.2346 .2578 .5295
.2135 .2153 .2205 .3560
.2644 .2721 .2761 .2323 .4216
.2041 .2279 .2685 .2073 .2495 .3457
.2455 .2563 .2691 .2208 .2894 .2503 .3700
.1662 .1811 .2411 .1771 .2007 .2249 .2026 .4705
ME
*
3.34 3.44 3.27 3.62 3.48 3.53 3.50 3.34
LA
*
Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8
MO NX=8 NK=8 LX=IN TD=IN PH=IN
ST .5 ALL

OU AD=OFF SS SC SE NS TV IT=600
DA NI=8 NG=3 NO=755 MA=CM
CM SY
*
.4790
.2670 .3981
.2434 .2412 .5127
.2565 .2216 .2166 .3991
.2573 .2628 .2523 .2600 .4073
.2315 .2289 .2602 .2451 .2550 .4061
.2650 .2609 .2658 .2624 .3067 .2923 .4157
.1840 .1831 .2267 .1917 .1948 .2659 .2238 .4699
ME
*
3.30 3.37 3.20 3.55 3.45 3.47 3.46 3.29
LA
*
Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8
MO NX=8 NK=8 LX=IN TD=IN PH=IN
ST .5 ALL
OU AD=OFF SS SC SE NS TV IT=600

**APPENDIX IX. SUMMARY OF THE EMPLOYEE RESPONSES TO THE
CENTER CHANGE**

1. Problems of organizational change in the Center (63 respondents, 85 comments)

Category	Frequency*	Summary of comments**
Too much work	15	<ul style="list-style-type: none"> • Decisions are totally driven in terms of paperwork by Medicaid and APS requirements. • Too much paperwork, which shortens quality time for consumers. • Few are carrying a large portion of the workload and others do not cover their share that leaves some on overload. • Too many work tasks to do in the allowed time-40hours a week. • Tremendous workload due to organizational changes coinciding with changes from external parties (i.e., RSB, MEDICAID, DHR) • Too much work without hiring someone in my work. • Morale still suffers because paperwork expectations and time (direct service) expectations are very unrealistic!!!
Lack of leadership (lack of direction)	11	<ul style="list-style-type: none"> • Those making decisions do not seem to have a working knowledge of what's involved at the delivery level. We need someone to oversee all directives for cohesion, applicability, duplication, and priority, before being passed on to staff. • Too many people telling different views on how the organization is supposed to be run. • Lack of trust in and judgment of the CSB & management team. Bringing in outsiders who do not understand the system and the unique problems of the Center and its personnel. • Many good employees are dissatisfied because their supervisors are mostly "absentee" and do not do their job. • Lack of knowledge about day to day meanings of programs. • The changes have highlighted the basic problems with the role and functioning of the CSB who are nice people individually but as a board, have repeatedly demonstrated that they are clueless and gullible. • Management team has a "know all" attitude and individual members are easily influenced by certain staff members. • The initial management team did not follow policies & problems of staff being devalued & ignored where raised. • Managers are not trained properly (e.g., poor communication).
Lack of mission orientation	8	<ul style="list-style-type: none"> • Organization is operated without any history. Values have been lost as shifts in management take place. • Mass confusion. Decrease in quality of services to consumers. More focus on money than consumers. • Consumer care is second to administrative needs and productivity. The number of layers in the organizational chart has increased exponentially. • Total loss of identify in outlying communities. They have no connection with the Center, no local identity. • Consumer services have gone down. Regional boards have put so many restrictions on services and have made so many requirements that leave no money for services. It looks like they don't care about consumer care.

		<ul style="list-style-type: none"> • Personal work with customer has dropped and help for them based on \$ and extra paperwork
Management problems	8	<ul style="list-style-type: none"> • Too much work without hiring someone in my work. • Too much time spent on technical matter by management team, i.e., what pens to use and x-mas cards. • Things are always more so slowly (e.g., hiring). • Excessive policies & procedures. • Too many chart, not enough trains.
Lack of employee care	7	<ul style="list-style-type: none"> • Hard working students as well as employees do not get recognize for their hard work and strong will. • Lack of morale of clinicians due to lack of sincere support and recognition to clinical staff. • Employee morale is more down than before the change. Many workers' enthusiasm has dropped from "helping others" to "just doing a job." • It appears that changes have been initiated without much thought of the consequences to consumers & staff. • The staff across the 10 county feel hopeless that anything will "get better" and hopeless to make any changes. There is an attitude that "management doesn't listen or address " the real problem of working in a clinic.
Poor pay	7	<ul style="list-style-type: none"> • Poor pay does not attract quality personnel. • The pay is still low for all the demanding duties. The rate of turnover surely reflects this. • The agency does not want to pay compared to market mid point for majority positions. This has caused much employee turnover. • I have not had one single raise in years. I make about half what I know I deserve. • The mount of work requested does not equal to pay.
Financial Problems	7	<ul style="list-style-type: none"> • Money has always been an issue for the organization. • We have more severe budget deficit. • Increased financial pressure. • Overspending. • The difficulties consumer and staff face with the perceived cut back in financial support for providing services.
Poor communications	6	<ul style="list-style-type: none"> • Policies, directives, etc., are still not issued in such an organized manner that staff can easily locate agency policies. Instructions provided by memoranda are hard to keep tract of. • Since the early 1998, there have been actually 2 organizational charts. The initial management team did not have a clue about the value of relationships and communication. • NO communication—the right hand rarely knows what the left is doing. Decisions are made by Athens management—who do not know what is going on in the individual communities. • Staff is given too little notice before changes made/begun. • Poor communication to employees about changes in policy.

Mistrust	5	<ul style="list-style-type: none"> • TRUST !!!!. For the last few years, we have been through multitudes of changes. In such a short time, we have had three CEO's and three completely different management teams, each one makes promises that it will get better, easier, we will be paid competitively as soon as the Center turns a profit. Then, the team bails. • Lack of trust between some departments and with administration. • Not enough cooperation among all areas of agency.
Too many change, inconsistency	5	<ul style="list-style-type: none"> • I have been constantly been going through organizational change since 1997. It becomes tiresome and most often confusing. I feel the constant changing deprives the consumers of a calm atmosphere. • Solid new plans rendered are hard to be implemented by system inertia, staff resistance, too many new plans at once. • Rapid turn over of administration has created many inconsistencies in procedures. A procedure is in place for only a shot change before it is changed again. • There have been so many changes in forms used. Once we finally get used to one form it is changed again. There doesn't seem to be any consistency.
Others	6	<ul style="list-style-type: none"> • The problems began with the so-called "Elberton" incidents approximately 4 years ago. The implementation of an entirely new management team coincided with a drastic reduction in funding which had resulted from federal funding changes (Medicaid). Distrust of the various department, redirection of funding to fund massive administrative budget and stress resulting from an impending CARF survey all contributed to an almost complete breakdown of the unit. • Problems with insecurity if having a job, not sure of our agency can survive. • No advancement opportunity. • PMF does not reflect true work of employee. Absenteeism continues to be unaddressed. Everyone given Met.

* Duplicated number

** Respondents' own words

2. Successes of organizational change that have been achieved during the intervention period (28 respondents, 31 comments)

Category	Frequency*	Summary of comments**
Managerial improvement	7	<ul style="list-style-type: none"> • Better at formulating treatment/service plans, documenting properly to get reimbursed. • Improved training for clinicians. • Audit scores from Medicaid have increased. • Taking the paperwork overload from the site and recording it to a Central Intake group. • Better communication between programs; i.e., MH clinics & MR services. • Better published line of chain of command (organizational chart)
More consumer oriented services	5	<ul style="list-style-type: none"> • Have made the customer know and feel that customer is valued as a human being and made to feel that customer belong. • Have moved away from specific disability services. Now can treat consumers better for multiple problems w/less difficulties. • Able to develop programs to fit each consumers needs. • The unit continues to operate with the basic philosophy of serving the consumers. The best of our abilities does still seem to exist.
Reduction in administrative staff	3	<ul style="list-style-type: none"> • Several administrative positions have been eliminated, which were expensive, superfluous, duplicative, and contradictory overall. Some people were detrimental to the organization and were hurting morale. The “atmosphere” is better. • Reduction in number of administrators without missing them. For the most part, administrators seem to listening to staff needs and staff are able to express feelings and needs without a much fear of reprisals as at one point. • I think that certain members of the past management team leaving helped more than anything.
Progress in organizational change	3	<ul style="list-style-type: none"> • Trend of getting beyond impediments to implementation of changes. • Being accredited for 3 years. • Budget improved to maintain each program with no lay off.
No success	13	<ul style="list-style-type: none"> • Cannot see success yet. I feel we are just going around in circles • The former executive officer had no idea what was going on. There is very little empathy from management regarding working conditions. They just keep pushing everyone to do more. • It seems that more lip service have been given expressing concern in staff’s welfare although I have seen little actual evidence. • Succeeded that employees feel insecure about their jobs. It has fired committed people and hired a lot of incompetent people, promoted them to supervisors, and have them in charge of things they don’t know about. It has shown preferential treatment to some employees and has pushed others aside. • Successful in alienating the support staff. ex. Clinicians got raises last year, but there was none left for secretaries. • A new name and less identification with public service organization.

* Duplicated number

** Respondents’ own words

2. 1. Successes of organizational change that have been achieved after the intervention period (25 respondents, 31 duplicated responses)

Category	Frequency*	Summary of comments**
More accessible management team (Better communication)	12	<ul style="list-style-type: none"> • Current administration (since 1/01) communicates much better with all staff and accepts input from all staff. • Management is more accessible. • Admittedly, this new management team does seem to be more committed to improve communications with the employees, They are more accessible, less into holding on to “fiefdoms” and into personal power struggles. • Increased trust in management and decreased paranoia. Increased ability to voice opinions without fear of reprisal. • Communications has improved. Management team appears to be more interested in overall agency and not just their own unit. • Management keeping the employees informed of what’s happening. The employees state their opinion or suggestion. • Management team minutes are now on line. • The best change was speaking to the head guy and he speaks back. • The current management team is less Machiavellian than before. • Recently management has been more forthcoming and has begun to lead with vision. • I think it has been good that managers take turns attending staff meetings.
Managerial innovation	8	<ul style="list-style-type: none"> • Learning about how to make more money. CSI and CST are good programs. • There have been changes to correct overspending. • Financial improvement by asking consumer’s to verify income and show proof of income. • Pay at the end of session for service rendered. • Consumers are now expected to pay their co-payment for service. This should have been done years ago. We have so many consumers and family members that feel all services are free, and paid for from the tax payees of Georgia. We have consumers in the system that has been abusing services for years. • We are still solvent. We did not have to lay anyone off from their job during the financial problems we have had. We have much more accountability through audits, productivity rates, closer supervision, better data, and data analysis. • Under current management, we are much more united and working toward a visible target.
Employee care	5	<ul style="list-style-type: none"> • Posting management minutes is an indication that management feel employees are important enough to hear issues. • Management appears to be more professional and dedicated to the Center. The increase of pay scale was the first acknowledgement that the employees are grossly underpaid, and I was thrilled that the Center was starting to recognize that. • Staff now recognized at oversight meeting for work above & beyond the call or duty. • I like being allowed to come up with creative solutions for court-ordered consumer. • Pay raise for some employees, which helps morale & attract more qualified/experienced employees.

Leadership (Better supervision)	3	<ul style="list-style-type: none"> • The greatest success is to expect that all staff will do their job and to work with, reprimand and fire staff who do not do their job. Accountability made a world of positive difference. Poor work was not tolerated or ignored. This expectation was backed up by administration. • Giving direct staff more of a voice, having management that actually comes into the clinics. • Supervisors do care what happens to the organization. I do know that my best interests are in these leaders hands.
Better personnel management	3	<ul style="list-style-type: none"> • Promoting within as well as bringing from outside –combining agency experiences w/newer perspectives. • A number of individuals who were financial, emotional, time, and energy drainers have left agency. Favoritism and inequity are greatly reduced, though not eliminated.

* Duplicated number

** Respondents' own words

3. Ideas for improving the Center management (70 respondents, 101 comments)

Category	Frequency*	Summary of comments**
Increase pay	21	<ul style="list-style-type: none"> • Increase salaries to maintain current level of quality staff. Salaries are way to low. • Guarantee raises for all employees (Christmas bonuses). • Improve pay scales. Pay is not equal to job duties and stress level. • Pay a master's level professional a competitive enough salary to satisfy him or her to stay. If you want quality, you pay for quality. • Provide better pay, less back stabbing. • Meet standard level of pay rate. Some positions that require a master's degree are no different than B.S. • See that decrease in raises for the past few years have hurt morale. Salaries are important to each and every one of us and should be considered a valuable part of our employment. Sometimes I feel devalued as a nurse since nurses make so much more \$ at local hospitals. • Increase salary!!! PMF are NOT fair. Obviously employees can only "meet" or "did not meet" why have "exceeds" on the PMF form. • Offer higher salary for licensed clinicians. • Reward employees equally. • Provide more financial incentives for longtime worker.
Improve work management	18	<ul style="list-style-type: none"> • Put more effort into accurate & timely billing process. • Use buildings more effectively. Need to look at combilling programs. • Get more organized. • Reduce the use of a cellular phone. • Ensure more uniformity in services provided in the different county clinics, i.e., access. • Add MH professionals as voting members of the regional board. • Retain minority employees in master's level positions • Perform continued time-saving mechanisms; continued streamlining of processes and procedures. • Ensure more focused department functioning so we won't have to be pulled in so many different directions. • Ensure that decisions are made on merit or amount of work accomplished or on ability to get along with others or on caring for the consumer instead of on friendship, cronyism. • Move community supported employment under DDRS supervision. • Remove Public Relations from management team. • Return courier services and beef up purchasing services staffing pattern. • Change of the management structure. • Reduce layers of management. • Find a suitable replacement for the CSB construct.

Increase staff /downsize management	15	<ul style="list-style-type: none"> • Do more streamlined personnel hiring process. • Hire more employees in outpatient clinics (One outpatient clinician for each 100 people) • Hire enough staff to give the 1,600 active consumers the quality of service that they deserve. • Hire more direct service staff (add full time nurse and part time clerk). • Increase in support staff to help enter TRIGRS or reduced caseload so clinician can enter their own TRIGRS. • Increase staff to manage stable-long term consumers. More nurses for medical monitoring and community support staff to be able to provide services to more consumer with different level of care. • Reduce management level positions. Places more importance on those working directly with consumers. • Downsize management team and start over with fewer administrators.
Reduce workload	13	<ul style="list-style-type: none"> • Hire more staff to shift clerical work to administrative staff (data entry of TRIGRS) in order to have more clinician's time to provide direct service to consumers. • More attempts for eliminating paperwork. • Do not ask clinicians to take responsibility of dealing with financial/reimbursement issues with consumer. • Get a "set" paperwork system (kind of standard) and stay with it. • Decrease clinician caseloads – now are 150-160 per clinician. (These are not padded-actual active consumers). • Do less paper work - more personal time with customers. Paperwork occupies 60-70% of job. This time makes quality/quantity of care less effective. TRIGRS is horrible. • Allow more time for paperwork. I do not see how our consumers are getting quality care when centers are so short on staff help.
Better leadership (supervision)	11	<ul style="list-style-type: none"> • Have supervisors who become more aware of who is doing what duties and the duties to be divided more evenly. • Have a supervision that is focused on the program goals and works toward obtaining these goals with staff. • Have management supervision that can help supervisor use management technique that are appropriate for problems. • Have only one supervisor. I should not be supervised by two supervisors. It is confusing to them and me. • Improve boundaries/professionalism between supervisor and staff. • Have more support to staff members (i.e., emotional). • Have more direction for the future (2). • Ensure more actual appearance of management at sites. • Do less punitive ways to handle correction. • Have all of the organization follow our written procedures.

Improve physical working condition	7	<ul style="list-style-type: none"> • House in a better location. Our building is large but need many things done especially the carpet. • Include more male staff for better protection possibly because of their strength. • Have more security in our building. Staff have been harmed by problem spouses who have committed crime off site. • Improve facility to provide services; questions also about health hazards in clinic due to ceiling leaks, wiring problems, broken windows, and insecure entry.
Improve communication	6	<ul style="list-style-type: none"> • Disseminated timely information. • Have a folder of examples of new (changed) paperwork. • Improved communication (among programs). • Improve communication/sharing information. We are not informed of meetings and training necessary to perform our specific jobs when changes are made by the center.
Improve morale	6	<ul style="list-style-type: none"> • Improve morale. Morale remains a problem and many talk about leaving at first opportunity. • Do efforts to improve morale. • Maintain, consistency, promote loyalty. • Praise for job well done/gratitude. • Find ways to show appreciation to staff for the extra they do.
Ensure financial stability	6	<ul style="list-style-type: none"> • Stop spending money on food and out of state trainings. • Find more efficient financial management. (e.g., send a bill to consumers). • Prevent abuse of funds that are wasted and misused every year. • Have more money for consumer activities. New vehicles to use in the community.
Improve quality of service	6	<ul style="list-style-type: none"> • Allow customers being served from their homes, or community inclusions. • Get in touch with the players. My county's community reps/leaders frequently complaint that "Athens" Center people come down, but they don't have clear understanding the specific nuances of the community—and not in communication with even the county's clinic. They also complain that \$ priority always seems to stay in Clark county clinic. • Put all consumers first and it would be evident NOT management. • Don't let consumer pay for the service.
Increase promotion opportunity	4	<ul style="list-style-type: none"> • Have more room for upward mobility needs to be incorporated into personnel management. • Recognize the importance of the employees by having advancement opportunities. • Allow upgrading positions for techs so we don't lose staff as soon as we train them. • Have more chance to move upward. The "good old boy system" is still intact.
Have clear policy & Procedure	4	<ul style="list-style-type: none"> • Place a procedure that helps us keep abreast of informal policies as issued via memoranda. • Have more comprehensive listing of procedures to follow in clinical situations. • Do more thoughtful change for procedures and then be consistent and not change again one month later. • Stop changing the paperwork. By the time the centers get the information about paperwork changes (activity note, ISP formats etc), they are being changed again.

Have more hands on training	3	<ul style="list-style-type: none"> • Have every counselor along with physician head evaluated. You can't run a clinic without people skills. • Have time to train staff prior to setting up programs. • Have more hands on training instead of so much paperwork. This takes away from the people we'll suppose to be helping.
Others	7	<ul style="list-style-type: none"> • Honesty. • Have more dedicated employees. • Ensure employment security.

* Duplicated number

** Respondents' own words

4. Desirable future state of the Center (67 respondents, 121 comments)

Category	Frequency*	Summary of comments**
Better pay	25	<ul style="list-style-type: none"> • If we are to continue to operate with quality staff providing quality services, salaries must rise to at least at market mid-point. • Better entry-level pay across the board. • I'd like to see us 'in the black.' Everyone getting a 10% raise. A raise just sweetens your work attitude when you are able to pay your bills without excess outside agency work hours. • The Center expects too much from employees and is not willing to pay what they are worth. • Salary increases should be more fairly given. At least employees should get what the state of Georgia votes the % raise should be. • Raises for long time employees who have proven that they are dependable and productive positive feedback (for a change)! • Recognize title and salary for good clinicians who choose to stay in clinical roles. • Show appreciation to staff by upgrading pay scale. • Higher pay and regular work hour. • Pay raises for under paid (average direct care MR workers make \$ 17,225 yearly). • Offer salaries that will keep "good" people in this agency. We have lost so many "good" case managers because of poor salaries and objections to change. • Good quality care would stay if the pay were better.
Outstanding leadership (consistent, clear direction)	15	<ul style="list-style-type: none"> • Outstanding leadership, good positive report. • Well-managed organization with a healthy leadership that is in touch with and in communication with the employees and with the communities consumers serves. • Increase understanding by management on what effects a new policy has on front line staff. • Disciplinary action when employees consistently do not do their job. • More or tighter supervision for mid-level managers. • A more uniform procedure for introducing new forms, program procedure etc. So often too many people make decision about specific things resulting in mixed message of implementation, etc. • Learn from others, but "stop trying to reinvent the wheel." Use what already works, not change it. Change what's cumbersome. • Follow one set of rules and policies. • Less confusion when changes are made. Clear direction from manager level. • Changes should be made in a more realistic, efficient manner. E.g., new programs or different ways of providing services should have clear instructions prior to implementation and staff should be adequately trained before using them. • Consistency in instruction for changes – someone to give information so we can adjust to change without so much confusion.
Employee friendly agency	12	<ul style="list-style-type: none"> • To be a more employee friendly agency. • Everybody being treated as equals. • Independent decision making, working on jobs of choice in the community with support from employers • Treat every employee valued. • More employees care rather than \$\$\$. Appreciate our staff more.

		<ul style="list-style-type: none"> • Recognition for work done well (3). • Employees who are professional and valued, who feel invested enough to make a career in the organization. • I want to see this agency be as loyal to me as I am to it. I want for everything to be fair and all decisions made objectively. • More input from clinical employees regarding clinical issues.
Realistic workload	12	<ul style="list-style-type: none"> • I would like to be given the time and assistance needed in order to help all persons served, meet all their goals. • Realistic case loads (caps on caseloads). • Give our workers relief by adding more clerical help not just clinical workers with good salaries to keep them and qualified people. • Increase support staff. Secretaries & bachelor level workers to locate chart, close chart, write letter etc. • More or enough staff so that workload can be done properly. Consumers are suffering now. • Reduce paperwork so clinicians can do therapy. • I would like to see better days for our consumers. Our staff are so overloaded with paperwork that the consumers of day programs are lacking planned structure and consistency.
Financial stability	12	<ul style="list-style-type: none"> • Being mindful of budget issues. • Better financial stability, sound financial base. • A person devoted to grant writing. • Fiscal stability with adequate resources to do the job. • I would like to see this agency become “sound in finances” so we don’t have to worry about out jobs. • The governor and the legislature need to wake up and quit playing games with budget.
Consumer-oriented services	10	<ul style="list-style-type: none"> • I would like to see consumer’s being served properly based on their needs. • Return to reality based service provision and focus on customers. • Continue designing new programs for consumers. • More consumer care rather than \$\$. • Treat every consumer valued. • More variation in treatment that better suits the consumer’s needs. • All employees work together as one for one common goal, to service the consumers of our community. • Stable and caring administration, working to make services priority for consumers, but not at the expense of employees.
Better management	8	<ul style="list-style-type: none"> • No more CSB, no more huge management team. Let the department of Human Relations run MH/MR/SA again. • I would like to see the different branches of the organization working independently—financial—personnel---etc. • More interoffice hiring of better positions if one has been in the system a long time. • Clinicians being able to provide MH services and not be “everything to everybody,” and not doing clerical work. • Hire a specific person designed to collect funds from consumer after session. • Progress note and scheduling on computer. • Total reorganization. • Better planning for emergencies.

High quality employees (more training)	6	<ul style="list-style-type: none"> • Reintegration of work ethics. • Adequate staff to accommodate the number of consumers we serve. • More training. Good training, good management decisions. Employees willing to work together and follow prescribed guideline. • Engage in best practice techniques & programs. • A “drop in” center people who don’t qualify for therapy groups or residential services need a people to feel “at home” and get professional services in a relaxed atmosphere. Therapy requires a support to know “we” care.
Better cooperation (teamwork)	5	<ul style="list-style-type: none"> • More teamwork instead of some employees thinking they are the only person who works hard. • A feeling of belonging for all employees, not just the management team. We need that pulling together of one big family. • Everyone works together to get this program going. These consumers need us and we need them. Get back on the right track. More training. • Better cooperation between all areas in order to better serve consumers. • All employees working together to make the Center the best work place possible.
Community-oriented organization	4	<ul style="list-style-type: none"> • Opportunity to grow and have a real impact on our community. • I would like to see the Center become the premier provider of MH care for the 10 counties of this CSB and achieve recognition as the model of excellence for community MH care in the state. • Continued improvement of the negative attitude in the community about our history because I am still proud to be a part of this system. • More “public relations” for the community.
Work diversity	3	<ul style="list-style-type: none"> • More diverse management team. • More opportunities for female staff. • I’d like to us to do more ethnically diverse.
Others	9	<ul style="list-style-type: none"> • Better working conditions. • Closer proximity of support services (physical distance, location). • Improved communication. • Job security. • Fair PMF, reflecting (accurately) employee performance.

* Duplicated number

** Respondents’ own words