12-2004

The Differences in Performance between Large and Small Organizations in Mental Health Settings

Randy Parker

Western Michigan University

Follow this and additional works at: https://scholarworks.wmich.edu/dissertations

Part of the Health Policy Commons, Public Administration Commons, and the Social Welfare Commons

Recommended Citation

Parker, Randy, "The Differences in Performance between Large and Small Organizations in Mental Health Settings" (2004). Dissertations. 1131.
https://scholarworks.wmich.edu/dissertations/1131

This Dissertation-Open Access is brought to you for free and open access by the Graduate College at ScholarWorks at WMU. It has been accepted for inclusion in Dissertations by an authorized administrator of ScholarWorks at WMU. For more information, please contact maira.bundza@wmich.edu.
THE DIFFERENCES IN PERFORMANCE BETWEEN LARGE AND SMALL ORGANIZATIONS IN MENTAL HEALTH SETTINGS

by

Randy Parker

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Education
Department of Teaching, Learning and Leadership

ADVISOR: DR. GARY WEGENKE

Western Michigan University
Kalamazoo, Michigan
December 2004
ACKNOWLEDGEMENTS

I would like to thank my wife, Deborah, for her patience, and the Lord Jesus Christ for the strength He gave me in this undertaking. I would also like to thank Dr. Wegenke, Dr. Shen, and Dr. McNeil for so many good ideas and so much patience.

Randy Parker
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS ............................................................................................................. ii

LIST OF TABLES ....................................................................................................................... vi

CHAPTER

I INTRODUCTION .................................................................................................................... 1

Rationale ................................................................................................................................. 1

Background Information ..................................................................................................... 2

Need for Further Study ....................................................................................................... 5

Statement of the Problem ................................................................................................. 7

Purpose of Study .................................................................................................................. 7

Limitations of the Study ..................................................................................................... 12

REVIEW OF THE LITERATURE ........................................................................................... 14

Literature on Size and Costs ............................................................................................... 17

Education and Social Service ......................................................................................... 17

Business and Government ............................................................................................... 20

Literature on Size and Structure ..................................................................................... 21

Education and Social Services ....................................................................................... 21

Business and Government ............................................................................................... 22

Literature on Size and Performance ................................................................................. 25

Education and Social Services ....................................................................................... 25

Business and Government ............................................................................................... 26

Summary ............................................................................................................................. 28
CHAPTER

III METHODOLOGY ................................................................. 30

Introduction ............................................................................ 30

Methodological Framework .................................................... 30

Quantitative Research Methodology ........................................ 31

Research Design ..................................................................... 31

Variables ................................................................................. 32

Selection of Subjects Sample .................................................. 35

Instrumentation ..................................................................... 37

Field Collection Procedures .................................................... 40

Data Collection Procedures .................................................... 41

Qualitative Research Methodology ........................................ 41

Research Design ..................................................................... 42

Subject Selection ..................................................................... 42

Instrumentation ..................................................................... 43

Data Collection Procedures .................................................... 43

Data Processing ...................................................................... 44

Methodological Assumptions .................................................. 44

Limitations of this Study ........................................................ 45

Summary ................................................................................ 45
Table of Contents—Continued

IV FINDINGS ................................................................. 47

Quantitative Results .................................................. 47
Qualitative Results .................................................. 48

Interview Questions .................................................. 50

Summary .................................................................... 55

V SUMMARY AND RECOMMENDATIONS ..................... 60

Introduction ................................................................ 60

Summary .................................................................... 62

Recommendations for Future Research .................. 65
Recommendations for Policy ................................ 67

APPENDIX

Protocol Clearance from the Human Subjects Institutional
Review Board ............................................................ 70

BIBLIOGRAPHY .......................................................... 72
LIST OF TABLES

1. Qualitative Interview Design ..................................................... 46
2. Means for Small, Medium and Large Umbrella Organizations .............. 57
3. Results of ANOVA ......................................................................... 58
4. A Comparison of Responses Made by High Error Rate Groups and Low Error Rate Groups .................................................................................... 59
CHAPTER I

INTRODUCTION

Rationale

Managed care came on the scene of behavioral health care in the early 1990's and it has functioned as a mechanism for augmenting accountability and cost containment. One of the distinguishing characteristics of managed care is the emphasis placed on treatment effectiveness. Purchasers of managed care services are beginning to differentiate the services, based on value and not just cost. Managed care functions as a mechanism for increasing cost containment and accountability (Poynter, 1998). In 1996, 140 million people were estimated as having their behavioral mental health benefits in managed health care systems (Ross, 1997). During the last 10 years, the managed behavioral health care industry has grown to cover over 66 percent of the insured population in the United States (Oss, Drissel, & Clary, 1997).

One cause for the interest in measuring outcomes is increasing healthcare costs. In 1990, the aggregate cost of the Medicaid program was 69 billion dollars. By 1994, the aggregate cost of the program had reached 197 billion dollars. Since 1996, 32 percent of the Medicaid population enrolled in a managed care plan (APA, 1997). The rise in Medicare recipients has led to demands to measure relevant outcomes and greater effectiveness in treatment. In 1970, the cost of the Medicare program was 7 billion dollars (APA, 1997). In the year 2000 the actual cost of Medicare was 214 billion dollars
The present study is an attempt to assist administrators working with the mentally retarded to serve them more effectively in a managed care setting. Managed care methodologies have provided protocols to the mental health field to measure client outcomes and to allow for treatment decisions based on firm statistical models. This type of decision-making approach is lacking in the mental retardation field. This study serves as an initial inquiry into such a determination-making model for the field, using evaluation methods that are currently available.

In the mental retardation area, debates on whether select group homes associated with umbrella organizations of various sizes should be chosen have occurred. Some argued in favor of large umbrella organizations economy of scale; others argued in favor of small umbrella organizations higher quality care. This study further investigates those factors as they are associated with error rates inside large and small group homes.

Background Information

The federal government is replacing the Community Mental Health (CMH) system in Michigan with a managed care system. A change from a fee for service (FFS) system to a managed care system is based, partly, on savings. A comparison between a FFS and prepaid or managed care system found a 64% cost savings to mental health care using the managed care system (Craig & Patterson, 1981). Early reviews of the use of managed care procedures in the private insurance area found significantly reduced costs of mental health care (Hodgkin, 1992). Additional studies found similar patterns of cost savings for public sector programs such as Medicaid, with few negative responses from clinical staff (Callahan, 1994). The state of Michigan is working with the federal
government to changeover the system statewide, since reductions in costs will help additional consumers. All changes are being made to identify better and more effective ways to provide necessary resources to clients and to deprecate unnecessary costs. This includes methods to identify which programs work better.

Quality Assurance (QA) and Quality Improvement (QI) procedures are becoming more important as managed care becomes a reality in the behavioral health field. Outcomes based on and supported by empirical findings are the core to establishing accountable mental healthcare services from consumers. The question is whether or not empirical evidence exists for significantly different outcomes? This might be a key indicator to decision makers seeking to contract out millions of dollars for residential services.

Large behavioral health care organizations such as Greenspring, Value Behavioral Healthcare, Human Affairs International, and MCC-Cigna have adopted the use of empirically validated procedures (EVP) for managed care. An EVP is a clinical procedure that has achieved an acceptable level of empirical certainty in a health care specialty (Armenti, 1999). Other authors have used the term Practice Guidelines (PG) instead of Empirically Validated Procedures (EVP’s) to define a clinical procedure that has achieved an acceptable level of empirical certainty (Gaus, 1994). EVP or PG includes parent training, cognitive restructuring, and desensitization, as identified in the Physician’s Current Procedural Terminology (American Medical Association, 1996). EVPs or a PGs used by organizations to manage care are indicators that relevant outcomes can be achieved. If the size of a provider’s management organization were empirically validated as an indicator of a certain quality of care, this then would help with critical decisions on
what and how care will be delivered.

Regarding legal implications, the use of an EVP is important. Compliance with empirically validated guidelines affords legal protection to service providers when challenged for misuse of funds in the Medicare Program (Gosfield, 1992). Malpractice insurers have offered discounts to providers who adhere to practice guidelines or use EVPs (Szabo, 1995). When millions of dollars of residential services are purchased each year, any empirically-derived information that could help make better decisions could be important.

QI systems are an integral part of managed care. QI systems identify ways to predict or ensure that high quality occurs in service providing health care organizations. Mental health has traditionally been one of the most expensive and ambiguous parts of healthcare (Freeman, 1999). Quality assessment traditionally requires the measurement of some output compared to a standard (Savitz, 1992). In the present study, the quantity of errors at each management group represents a failure to follow just one of the written regulations for all group homes of the same type across Michigan. In the present study, an assessment measure is the comparison between the size of management organizations and how staff followed health and safety regulations.

The size of an organization affects the function and performance in some organizations. Size can be measured in different ways, but how size is measured depends on the purpose of the study (Kimberly, 1976). The size of an organization explains many characteristics of its structure. For example, the larger the organization, the more important was standardization as coordinating mechanism (Pugh, 1969). Increasing the size of educational settings promoted curriculum specialization, resulting in
differentiation of students' academic experiences and social stratification of student outcomes (Lee & Bryk, 1989).

The size of the organization relates to the structuring of activities (Pugh, 1969). Increasing structure is concomitant with increasing size (Pugh, 1969). Research shows that direct size effects the organization (Lee & Bryk, 1997). Finally, organizational size has considerable influence on both diversification and macro characteristics including formalization, centralizing and the span of control (Grinyer, 1981). So, size as a variable has different effects upon organizations.

Other studies show size as having little to no affect on performance within the organization. While these studies found differences in the performance in organizations of different sizes, this was not the finding of all research. A larger school does not automatically lead to cost savings (Fox, 1981). Projected savings from school consolidation have not materialized as small schools combine to form larger schools (Fox, 1981). The larger an organization does not translate into lower costs to run (Guthrie, 1979). In a study that explored subunit size and individual performance, larger subunits revealed greater productivity for highly structured and repetitive tasks, but subunit size did not show significance in performance for those working on complex or unstructured tasks (Cummins & King, 1973). As the size of the overall organization increased so did the size of its units at all levels. So the larger size of the organization did not reduce costs, or streamline services (Blau, 1971).

Need for Further Study

The need for this study is that no similar study exists. The behavioral health field serves a fragile population that continues to need optimal treatment and support, while
the system transitions to a managed care system. The basis of customer service is
listening and responding to the feedback of the people served. The customers in this type
of organization have developmental disabilities and many have IQ scores below thirty
with average intelligence scores at one hundred. Many of these consumers cannot express
themselves clearly. Most are highly dependent on staff to care for basic needs such as
suing the toilet, feeding oneself, and supervision in the community. Millions of dollars
are spent annually on this type of residential care. Any research finding that assists a
managed care provider to make better decisions is important for this group of consumers.

Evidence of effective care, based on actual data from different sized providers,
would facilitate better choices and direction. Without any form of systematic research, the
decision to use residential providers is made by untested methods based solely on beliefs.
Some mental health managed care organizations believe that smaller management groups
are more responsive to consumer needs. Therefore, smaller organizations have managers
that are more hands on and know the consumers better. Another major belief is that larger
management organizations can pay more to hire experts and that an economy of scale
will exist and allow a lower cost of treatment (Blau, 1971); (Buzacott, 1982); (Grinyer,
1981). Little research exists today in this area of mental health, so the decisions are based
on beliefs and not on data.

The arguments for which size of management organization produces few errors in
health and safety rules mirror concerns in the fields of business and education. But, the
education field has begun to research this area (Lee & Bryk, 1997) and should over time
have answers. The business field also has researched this area and is therefore pouring
billions of dollars into mergers and consolidations of industries. Mental health has not yet
begun to examine this area that seems so basic. Does one size of management organization significantly differ from another? The purpose of this study is to begin to contemplate this question and prepare the way of follow up research. The results may help steer millions of dollars of residential contracts to particular sized management organizations. Also, the ability to predict the most efficient size of a management organization may help in the selection of providers.

Statement of the Problem

The specific problem in the present study is to investigate how health and safety errors made by larger managed care organizations is different from small sized managed care organizations, carrying out the same tasks in similar settings. This investigation is important because of the at-risk nature of the developmentally disabled population that is unable to voice complaints about the services rendered. The classification of the differences in performance by varying sized management organizations may lead to further research to uncover indicators of successful treatment outcomes.

Purpose of Study

The purpose of the study was to look for differences in regulatory errors found in group homes in Michigan of variously sized management organizations. The study was undertaken to investigate the relationships between the performance of management organizations that were smaller, locally owned and run, and those which were larger, with more layers of management and having more geographically diverse locations.

The present study is the first step in establishing validation whether the size of a management organization has a significant impact on regulatory errors. Each regulatory
error would be the failure of the organization to comply with health and safety regulations for a dependent population of mental health consumers. Five steps were used to develop this process.

Step One: Develop Relevant Outcomes

The first step was to develop the relevant outcomes that would be important to an organization using managed care methods. Relevant outcomes are defined as the outcomes that meet the specifications of required staff performance. Relevant outcomes are the measurements of staff actions that demonstrate the performance objectives for the organization were met. The relevant outcomes will vary for each health care setting. In manufacturing a low number of defective parts might be a relevant outcome. In medicine, a low number of secondary infections might be a relevant outcome. In mental health settings, clients having an urgent need to be seen by a therapist within two hours are a relevant outcome.

In all of the cases above, the relevant outcomes are important to the functioning of each of the respective organizations and are viewed as indicators of performance. These relevant outcomes are more important than several other possible indicators that could have been selected for the study. Other indicators would include timeliness of reports, and patient satisfaction with care.

In a managed care environment, the relevant outcomes that focus on staff performance leads to reductions in cost. The relevant outcomes also lead to fewer problems with clients, a faster completion time for staff duties, and greater efficient use of an organization’s resources. An example of this from the health care field is the wise use of outpatient surgery for gall bladder surgery. This operation used to take three weeks
of hospital recuperation, and now only a two-day hospital stay is required. In the above examples the relevant outcomes can be used as predictors of future staff performance.

The relevant outcome to be examined in the present research paper is defined as the outcomes that meet the specifications of required staff performance. In the present study, the size of the management organization is the number of group homes being managed by the management organization. The size of the management organization should align with a relevant outcome for the residential care of people with developmental disabilities. If this is the case, then the size of the management organization and some relevant outcomes should be related. For example, the relevant outcome in this study is the staff meeting the specifications of required performance.

**Step Two: Development of Assessment Measures**

The second step is the development of assessment measures. When measuring information, there must be concern that the measurement process results in classification or scores that accurately represent the characteristic to be measured (Eichelberger, 1989). In this study, the actual error scores from the Annual Federal Survey of Compliance and Regulations were used to measure the characteristics of the performance. The use of the deviation scores from the regulations follows the definition of quality as conformance to requirements and not as goodness (Crosby, 1996). The assessment measure used in the present study is the number of errors occurring in clearly defined regulations published by the federal government. The failure of group home staff to follow the federal regulations would lead to errors recorded on the survey results. Having several errors would be a relevant outcome for the managed care setting.

Errors recorded on the federal survey indicate that health and safety rules were
not being followed. Every group home for each management organization is surveyed annually. Each survey uses the same set of rules and records the results in the same manner. The agreement between the selected relevant outcome for the present study and the measures used for assessment are because the more errors, the less the studied organizations are meeting health and safety regulations. The number of errors made on the survey indicates a relevant outcome, a lack of compliance with health and safety regulations. It was hard to find quality of care measurements prior to the implementation of managed care (Smith & Gaumer, 1992). Different providers maintained data on performance differently, but the Federal survey used the same criteria. The Federal survey records the data in the same manner across all the providers.

**Step Three: Focus Outcomes on Organization Size**

The third step in the present study was to focus on the outcomes when compared to the size of the various management organizations. The task was to look at how varying sized organizations perform similar tasks. Community Mental Health in Michigan is generally divided between services for people with Mental Illness and people with Developmental Disabilities. The Developmental Disabilities area is mostly comprised of people who are mentally retarded. The mental illness area has over the last ten years been standardized in terms of treatment. A person with mental illness problems can present themselves for assessment and will be authorized for certain treatment protocols based on Empirically Validated Procedures. These Empirically Validated Procedures are backed by extensive research and allow the authorization for a set number of visits with a therapist and psychiatrist (Oleary, 1993).

In effect, based upon empirical data, people visiting a mental health center for a
Mental Illness can quickly be authorized for standard treatment approaches. Also, they can be authorized for a certain number of visits with mental health professionals depending on their complaint. Electronic and empirical studies have validated that usually good clinical results will be obtained with this amount of care. In a few cases, additional resources or visits will need to be authorized. Contrast this with the Developmental Disabilities area where little information on treatment effectiveness exists. Predictability exists on the mental illness side of the mental health center. People who need mental illness assistance are assessed and provided with successful and limited treatment whether they have problems with anxiety, psychosis, mood, or dissociative disorders. Effective and standardized treatment regimes exist, allowing the mental health administrator to allocate resources and costs.

*Step Four: Compare Results Between Organization Sizes*

The fourth step in the present study is to compare the results found in residential settings for consumers with developmental disabilities. Using the existing clinical pathways, the staffs that deal with mental illness can work with minimal errors measuring their performance against the statistics that verify what works well. Currently with nothing to measure against, the care providers for persons with mental retardation have many opportunities to make errors with nothing to measure against. In the mental illness field, a person with an anxiety disorder would generally respond to a certain treatment in a predetermined number of visits. This is a scientifically based decision for treatment that is supported by treatment data gathered over time. The present study examines data in the field of mental retardation and attempts to determine if certain identified variables can be used to measure successful residential care.
Step Five: Recommendations for Improvement

The last step in the present study is to look for recommendations for improvement. None of the preceding intends to indicate that good care is not presently being provided for people who have developmental disabilities. Instead, the present study is designed as a starting place to answer questions based on data. The present study is an attempt to help administrators in the field of mental retardation to more effectively work in a managed care setting in the same way as the administrators in the mental illness field. The EVPs followed by administrators in the mental illness field have made the mental illness field more predictable and less chaotic. Whenever a person with mental illness requests assistance a clinical assessment is completed. From the results of that assessment, a clear choice of treatment that is based on EVPs is selected to help that person. People who request assistance with developmental disabilities lack the same predictability for treatment needs or costs. It is not a question of trying harder to work to serve persons with developmental disabilities, but it is a question of looking for indicators.

The indicators will not be the same for those with developmental disabilities as those for persons with mental illness. There are too many differences in the populations of people and in the abilities and needs of each group. The early attempts by other states to use the same managed care procedures for both groups have led to a break at the structural, process, and participant levels.

Limitations of the Study

This study is limited to a small subset of the total population of people with developmental disabilities. This study includes only the consumers who are in need of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
supervised residential care in a six-person group home. Since this is the first exploration of this area there is little basic research to draw from or to build upon. Subsequent research may use the findings of the present study to use in establishing procedures for other services such as occupational therapy or day program services. In the present study inferences were drawn from similar studies in business, education, and sociology.

Another limitation in this study is the difference in the definition of a large organization with thousands of employees and a small organization, and each with locations in multiple states. In this study, a management organization may operate 20 group homes and be one of the largest providers in the state. A small organization may be a small factory with several hundred employees. The smallest provider, and there are many of them, operates only one or two group homes. So, while this study may point out consistent and useful trends for the use of decision makers in mental health, the resulting information may not generalize into some other fields. At the same time, the results will be of interest to mental providers in many states other than Michigan.
CHAPTER II

REVIEW OF THE LITERATURE

This chapter reviews the existing literature on the effects of organizational size to various types of performance such as cost and student achievement in healthcare, behavioral science, government, and business. The purpose of this review is to synthesize the existing literature on organizational size and how it relates to cost, structure, and performance. There are important reasons to review the literature in this area. Many changes are happening across the country in health care, behavioral medicine, government and business. The change or changes in the size of organizations has become daily financial news. Business Week (2000) explained that one half of Japan's auto market is owned by automobile companies outside that country. Large American and European companies have combined with Japanese corporations to form even larger automotive organizations.

Acquisitions and mergers resulting in larger organizations have increased dramatically in Germany (Schiessl, 1999) and in Italy (Keeler, 1999). A prediction in Forbes Magazine (Lenzner, 1999) showed that hundreds of regional and local banks in Italy will eventually merge to create nationwide outlets. The Wall Street Journal (March 2000) highlights the increased mergers and leveraged buyouts increased substantially in the United States and other countries throughout the 1990's. The Labor Research Association reported 60,000 corporate mergers from 1996 to 1998. The report further
stated that, in 1997, $917 billion dollars worth of assets were involved in mergers.

An acquisition or a merger is the best avenue to increase growth for many associations (Lang, 1999). In 1999, $1.4 trillion dollars were made in transaction volume from mergers and acquisitions in the United States versus $356 billion dollars in 1995 (Thurman, 2000). Around the world, expansion of organizations through mergers is growing. Two or more social service organizations, for example, join to form larger health organizations. The Detroit News (May, 2000) reported that the State of Michigan is proposing to eliminate 49 small county level community mental health boards and use a smaller number of large mental health agencies to service the same areas. These services would be awarded through competitive bids. Ten to fifteen service providers are expected to take part in the bidding process. This process would replace the forty-nine smaller agencies with ten to fifteen super agencies. Therefore, the affects of organizational size on performance are important to mental health consumer and mental health administrators proactive in making systemic changes.

No consensus regarding the affects upon performance after organizations in business, education, or healthcare, have increased in size was found in the research literature. Some researchers identified weaknesses following an increase in size and that sixty-to-seventy percent of mergers have failed (Millman, 2000). A research report published in October of 1999 by KPMG found eighty-three percent of mergers produced no benefit for shareholders. Fortune magazine (February, 2000) reported that the merger of many large American banks resulted in poor service, low stock returns for shareholders, and low returns on investments. Further, Fortune magazine reported that chief executive officers with companies that were acquired and merged to become larger
were paid enormous sums to get out of the way and leave. Several mergers and performances of larger organizations were reviewed (Cerami, 2000) and the results were as follows:

1. Lockheed and Martin Marietta is an example of a merger that resulted in lost contracts;
2. The increase in the size of the organization resulted in control problems;
3. The control problems resulted in the company losing contracts and less money coming into the organization;
4. Cerami’s (2000) article suggests that the income reduction from lost contracts might have resulted in the thirty-five percent drop in the stock price. Information such as this indicates a need to examine the effects of the size of the organization on the performance of organization.

This literature review identifies the affects of organizational size on costs, structure and performance, using the research literature in the fields of education and business. Knowing the affects of size to cost, to structure, and to performance in each organizational area is needed.

Management has an invested interest to improve techniques to increase organizational performance (Scott, 1981). The purpose of management and the reason for organizational theory is to increase the value of efficiency by adjusting the relative values of outputs over inputs (Scott, 1981). The present study attempts to clarify whether the input or variable of organizational size will lead to a distinction in the performance of staff when following regulations. As stated above, any variable that contributes to increases in the measurable behavior of staff while correctly following regulations,
results in a higher efficiency value for the organization. For example, if it were found that different-sized management in organizations had a staff perform at significantly different levels then some management would perform more efficiently than others.

Literature on Size and Costs

*Education and Social Service*

This section reviews how the size of an organization in the fields of education and social service influences costs. The term "economy of scale" serves in reference to the theory that by combining organizational units to form larger organizations, costs are shared across the units combined. In education, for example, merging several small schools to form into one large school would lead to lesser costs to individual units. The budget for the school district would benefit from having one principal on the payroll in place of several, which in turn saves money for the maintenance of programs or the addition of innovative tools and lessons. Fewer teachers also may lead to savings to the district. Personnel reductions could also happen for custodians, librarians, groundskeepers, bus drivers, clerical help and cooks, because of consolidations. According to Kenny (1982) economies of scale favors the consolidation of several small schools into one large school. He explained that the savings should be seen as core costs spread over a larger pupil base. The savings could strengthen the academic base.

In Australia, considerable concerns over the closing and merging of schools were raised (McKenzie, 1995). However, McKenzie's study found that large schools do have cost and curriculum advantages over small schools. It has been suggested that by increasing the number of students served in each American school, could generate greater efficiency by first maximizing the efficient delivery of services. In addition, greater
efficiency can occur by large purchases of materials and supplies (Buzacott, 1982).

A study in Hawaii (Thompson, 1994) demonstrated that small schools have diseconomies of scale for pupil cost because of their small size. This study supports the idea that economies of scale exist for larger schools. Hawaii has just one school district for the islands. Large, or small identical contracts for services and administrative policies exist for all Hawaiian schools compared in this study. The author noted that since the schools, whether large or small in this study, were in the same school system this could reduce factors that contribute to variance. Such variance factors include: differences in support services; schedules; building conditions; and, salaries.

In an examination of public schools (Fox, 1981) a larger size does not automatically lead to cost savings. Fox found that savings projected by school consolidation did not materialize. There was a clear diseconomy of scale for small schools after controlling the variables of teacher salary schedules, conditions of facilities, and support services (Thompson, 1994).

A study of the top doctoral degree granting institutions in the United States suggested that there are economies of scale in higher education (Koshal & Koshal, 1995). Two and four-year colleges have economies of scale (Brinkman & Leslie, 1985). Other researchers have not found economies of scale to be in operation. An analysis of the economy of scale assumption in Florida community colleges found no such relationship (Hackett, 1981).

Large public schools do not translate into less expensive operations (Guthrie, 1979). Chambers (1981) found that savings suggested from the consolidation of schools had not materialized. He also reported that in rural areas, where consolidation had taken
place, increased costs for distribution of materials and transportation of greater numbers of students offset any projected savings.

The research on the public school is not extensive, and some findings contradict each other. One of the reasons may be that size can be measured in various ways (Kimberly, 1976). How size is defined and measured will depend on the purpose of the study. The types of organizations that are reviewed are also a factor. Organization types found in the research journals include: service providers; schools, business; and, public entities. There should be a full range of organizations to sample when researching the effects of size on organizations, but such data are scarce (Freeman, 1986).

Clearly, public schools in the United States have gotten larger over time. Public school student population has grown since 1930 when there were 128,000 school districts with 262,000 schools. By 1972, there were 16,960 school districts with 90,800 schools (Guthrie, 1979). Therefore as students increased, school districts consolidated and became larger while the number of schools in the United States decreased by 171,000. The information indicates the remaining schools became larger in population and there were fewer schools serving the growing student population.

In a national study of 2,271 subjects living in 236 residential facilities for persons with mental retardation, the smaller residential settings (with five to eight persons) were less costly than for larger settings (with sixteen or more persons). An interesting note was that this study (Roteguard, 1983) also found that residential settings that were smaller then five to eight also cost more. This may indicate there is a range where settings can be too small for savings.
Business and Government

This section reviews the research literature available on how the size of an organization influences the costs of business and governmental organizations. Several articles in business publications discuss the size of corporations, but few explore the effects on costs. One field that examined the effects of the economy of scale was the banking industry. In banking, some studies showed that banks having assets of more than three hundred million dollars had experienced average operational cost growth, thus eliminating the effects of economy of scale (Ferrier & Lovell, 1990). A study (Bernstein, 1996) found that the economy of scale did exist even for the largest banks. Altunbas (1996) found evidence of economies of scale in banks in France, Germany, and Spain. Further, Altunbas (1996) found that breaking larger banks into smaller ones resulted in higher operational costs. Banks of all sizes were examined in this study.

In England, building societies, which are similar to American credit unions, with assets of less than two hundred and eighty million pounds can achieve statistically significant economies of scale. However, beyond this figure there are no further economies of scale found. In fact, this English study found that organizations of over one and a half billion pounds have significant diseconomies of scale (Hardwick, 1989).

Simper (1999) found there were significant economies of scale in Italian banks from 1982 to 1989 during deregulation of the banking industry. A study of county government impact on county residents (Christenson & Sachs, 1980) found that larger county governments, defined as public employees in government, resulted in higher public perception of quality services. This study covered 100 counties in North Carolina. The public perception in the Christenson study showed that larger governmental units
were more effective. Further, the study suggested that when people recognize an organization as being more effective, they consider it to be worth the cost.

Literature on Size and Structure

_Education and Social Services_

This section reviews research on how the size of an organization influences the structure of organizations in the fields of education and social services. From one point of view, as an organization gets larger and more complex, it appears that additional structures are needed to coordinate, organize and ensure that activities needed for the survival of the organization are operating as needed. Max Webber (1930) suggested that bureaucracy is essentially a technical solution to organizational situations that require the coordination of tasks, large groups of people, and organizational resources. Structures that are more complex could occur in response to difficulties in coordination and control generated by the larger organizational size (Grinyer, 1981).

The purpose of organizational design is to provide conditions that facilitate optimal attainment of objectives (Carzo & Yanouzas, 1967). Educational research into the size and the structure is difficult to locate. Increasing size promotes specialization in the schools (Lee & Bryk, 1989). As the sizes of schools grow more people are needed to assist with coordination, task completion, and to teach additional curriculum offerings.

Research shows that public schools are much larger than private schools (Ornstien, 1989). Eighty-four percent of graduates from private schools attend college while only sixty-four percent of graduates from public schools attend college (Ornstien, 1989). Size may not be the only reason for these results. Another study showed that student achievement is influenced by a facility's size, but the relationship between size
and achievement is weaker than for teacher characteristics (McPhail-Wilcox & King, 1986). These studies suggest that as an organization becomes larger, it changes to accommodate the need for increased communication, coordination, and resource management. The effects of this increase in size have not been researched in the fields of education or the social sciences to any great degree.

**Business and Government**

This section reviews research on how the size of an organization has an effect upon the organizational structure of a business and government office. As organizations merge, consolidate, or are designed to form into larger organizations, more people and positions are needed. Generally, in most fields more people are required to operate a larger organization than a smaller one. This increase in both staff and complexity leads to a more complex structure. Larger organizations may be different from smaller organizations in terms of the number of people needed to conduct the work. Pugh (1969b), a researcher in the business field, found that large organizations are highly structured and retain decision-making authority at higher levels. Other examples of structural differences include prominently independent organizations with highly integrated workflow(s). Pugh (1996b) also found loosely structured organizations to be comparatively small with decisions made by the owners.

The interplay between the decisions made by management and the organization’s context develops organizational structure. The context refers to the organization’s purpose, size, resources, technology, environmental dependencies, and type of ownership (Pugh, 1969). In another study, Pugh (1969) stated that the structure of the organization was closely related to the context in which it functions. Much of the variation in
organizational structures is explained by contextual factors such as those noted above including size. Another definition for organizational structure is the enduring system of consistent relationships among positions within an organization (Scott, 1981).

Researchers have had difficulty understanding the relationships between organizational structure and the variables of performance, attitudes, and effectiveness (Gibson, 1997). Gibson continues to say that many researchers use the dimensions of formalization, centralization, and complexity to describe structure. Other researchers have used tall versus flat organization structures for dimensions to study how size and structure interact. In one study conducted on large insurance companies, the same task given to tall and flat organizations with no significant difference was found in the time taken to complete the task (Carzo, 1969). This same study showed that the more time required for decisions to pass through multiple levels of a tall structures was offset by the time required to resolve differences and coordinate the efforts of many subordinates in a flat structure (Carzo, 1969). In the same experiment, the organizations with tall structures also did much better on measures of profit and returns on investment. The author suggested that in tall structures the leaders spent less time trying to coordinate with many subordinates and more time focusing on the main problems. Fewer subordinates for each leader characterize tall structures, whereas leaders have many more subordinates reporting to them in flat structures.

Some research shows that while an organization grows its structure becomes more complex with more personnel hires to perform necessary functions. The more complex the organization becomes the greater the need for uniformity of performance becomes. When labor tasks are divided and simplified, these require greater coordination (Scott,
 Organizations with complex bureaucratic structures have larger departments, when
the work was the most standardized (Woodward, 1965). So, organizations with repetitive
tasks had larger departments while organizations that had varied, or complex tasks had
smaller departments.

Organizational size has considerable influence on both diversification and macro-
characteristics (Grinyer, 1981). In this study, macro-characteristics are defined as
formalization, centralization, and span of control. Formalization refers to the number of
policies and standard operating procedures. Organizations that have more written policies
and procedures are classified as being more formalized. Centralization involves the
location of who makes decisions and where decisions are made within the organization.
“Span of control” is the number of staff directly supervised by each manager. Grinyer
(1981) found that more complex bureaucratic organizational structures happen in
response to difficulties of control and coordination, generated by the larger size.

Grinyer’s study is in line with Pugh (1969): that the size of the organization
relates to the structuring of activities. Another study (Pugh, 1969) suggested that
increasing structures is concomitant with increasing size. Reviewing two hundred and
sixteen industrial goods organizations (Jobber & Hooley, 1993) found that larger
organizations used more formalized methods of evaluation and made greater use of pre-
determined performance standards then did smaller organizations. Jobber’s study
suggested that organizational size be used as an explanatory variable in future sales
research.

Pugh (1992) examined fifty-two business organizations to compare the effects of
organizational structure on performance. Pugh could predict the internal structure of
organizations based on the size, technology, and dependence. The degree of dependence
factored analysis of size, representation on a controlling body, status as a branch office
and the number of services contracted out. The factors of organizational size, technology,
and dependence were more powerful in predicting the structure, then governmental
policy, historical events, or the personality of the founder of the company.

Literature on Size and Performance

*Education and Social Services*

This section reviews research conducted on how the size of an organization
influences performance in education and in the social services. The affects of the size of
the organization on performance have been measured in many different ways. A study of
1001 Texas high schools that measured the effects of school size on socioeconomic status
found that as school size increased, the mean for achievement of schools with
disadvantaged students declined (Bickel, 2000). This study was controlled for ethnic,
linguistic, socioeconomic status, size, cost, and curricular composition variables. In a
previous study, Bickel (1999) used 1996-1997 data from 6,288 Texas schools to examine
the dependent variable of mean achievement test scores with the independent variable
being school size and enrollment for the free or reduced-cost lunch. Again, statistically
significant and negative interaction effects were found. Achievement in schools with less
advantaged students decreased as the school size increased. Another finding was that
achievement levels for all students decreased as the size of the district increased.

Lee (1997) found that the size of the high school influences student achievement.
Lee found that students learn less in schools with fewer than 600 students as well as in
schools that are very large. The results of Lee's study showed a clear advantage for
students in moderately sized schools. Smaller school districts have better ACT and SAT scores, and larger school districts graduate a lower proportion of students (Jewell, 1989). Performance can also be measured in other ways. Smaller schools may have an advantage over large schools in terms of school climate, but larger schools tend to offer a wider array of curricular activities (Witcher & Kennedy, 1996). A paper by Raywid (1997) reviewing a series of studies involving 12,000 students in 800 schools concluded that school size had more effect on student achievement then any other controllable factor. (Castle & Shea, 1998) found that larger nursing homes could be an important factor in the quality of mental health care for nursing home residents.

A study by Coladarci (1996) found students attending a small high school, defined as less then 800 students, had higher extracurricular participation then students in schools of over 1600 students. But, Coladarci (1996) also found that school size had no effect upon academic achievement or self-esteem. Bracey (1998) found math achievement scores rose as school size increased to about 600 students. This holds steady to about 900 students and then reduces. Students gained more in high socio-metric status schools despite school size. The findings from these studies indicate that the effects of organizational size are not consistent across the research landscape. More study is needed to define the effects of size on organizational performance.

Business and Government

This section reviews research literature on how the size of an organization has an effect upon the performance of an organization in the fields of business and government. In a study of state employment services (Blau, 1971) found that as the size of the organization increased, as did the size of the units and the average span of control by the
managers. This increase in the size of the units happened at all levels in the headquarters, in the local offices and in their sections, from the agency director to the front line supervisors. In a study of 46 organizations, the structural variables of structuring activities, concentration of authority, and line control of workflow were examined (Pugh, 1969).

One question may be whether there are actual differences in organizations or in the outcomes for organizations that are of different sizes. Failure rates among New York life insurance companies, spanning from 1813 through 1985, were studied (Ranger-Moore, 1997). The results of this extensive study revealed that over a range of sizes, large insurance companies generally experienced low failure rates.

A statewide, decade long review of banks in Ohio found that very large banks had more problems with loan quality and poor profitability (Samolyk, 1994). Research conducted on the size of group homes for consumers with Mental Retardation is generally focused at the level of the living unit or on the number of consumers living together in one setting. Facilities with smaller living unit sizes provide more opportunities for individuals to make choices (Stancliffe, 1997). Overall, results that are more positive have been found when consumers are in smaller facilities then larger ones (Heller, 1998).

**Progressive Grocer** magazine carried out a nationwide survey measuring store performance in supermarkets in April of 1992. The results showed that on average the shelf footage in supermarkets had increased in size from 1982 to 1992. Sizes in shelf footage increased from 20,597 to 28,216 square feet. Also, the small stores went from selling 11,382 items to selling 18,540 items. Therefore, large-sized stores sold more
items. The survey results have also shown an increase in productivity, with sales per employee hour going from $74.63 to $86.07 in the average independent store. The weekly sales per square foot of selling space also increased from $6.20 to $7.93. Both of these are important productivity gains found, on average, across the country as stores increased to a larger size.

The present study carries this concept one step further, by questioning whether the size of the management organization has an effect on the performance of the staff. The literature in the field of mental retardation is very clear that smaller living facilities in community settings are good for the consumers (Conroy, 1996; Cullen, et al; Stancliffe & Abery, 1997). When plans are made for constructing or obtaining new living facilities, the results of these studies should be used to make decisions for the best possible care of consumers with Mental Retardation. A similar process is being explored in this study to find out if there is a difference in staff performance based on the size of the management company.

Summary

The research reviewed in this section indicates that there are effects of size on different organizations’ costs, structure, and performance. With worldwide competition, greater changes are imminent to American business and mental health areas. It is imperative, therefore, that when deciding for change these are made on an empirical basis and not on slogans or ideas that sound good on a theoretical level but have not been tested. Spending for services in business or government should be based on ideas proven through empirical findings on what methods work well so that limited funds can be spent efficiently. This study attempts to explore whether or not the size of the management
organizations for group homes influences the outcomes of staff meeting the criteria required staff performance.
CHAPTER III

METHODOLOGY

Introduction

There are two stages for this study. The first is quantitative, with a purpose to inquire into whether size and performance are related. The second is qualitative, with a purpose to explore the factors that are related to performance.

Methodological Framework

A Quantitative Study on the Relationship between Size and Performance

As costs associated with the residential care of persons with developmental disabilities continue to rise, the need to select the most efficient service providers grows. Methods for identifying such providers need to be developed. The present research explains one possible method of selection, which is the size of the umbrella management organization. If the size of the umbrella management organization was found to be a reliable predictor for the number of errors through annual surveys, then size, as a variable, could be used by agencies that spend public money to obtain these services.

The basic question for the first stage of the research is whether a difference in the size of an umbrella management organization has an effect upon the performance of the staff. In this section I will discuss the methodological issues for the first stage, which include sample; principal components of analysis; instrument; and, processes of data analysis.
Quantitative Research Methodology

Observing existing consequences, and searching back through the data to determine plausible causal factors, resulted in an investigation for possible cause and effect relationships. This causal-comparison is “ex post facto” in nature, meaning that the data were collected after all the events occurred. The researcher is taking the dependent variable back through time to seek out relationships, causes, and their meanings. This is in contrast to the experimental method that collects data under controlled conditions in the present.

A descriptive method of research was utilized in this case rather than a more traditional research approach, because of the lack of information about the relationship between the size of the management umbrella organization and the performance of the staff. The number of regulatory errors recorded in this case denotes performance of the staff. Using a descriptive research method allows the compilation of qualitative and quantitative data to produce valuable information in the hypothesis formulation about the relationship between the variables in the study.

Research Design

The first stage of this study was designed to answer the following question: is there a relationship between the size of the umbrella organization and the performance of its staff? A database from the State of Michigan was used to obtain performance scores for a sample of group homes and the size of each of each umbrella organization. The data collected from the database was compared in terms of the size of the umbrella organization and the performance of the staff. The instrument used in the study was a
government survey carried out once a year. This survey measured the number of regulatory errors found at each of the group homes. The results for each home could be assigned to umbrella organizations of various sizes. The mean scores of errors for umbrella organizations of various sizes could be compared to see if there was a relationship between the scores.

As noted earlier this type of research design did not provide any causal relationship between the size of the organization and the number of errors. This type of research does produce important information that may assist future hypothesis formulation in an area with very little existing research. If differences were found between the mean scores of errors in different sized umbrella organizations, this might indicate that some umbrella organization sizes are more efficient or more effective than others.

Variables

The quantitative independent variable and the measurement scale in the first stage of the investigation is the size of the umbrella organization. The size of each umbrella organization is measured in the number of group homes directly managed by that umbrella organization. An umbrella organization might manage from one to 18 group homes. A large umbrella organization would manage more group homes than a small umbrella organization. The smallest umbrella organizations would in fact manage only one group home. Each additional group home added to be managed would increase the management duties of the umbrella organization. The umbrella organizations managing 18 homes would function very differently from those managing only one group home.
The dependent variable in this study was the number of errors each home scored on a once a year compliance survey. This federally mandated survey was designed to insure, by a yearly measurement, that the group homes complied with Federal regulations. The only scores recorded on the surveys were errors. An error was defined as not meeting a specific regulation. The survey did not record positive scores of any type; it was designed as a negative outcome survey only. The numbers of errors were defined as the number of failures to meet regulations. Using the data it was possible to obtain the number of times regulations were not followed for each group home.

The survey format exactly mirrors the regulations written by federal authorities to meet the code of federal regulations concerning the group homes surveyed in this study. An error found in the yearly mandated compliance survey would correspond one to one with a regulation that was followed incorrectly. The same survey is completed across the United States by trained specialists, licensed in an allied health profession, who work for various state governments. The survey was designed by federal specialists to insure it clearly measured that the code of federal regulations was being followed. The number of errors obtained by each group home on the yearly surveys would be the dependent variable.

It could be hypothesized that variables such as levels of staff ability, pay differences for staff, staffing levels, physical setting differences, differences in procedures in each home, could be related to the outcome measure. However, these variables are somewhat controlled by the fact that this is a federal program that is administered by state government staff. The rules for this type of group home are extensive, standardized and closely monitored. Variance from the rules can result in the elimination of a group home.
from the program and elimination of funding. The physical home designs are similar and have to be built to exacting standards put forth in a small number of approved home architectural plans. So the physical layout is similar in each group home.

The budgets for staff salaries are very similar so discrepancies in staff pay are limited. The numbers of staff per shift are similarly affected since the budgets are all based on the same Federal staffing guidelines. Similar training requirements across all group homes are enforced yearly. The procedures in each home are based on extensive federal regulations and must be the same across the group homes sampled in the present study. Lastly, group homes selected for inclusion in the study were randomly chosen.

Pilot studies were not completed before the start of the present study. Little prior research exists in the mental health field on the affects of organizational size on performance. No research could be located in the area of developmental disabilities on using size as an indicator for future performance despite the fact that millions of dollars are spent annually for the residential care of people who have developmental disabilities.

The first stage of the present study is a very early attempt to explore whether findings or patterns found in other fields could be used to predict differences in performance of the umbrella organizations. It explores an area that has not been studied before and attempts to investigate if there is a pattern in the field of Developmental Disabilities that matches those found in business, education or government. Each of these fields has research showing differences in performance based upon the size of the organization. In these other fields research has shown a predictive effect of performance based on the size of the organization. So in many respects the present study is a pilot study taking a first look into an area that has not been explored before.
Selection of Subjects Sample

The sample for the present study consisted of 255 randomly chosen group homes. The number of errors found in each group home by the surveyors is the dependent variable. The Michigan Department of Consumer and Industry Services (MDCIS) obtained the scores for the 255 homes on the yearly licensing visit to each home. There is a total population of 476 group homes of this specific type in Michigan. The names and scores of the group homes were obtained from the official database kept by the MDCIS. Special permission to use the database was obtained from the State of Michigan. The database can be accessed through the computers in the Office of the Consumer and Industry Services, Lansing, Michigan. Permission was also granted to use the Office’s computers.

The first stage of the study included group homes that were Alternate Intermediate Service (AIS) group homes. AIS group homes receive specialized funding and comply with rules listed in the Code of Federal Regulations under the Intermediate Care Facilities for the Mentally Retarded (ICF/MR). Each group home, under federal regulations, has only four to six consumers with Mental Retardation. This makes AIS homes different from the several other types of group homes in Michigan.

The group homes used in this study are very similar to each other in design, staffing levels, type of consumer and budgets. This contrasts with other types of group homes not used in this study that have many different structural designs. Other types of group homes not used in this study may have up to sixteen residents living together. To be included in the group homes used in this study, the resident consumers also have to be the hardest to manage and to place in the community due to behavioral management.
problems or medical problems. These resident consumers needed full time care and supervision to be certified as appropriate to live in an AIS. The consumers who lived in the group homes used for the present study were considered difficult to care for and in need of intensive treatment.

The physical setting and residential population of the type of group homes used in the first stage of the study were very similar to each other. The homes were specially designed for fire safety and only a few architectural models existed. These same architectural models were replicated all over the state. So the physical layout was similar for staff members all over the state no matter in which organization they worked. The home budgets, amount and type of training, and staffing levels were also similar. The same regulations were in place for each home and every regulation had to be followed and certified for each home. After the Consumer and Industry Services survey team completed each survey the results were sent to the Federal government and Federal surveyors did random follow-up surveys. State government surveyors accompanied the federal surveyors for the random follow-up surveys.

The size of the umbrella organization was obtained from another database on the Consumer and Industry Services computer system which contained a master list of all group homes of this type and the names the organizations that manage each home. From this list, the size of each management organization based on the number of group homes managed could be determined. The sizes of management organizations ranged from managing only one home to managing twenty-eight group homes. The homes were located across Michigan, in both the upper and lower peninsulas.
Instrumentation

The instrument used in this study was the Survey Protocol: Intermediate Care Facilities for Persons with Mental Retardation (ICF's/ MR). The Health Care Financing Administration Health Standards and Quality Bureau developed this instrument. Instructions for this process are found in the State Operations Manual for Provider Certification published by the federal government.

The survey protocol, which is composed of a highly structured report format and an inspection process, was designed by the federal government to focus on the outcomes for beneficiaries. The beneficiaries in this process are people with mental retardation who are certified as being in need of extensive behavioral or medical assistance. The beneficiaries are the consumers who live in the highly regulated six bed group homes. Another term used for the consumers in the mental health literature is “residents”. The survey was also designed to identify the conditions of participation which identify the outcomes to be present for the condition to be met as well as the outcomes that would score a condition as not met. The term “conditions of participation” is defined as the group home meeting regulations well enough that the group home can be paid for the services it provides. Failure to fix any non-compliant item found in the survey would result in the provider not being eligible for payment from the government.

The survey protocol has eight identified survey tasks. The first task was to use a standardized formula to sample a proportionate representation of individuals by the four functional levels that are recognized by the AAMDS for classifications in mental retardation. The second task was to review the group home systems in place to protect consumers from neglect and abuse. Task number three was to carry out individual
observations of staff and the consumers. The fourth task was required interviews with family members, consumers, staffs and outside advocates. The fifth task was to observe the preparation of medications and the actual administration of the medications to consumers. Task number six was a visit to each area of the group home serving the consumers. This included a detailed assessment of physical safety. The seventh task was the creation of a written record of the survey in a standardized format. The eighth task was a team assessment of the findings with consensus conclusions about deficiencies. This included the decision on whether additional reviews or information were required. The number of failures to meet the requirements of the regulations, or errors found, on this report is the dependent variable in the present study.

The same survey protocol was completed for each group home in the population of Alternate Intermediate Service (AIS) group homes. Each of the group homes from the sample used in this study underwent the same yearly survey protocol. Each survey was completed by full time professional surveyors employed full time by the State of Michigan. Survey staff had to be registered nurses or hold a master's degree in social work, occupational therapy, or a similar allied health degree.

Extensive ongoing training was given to the survey staff with an initial three weeks of training in survey techniques and methodology, mental retardation and active treatment principles. The surveyors were assigned by administrative staff in patterns that would minimize relationships forming between the surveyors and the staff at the sites being surveyed. The survey teams were generally composed of one medical staff and one allied heath staff such as a social worker or occupational therapist.

Each group home knew the date the certification from last year's survey would
end. This was an important date since payment to each group home would end one year from the previous year’s certification. At some point, usually within a month of the expiration of the last certification, the group home would receive a phone from the survey team members. This call usually came one hour before the survey team arrived and was made to insure the group home would have a manager present to find requested documents. The surveyors would generally arrive mid morning, stay at the group home observing and interviewing people then leave late on the following day. The survey team would generally spend one and a half days at the group home.

A written report would arrive several weeks after the survey protocol was completed. This was the official report with the errors noted that were clearly tied to each federal regulation not met. The report did not use any identifying information about consumers or staff members. The number of errors on the report is the dependent variable used in the first stage of the present study. Failure to pass the survey protocol would result in no certification for the group home. Without certification the management organization could not be paid to care for residents. Without certification there would be no incoming revenue to designate to cover costs for care to residents.

The standard research results on the reliability and validity is not available on the survey protocol. The federal government relies upon the instrument to decide on payment for 476 group homes in the State of Michigan. The typical group home of this type is paid between two hundred and fifty thousand and three hundred and fifty thousand dollars a year for caring for the needs of four to six residents. This is a very expensive treatment option and the federal government put the survey protocol report and inspection process in place to insure that the group homes were meeting the regulations.
The federal government pays for 25 full time, professional, State of Michigan survey employees to monitor the group homes using the survey protocol. The State of Michigan survey employees would send the results of their surveys to the federal government employees. Federal inspection teams would then randomly check on the state surveyors using the same survey protocol. Spending millions of dollars on this process with a direct overview by the Health Care Financing Authority (HCFA) indicates that the federal government had confidence in the survey protocol as an instrument to measure results and to make huge financial commitments based on the results.

It is suggested that the management organizations would be motivated to do the very best to complete the tasks needed to pass the survey protocol. Each management organization should have put forth great effort to pass the survey. It is assumed that the number of errors on the survey protocol indicated the best practices that each management organization can put forth. The results should then serve as an indicator of the efficiency of each provider. The number of errors on the survey protocol gives the researcher a glimpse into how well each organization performs. The present study is researching a critical task directly related to management organization’s financial ability to keep billing the federal government.

Field Collection Procedures

Field procedures were not needed in the quantitative part of this study since no actual subjects were involved. The data were taken from a governmental database containing information that is public.
Data Collection Procedures

The data on the number of errors found on the survey protocol was obtained directly from the Michigan Consumer and Industry Services database used by Consumer and Industry Services (CIS) staff to track the number and type of errors from the previous year’s survey. Permission was granted to use CIS computers to obtain the data since the system is a closed computer system. The researcher was trained in the use of the database and computer system. Hard copies of all information were obtained. No identifying information on consumers or staff was stored on the database.

A second database was reviewed by the researcher with the identification and sizes of each of the umbrella management organizations. This comprehensive data base listed every AIS provider in Michigan. This information allowed the researcher to accurately measure the number of AIS group homes managed by each umbrella organization in the state. This provided the accurate size of each umbrella organization which is the independent variable in this study.

The databases used to gather the information are utilized by CIS professionals to track performance and insure payment to providers. The database is assumed to be accurate and up to date otherwise payment to each provider would not be processed. Both databases were highly accurate methods to obtain information on the dependent and independent variables. The number of errors obtained per group home represents the end result of an independent survey undertaken by highly trained professionals.

Qualitative Research Methodology

The second stage of this study was designed to answer the following question What are the factors that are associated with the performance of the organization?
Research Design

The procedure in the present study involved personal interviews to add qualitative information which help to provide additional information on any relationships found in the quantitative data. Qualitative research methods according to Glesne, (1992), allow us to know and understand different things in the world. Patton (1990) has commented that researchers can successfully combine qualitative and quantitative approaches. Seidman (1998) states that research interest has many levels in many cases and multiple methods may be appropriate. Seidman further points out that interviewing is most consistent with human subject’s ability to make meaning through language.

The researcher interviewed a number of staff as shown in figure 3.1. Eight key questions were developed to help explain the findings of the quantitative data and to broaden the understanding of this area.

The same design was used for the two homes from large umbrella organizations. Staffs were interviewed from a large umbrella organization group home with few errors and a group home with many errors. The staffs interviewed were representative of staff in the four group homes and were responsible for the duties associated with errors on the yearly survey. To insure comfort for the interviewees and accurate information, confidentiality was assured for answers made by each interviewee. Nothing that could identify an interviewee was presented in the research results. All names, locations, and position titles were not included in the results of the present study.

Subject Selection

The interviewees were chosen from four group homes. The first group home was from a small umbrella organization with few errors. The second from a small umbrella
organization with many errors. This procedure was carried out so that a comparison could be made between the staff members of umbrella organizations of similar sizes but with different error rates. Qualitative research attempts to make sense of personal stories. By interviewing these two groups of staff members a comparison could be made of what factors the staff considered to be associated with the performance of the organization.

**Instrumentation**

Eight questions were designed for the second stage of the study. The focus of the second stage is on the factors that are associated with the performance of the organization. Eight questions were developed to fit the topic and to elicit responses concerning factors that are associated with performance in the organization. The questions were free from loading meaning or leading the interviewee. Open ended questions were used in clear understandable terms. The questions focused on the areas of staff hiring, initial training, on-going training, and procedural manuals. The questions also asked about staff turnover and the results of the previous yearly review.

**Data Collection Procedures**

For the qualitative part of this study the researcher visited four group homes and interviewed six staff members at each group home. The same structured series of questions was asked of each staff member and the responses were recorded. The questions were asked in the same order for each of the interviewees. The interviews lasted from five to twenty minutes. The researcher met with each interviewee only one time.

The interviewee was given a brief overview of the study. The interviews took
place in a secluded part of the group home where the answers given could not be overheard by others. The interviews were tape recorded and later transcribed for analysis.

Data Processing

The responses made by the interviewees were analyzed using qualitative methods. The information obtained may be helpful for future research. Responses obtained using qualitative methods are not analyzed using statistical procedures. The qualitative methods seek to make sense of personal stories and the ways in which they intersect (Glesne, 1992).

The responses from the staff were analyzed according to the differences between the high error and low error rate group homes. The data are coded according to the error rate of the group home. Patterns were searched for in seven specific content areas. These areas include the hiring process, initial and ongoing training, use of policy and procedure manuals and staff turnover. Other areas of specific content include being informed of the results of the survey and knowledge of specific weaknesses reported on the survey. A general content area question was asked to elicit information unforeseen by the researcher. This question asked the staff to describe what might be different about their organization compared to others.

The responses were coded and analyzed to focus on how the high error rate and low error rate group homes are different. The results of this analysis are reported later in the present study.

Methodological Assumptions

The qualitative part of the study was designed to broaden the understanding of the
results of the quantitative part of the study. The use of qualitative methods allows interviewees to tell their stories and open up the possible variables that can help the researcher hypothesize the important factors and assist other researchers in this unexplored area.

Limitations of this Study

The present study is a first look into an area that has not been explored in the field of mental retardation. It is an initial attempt to locate indicators that may help in the selection of efficient residential provider classes. Currently few indicators exist to help with the selection of millions of dollars of services in residential care.

The inclusion of more interviewees may increase the amount or type of information that would be helpful for future researchers. Due to the high number of comments the responses were grouped together according to similar themes. Examples of each type of response were included in the appendix. A sorting bias might exist which may limit the categories listed.

Summary

In summary, the methodology used in this study is appropriate based on the problem identified and the rationale for the study. The quantitative part of the study compares how umbrella organizations of different sizes perform. The qualitative part of the study examines how the staff perceive the duties they carry out in both high and low error rate settings.
<table>
<thead>
<tr>
<th>Size of Group Home</th>
<th>Low Error Rate</th>
<th>High Error Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Staff</td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Large</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 1: Qualitative Interview Design
CHAPTER IV

FINDINGS

Quantitative Results

A total of two hundred and sixty two group homes were sampled from a population of four hundred and seventy four group homes. Fifty-five percent of the population was included in the sample. For the purposes of this study, sampling fifty-five percent of the population is acceptable.

The mean numbers for group homes managed by small, medium and large umbrella organizations are listed in table one. This enables the reader to intuitively examine the size of the umbrella organizations compared in the quantitative part of this study. The complexity of interactions would seem to increase as more group homes are managed. For example, managing one group homes with 11 staff would be different from managing 12 group homes with 132 staff or 18 group homes with 198 staff members.

An analysis of variance (ANOVA) was performed to determine if there was a significant difference between the size of the umbrella organization in the performance of the individual group home scores. Analysis of variance allows us to compare the means of more than two samples. The mean of yearly errors were 2.9 for homes affiliated with small organizations, 2.4 for homes affiliated with medium-sized organizations and 2.1 for homes affiliated with large sized organizations. The results are listed in Table 3 and indicate that no significant difference exists between the variables. This means that the
size of the umbrella organization was not a statistically significant factor in explaining why some group homes scored well and others poorly. It is likely that other factors may have a more significant effect on the differences in performance. To explore other possible factors the second part of this research was undertaken. The second part of this research involves a qualitative approach interviewing staff from high and low error rate group homes. The qualitative approach will allow the researcher to examine high and low error rate group homes from the perspectives of the staff that carry out the day to day duties. The error rates in these duties were used as variables in the quantitative portion of the research. This may help future quantitative researchers select variables that are reported as important by the individual staff that carry out day to day operations.

Qualitative Results

A summary of the main themes from staff interviews is included in this chapter. The interviews with staff were recorded and transcribed. The responses to each of the eight questions were grouped according whether the staff was from a high error rate site or a low error rate site. The information provided in the interview process was gathered for the purpose of allowing the researcher to get a better idea of what the quantitative research had revealed.

The findings of the quantitative analysis indicated that the umbrella organization’s size did not affect the error rates on the yearly quality compliance review. The qualitative part of this study is designed to probe for possible differences between high and low error
rate sites. The questions in the interviews are asked of the staff members who carry out the daily work in the sites. The questions are designed to measure the perceptions and the importance of activities to the staff. The interview questions ask the staff about hiring practices, ongoing training, use of the policy and procedure manuals, and the amount and type of feedback from management on the yearly quality survey.

The responses obtained during the staff interviews were rich in information but the physical act of interviewing the staff was even more interesting. The researcher noticed upon each arrival a difference between the high error and low error rate homes. The low error rate sites were quiet and the high error rate sites were noisy to the point that it was hard to tape record the interviews despite sitting close to each staff member in a separate area of the site. All of the staff was cooperative but the low error rate site staff had a depth of knowledge that led to extended answers sometimes in great detail. Most of the high error rate site staffs were friendly and considerate but answered very briefly with long pauses before answering.

Sometimes a startled look was evidenced in high error rate site staff when certain questions were asked such as the frequency of the use of the policy and procedure manuals. The same behaviors manifested when questions were asked about the management feedback on the yearly quality compliance. There were also some disagreements in the responses from the high error rate group such as the comments from the same site that staff meetings were held constantly, twice a month, monthly or every other month. It should be noted that all of the sites were clean, comfortable and the clients under care were well treated.
**Interview Questions**

1. **Tell me about the process you went through to be hired at this organization?**

   It appears that for low error rate organizations the staff equate the hiring process with training. Almost every low error rate site staff mentioned training in response to this question which does not include any reference to training. One staff mentioned 15 different types of training that were a part of the hiring process. Other staff mentioned training duration in terms of weeks, specific types of training and that training is specific to each client under their care. One staff stated “we had to take these modules which are the papers to learn how to do things”. Another stated “we learn with the modular”. Still another said, “How you take care of different people with different disabilities.” Another staff stated: “how to deal with their behaviors, each person has different behaviors”.

   Few staff persons in the high error rate sites mentioned training in regard to the hiring process. Those that did mention training were very brief with a one-sentence answer. Instead they talked mostly about the interview process. One staff mentioned “I did an interview, pretty basic”. Another mentioned “then had an interview with X and then that other lady Y so there were two who interviewed”. Another stated “I went in and filled out an application and I did an interview, pretty basic”. Other staff talked about where they came from, such as, the one staff who commented “I came to the organization out of high school to get to where I am now”.

2. **What type of training did you receive when you first started?**

   The low error rate staff continued to focus on training which in many cases was detailed such as the three different types of medication training or the dangers of misuse of certain physical management techniques. Most low error rate staff gave extensive lists....
of subjects they were trained in and the fact that certain amounts of training had to be completed before working directly with a client. One staff mentioned “I had first and foremost a job description of the things I was to do”. Further the staff stated that “I believe I did 40 some modules” and “all the print material before I was ever hands on the job”. Two of the staff mentioned the existence of a mentoring process “then I had a person assigned from the home to guide me and to the needs of each individual in this home according to their needs”.

The high error rate site staffs gave much shorter lists of the topics they were trained in and little detail was given on the types of training. These were mostly brief responses of one sentence or two with no elaboration. The same few topics were mentioned by each staff member. For example one staff stated “we did first aide training, medication passing, and some other things”. One staff made the statement “my first day was here in the house, here are the clients, here is your job and there you go, and then it went from there”. That same staff stated there were a lot of classes but that “well our training, our training is not completed for like six months”. The shortest response came from a high error rate staff and that was “I had several classes”.

3. Explain the amount and type of ongoing training you receive.

Two of the low error rate site staff described how changes are incorporated in training for staff. Others talked about the procedures to notify staff of changes and how the monthly meetings are used to teach changes and to review the company values and mission. Monthly training was mentioned along with many specifics including the term continuous learning. One staff mentioned “anytime anything changes, they will do a test or a modular”. Another staff said “we recently had a person come in with a history of
seizures so I had to do a modular on this specific type of knowledge". One staff said "I received self defense, med passing, food preparation, home living skills for the clients, how to pass meds, first aid, and CPR. Yeh, like first aid, CPR you have to have self defense every so many years".

The high error rate site staff mentioned a few standard areas of training and that updates are delivered to staff members. The answers were again short and there was some confusion in one site that had staff indicate that training took place either all the time, three or four times a year or every other month. It is clear that training did occur on a regular basis at the high error rate sites but not at the same intensity or breadth as in the low error rate sites. Confusion does exist since at one site one staff said "training was once a month". Another said "we have training all the time, a couple of times a month at least, about everything". Yet another stated "Oh three or four times a year we have staff meetings where we have different types of training". Some of the one sentence answers to this question were vague such as "we get like little things like looking around the house and making sure we know where everything is at. Like how to take care of everybody".

4. How often do you use the policy and procedure manual in the group home?

Several of the staff in the low error rate homes explained what was in the policy and procedure manuals and most indicated it was the first place to go to check out a question. One staff explained how it was labeled, making it easy to find answers. One staff reported rarely using it. It was also mentioned that portions of the manual are reviewed at every staff meeting. As one staff said "we usually go over some policies in the staff meetings". Another stated "that is the first place you need to go". A staff stated that "we use them quite often because we have to go back and I mean sometimes we
forget things”.

The high error rate site staff had a number of staff who reported using it seldom; one self reported knowing the information already; and a few reported using it every day. When asking staff from the high-error rate group about with what frequency the policy manual was used, they drew a number of blank stares and delays in responding. There was little elaboration in some of the responses where the entire answer was “everyday” or “daily”. Two staff responded “seldom” or “very seldom”. Another staff said “I don’t know” then clarified that to “once every couple of weeks or so”. A few of the staff were clear that “we have to understand it, and we have to know it”.

5. How long have you worked here and how do you see the staff turnover?

The average length of stay for the two groups is very similar. All of the sites have a few staff with a long seniority, ten to twenty years, and the rest of the staff has various lengths of stay. The answer to the part of the question on how the staff sees staff turnover is inconsistent among all sites. Each staff person gave contradictory answers to the answers of other staff who worked at the same site. Staff perception of turnover rates is inconsistent among all sites.

6. Does anyone go over the specific results of the yearly licensing review?

Ninety percent of the low error rate site staff reported that someone went over the specific results of the yearly licensing review with them. Most stated that the manager or supervisor reviewed the results of the yearly review with them. One staff discussed the procedure used to inform staff to “make sure that we do a plan of correction immediately”. Another staff said “the management does. They go over that with us and let us know how we did and what needs to be done”.
Forty percent of the high error rate site staff reported that someone went over the specific results of the yearly licensing review with them. One staff stated “I don’t think anybody ever does. Mostly we just hear rumors”. Another said “I don’t think so”.

Another staff mentioned “years ago they did, yeah, not so much now”. Other responses by different staff included statements like “I wouldn’t know that” or “No, I don’t know”.

7. **Do you know the weaknesses reported on the last yearly survey?**

(Additional prompts for this question included: What factors contributed to the successes on the survey? What factors contributed to the weaknesses on the survey? What could your organization do to improve the weaknesses? )

No clear answers were obtained from either the low error rate or the high error rate groups. The low error rate groups had few if any errors reported on the yearly survey so they had little to say to the researcher. The staff from the high error rate had not been given any feedback that they recalled so they had no answer for the question. Responses consisted of either a “no” response or shrugs, stares or a loss of eye contact with the researcher.

8. **What might be different about this organization compared to others?**

The low error rate site staff made comments about openness to sharing problems, home like environment, and wanting to please the employer because the employer is good to them and understands the employee’s personal life (single mother). There were also comments on “it is a small caring organization even though it is big organization” and “this place is like my second home”. Other comments were on “the upper management is approachable about anything” and “the company chooses staff that really cares about the clients”.

54
The high error rate site staff made comments about having a union, location of the site, small community setting and being a close knit group. Others mentioned “we have demanding clients”. One staff noted “having no clue” and another about “not knowing a difference”. Another made a comment about being a smaller organization and two others answered with shrugs and no reply. The high error rate group had brief answers if an answer was given. The results of the qualitative analysis are summarized in Table 4.

It should be noted that all of these staff were friendly and hospitable. They had volunteered to take part in the study. The researcher was invited into each site and the staffs were cooperative and cordial. Each staff was cooperating fully but varied in some way in the perception of their organizations. They also varied in the way that they responded to questions based on whether they were from a low error rate or high error rate organization. Size as studied in the quantitative part of this study had no effect on the placement of group home into a low or high error rate environment. But clearly some variables were at work effecting staff performance.

Summary

Data analyzed in the quantitative part of this study indicated that there is no relationship between the size of an umbrella organization and the number of errors made by the staff members. A review of the literature showed that some studies indicated that larger umbrella organizations performed better than smaller ones. In other research studies smaller umbrella organizations were found to perform better. The data from various studies are conflicting and at times confusing. This study did not support either of these positions but found rather that the size of the organization’s were not linked to the staff performance.
The qualitative part of this study then explored possible reason for why some sites perform with few errors and others with high error rates. Clear differences in responses were discovered between the staff in some of these areas. Staff members clearly perceive differences in the way that they see their organization and their job. The staff speaks differently about the way they see the hiring, training and feedback processes in their organizations. These differences in perception and attitude may be the reason for the improvement in performance between the two sets of staff. Further research is needed that will focus on the variables studied in the qualitative part of this study in order to ascertain which variables are the most important to improving performance. Staff members who make fewer errors are an important goal for any organization. Some errors such as medication errors can be dangerous and costly. Organizations that use the proper hiring, training, feedback and policy procedures may decrease error rates. There was considerable difference between the two types of staff interviewed in this study. Organizations should review the variables in the interview and attempt to utilize them in a way to maximize staff performance.
<table>
<thead>
<tr>
<th>Umbrella Organization Classification</th>
<th>Mean Number of Homes Managed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Organizations</td>
<td>2.1</td>
</tr>
<tr>
<td>Medium Organizations</td>
<td>6.5</td>
</tr>
<tr>
<td>Large Organizations</td>
<td>12.4</td>
</tr>
</tbody>
</table>

Table 2: Means for Small, Medium and Large Umbrella Organizations
<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>117.097</td>
<td>14</td>
<td>8.364</td>
<td>.555</td>
<td>.898</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3707.730</td>
<td>246</td>
<td>15.072</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3824.828</td>
<td>260</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Results of ANOVA*

* mean for small organizations = 2.9 homes; mean for medium organizations = 2.4 homes; mean for large organizations = 2.1 homes.
<table>
<thead>
<tr>
<th>Low Error Rate Group</th>
<th>High Error Rate Group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hiring:</strong> Linked strongly with training</td>
<td><strong>Hiring:</strong> Linked to interview process</td>
</tr>
<tr>
<td><strong>Training:</strong> Considerable comments with great detail elaborated by the staff</td>
<td><strong>Training:</strong> Little detail or elaboration</td>
</tr>
<tr>
<td><strong>On Going Training:</strong> Elaboration of details with many specifics, organization values and mission discussed</td>
<td><strong>On Going Training:</strong> Inconsistencies between staff, less detail and specifics as to what is trained.</td>
</tr>
<tr>
<td><strong>Policy and Procedure Manual Usage:</strong> Higher frequency of usage, details given as to how to utilize the manual.</td>
<td><strong>Policy and Procedure Manual Usage:</strong> Lower frequency of usage if at all, no details on use of the manual.</td>
</tr>
<tr>
<td><strong>Length of Employment / Turnover:</strong> No difference / Inconsistent perception by staff.</td>
<td><strong>Length of Employment / Turnover:</strong> No difference / Inconsistent perception by staff.</td>
</tr>
<tr>
<td><strong>Feedback Received on Yearly Survey:</strong> Yes for all but one staff</td>
<td><strong>Feedback Received on Yearly Survey:</strong> No for most staff</td>
</tr>
<tr>
<td><strong>Aware of Specific Weaknesses on Survey:</strong> All were aware that home had been cite free and had done well.</td>
<td><strong>Aware of Specific Weaknesses on Survey:</strong> Only one third of staff had any idea of specifics.</td>
</tr>
<tr>
<td><strong>Aware of Differences from Other Organizations:</strong> Longer more detailed responses but both types of organizations had staff say nice things about their organizations.</td>
<td><strong>Aware of Differences from Other Organizations:</strong> Shorter responses but both types of organizations had staff say nice things about their organizations.</td>
</tr>
</tbody>
</table>

Table 4: A Comparison of Responses Made by High Error Rate Groups and Low Error Rate Groups
CHAPTER V

SUMMARY AND RECOMMENDATIONS

Introduction

The present study is an attempt to help administrators in the field of mental retardation to more effectively work in a managed care setting in the same way as the administrators in the mental illness field. Through managed care methodologies the mental illness field has developed protocols based on client outcomes that allow decisions to be made about treatment based on firm statistical models. This type of decision making approach is lacking in the mental retardation field. This study is an initial inquiry toward such a decision making model using existing measurement processes.

In 1998, the federal government mandated an end to a thirty year history of clients paying for mental health services on a fee for service basis. Instead state agencies were to be paid by the government on the basis of a managed care model. Under the fee for service model the more an agency billed for services rendered the more money the agency obtained. Under a managed care model a set amount of money was given per month for each client and no more. In effect the change put mental health providers on a tight budget, a budget that could not be increased even if more services were provided. The agencies were paid the same rate whether clients needed few services or many services.
The danger of such a model is that if an agency has a large number of expensive clients then the budget can be depleted. Mental health services are generally divided between programs that serve the mentally ill and the programs that serve the developmentally disabled. Early in the change over to a managed care model, the programs that served those with mental illness developed programs which significantly reduced the costs of care. For example Empirically Validated Procedures (EVP) were adopted that allowed empirical certainty in decision making. Decisions could be made about the cost and course of treatment based on objective criteria. That same precision did not appear in the programs which served the developmentally disabled. The present study is an attempt to generate criteria which would allow greater empirical certainty in the developmentally disabled field specifically in the subset of that field that serves those with mental retardation.

The present study examined the relationship of organizational error rates to the organizational variable of size. Many experts in the mental health field considered the size of an organization to be an indicator of performance. From 1995 until 1999 in conference after conference the topic came up repeatedly on the need to have small residential providers merge with larger providers in order to improve performance and survive the change over to a managed care environment. No credible research literature existed to support such claims just a litany of speakers at conferences set up to prepare mental health agencies to succeed in the managed care setting. No official position papers were generated by the State of Michigan on this topic. Yet many residential providers were concerned about their organization surviving because they were considered too small.
If the experts were correct and a predictive relationship existed between the size of the organization and the errors emitted by staff, then this variable of organizational size could be a predictor useful for selecting residential providers. Scarce resources would not have to be used for marginally effective providers and selection criteria could be designed to contract with only providers of a certain size.

A review of the research literature on size and performance indicated contradictory findings. In the present study three sizes of organizations were examined. In this way the effects of various sized organizations on staff error rates could be explored. Some research indicated that small organizations were better and other research indicated that large organizations were better. There was even some research on school size that indicated that schools which were too small or too large were not as successful as medium sized schools.

Summary

To study the effects of size on performance the error rates of over two hundred and fifty group homes were compared for various sized organizations. The errors were obtained by professional evaluators who were independent of each group home. The criteria used for each home were the Federal regulations which each home had to follow in order to secure funding for the following year. The size variable was studied by comparing the size of the umbrella organizations which managed the group homes. Some umbrella organizations managed only a few homes and others managed many more. The present study was designed to look for significant differences in performance between organizations of different sizes.
The quantitative part of the present study found that there were no significant differences in the error rates for the umbrella organizations managing the group homes. The results of this study indicated that whether an umbrella organization was large or small, statistically the performance was not significantly different. This study would not support the idea that the size of an organization would serve as an effective selection tool in any decision making model for managed care. To be useful in decision making a variable would need to be found that indicates significant differences between options.

The results of this study show that the size of an umbrella organization does not help with selection of high or low error rate group homes. But perhaps other variables exist that would help to provide a useful decision making model. To help to discover other possible useful decision making indicators, the second part of this study a qualitative component was undertaken.

A qualitative component was added to explore the differences in the group homes that had low error rates and those that had high error rates. The qualitative part of this study focused on the differences between the levels of error rates and did not consider the effects of organizational size. Since millions of dollars of residential services are contracted for each year it would be in the best interest of the government to have indicators of what makes a group home a low error rate site. Such information may help with the selection process.

The findings of the qualitative part of this study indicated clear differences between high error rate and low error rate group homes. There were extreme differences in the staff perceptions of the hiring process and ongoing training. The low error rate staff talked exclusively about the hiring process in terms of training. They discussed the
process of learning the job and mastering the skills. The high error rate staff only talked about the interview process or how many supervisors asked them questions at the interview. The low error rate staff talked at length about the process with energy and pride while the high error rate staff gave brief answers with little energy and pride. The low error group saw the entry into the organization as the mastery of a challenging set of skills. To the high error rate group the responses indicated the steps were a typical hiring process.

Another interesting area was the difference in perceptions between the low error and high error rate staff on feedback given to them about the yearly evaluation. The low error rate group had been given feedback on the performance of their group home on the previous yearly evaluation. In fact some staff made comments about the method by which the results were sent to the family members of the clients under their care. They also could give multiple ways in which the feedback was given to the staff. Most of the high error rate staff had not received feedback on the yearly evaluation performed by the state. This yearly evaluation is the key report card on the group homes performance. Yet many staff in the high error rate homes had no clear idea about the evaluation, nor were they given feedback on the results.

The use of the policy and procedure manual was another sharp contrast between the two groups. The low error rate group reported using the policy manuals at a high rate to find answers to treatment questions. Without further questioning by the researcher a few of the low error rate staff volunteered as a part of their answers the details of how to use the policy manuals and how they were laid out. The high error rate group were physically startled by the question and reported a lower usage rate if it was used at all.
Some of the high error rate staff seemed to be trying to make up an answer on this question. The way in which the answers were given indicated to the researcher that the policy and procedure manuals were not used very often in the high error rate homes, but were an integral and frequently used item in the low error rate group homes.

The area of training also showed a notable difference in the responses between the two types of staff. The low error rate staff made a considerable number of responses to this question. The low error rate staff elaborated their answers with specific details of the training. Some of the staff also discussed the organizational values and mission. The high error rate staff gave little elaboration and details. There were also noted differences between the high error rate staff such as how often training took place. Some staff said formal staff training took place weekly; others said monthly and still others said every few months. The high error rate staff also gave few details and specifics as to what was trained.

**Recommendations for Future Research**

Future research is needed to better isolate the variables uncovered in the qualitative part of this study. Leaders in the mental health field would find the results of additional studies helpful. Additional research may uncover variables useful for deciding which provider to use for contracted services. The concept of umbrella organization size being used for selection of providers has appeared sporadically in state wide conferences and in speeches by experts. It appeared that the mental health field might be following the lead of the business field which uses economies of scale to improve service provision.

Additional study in this area is needed to explore variables that would help in the
selection of high quality providers. As shown earlier there is less money from the government to pay for services to dependent populations. Variables such as staff use of policy and procedure manuals, systematic performance feedback to staff by management and the systematic training of staff can be measured. The measurement of these or similar variables could be used in the selection process for providers. More efficient and effective providers should translate into lower costs and better care according to the overall theory of quality improvement. At the moment few if any selection criteria were evident in the literature or in actual practice. The process now appears to be run by political and historical association processes. These may not be the best methods of provider selection in a period of shrinking budgets and a managed care environment.

Selecting a high quality provider can be done by expanding upon the variables from the qualitative part of this study. It was very clear to the researcher by the actual comments, expressions and pauses in answers made by the staff members at the high error rate group homes that certain practices were not often used. Further research is needed to explore variables that exist in the low error rate settings and how this differs from the high error rate settings. Additional research would clarify what factors clearly differentiate the settings that make few errors and those that have higher error rates. An instrument to differentiate the two could be developed that would assist government selection of providers. This would help decision makers to measure and to focus on the important characteristics. It might also help providers to focus their management efforts on specific staff behaviors which pay off with increased performance.

In view of the limitations of this study, it is recommended that the study be replicated across more than one year. Another area that may offer additional insight is the
exploration of other long term care types of facilities such as nursing homes or assisted living facilities. Nursing homes now have computerized central databases which allow comparisons of yearly performance on compliance surveys. That population also is vulnerable as was the population of Developmentally Disabled consumers managed in the group homes used in the present study.

**Recommendations for Policy**

Highly dependent populations of consumers that cannot speak for themselves need research to insure that they receive high levels of service provision. Leaving provider selection decisions to concepts that “larger providers are better able to meet consumer needs” are no better than saying that “smaller providers are better able to meet consumer needs”. Each statement above has become a mantra, a repeated phrase. Each mantra has a large following based on the concepts of either a bigger organization has economies of scale or a smaller organization is more person centered. The present study found neither statement to be true in the population studied. The fact that no relationship was found despite contrary statements by some experts may present an area for further study. More research is needed to replicate the findings or to clearly show that one set of selection variables is superior to another. We owe this to the many dependent clients served by our public residential entities.

Less money will be available for dependent populations. Increased funding for Medicare, Medicaid, Social Security, aging persons and single families has had an impact on the overall funds available. Seventy million baby boomers will retire between 2010 and 2030. This is a group that will need to draw resources from all of the areas above.
Seventy million boomers who now pay for their own insurance will go onto Medicare and some will need Medicaid. Most will need additional services for aging people and social services. The seventy million boomers will be drawing from the social security system which also provides considerable financial support to those with disabilities.

The future is very certain in terms of the increased demands for the limited dollars currently used to serve special populations. Group homes will still need to exist for those with custodial needs, severe behavior problems and medical needs. The most expensive type of client to serve are traditionally those that need 24 hour care in a residential setting. The population of people with mental retardation continues to grow older and supports for aging will also be needed for them. All of this points to the need to use public dollars wisely so that more people can be served with the same amount of money.

The main idea behind this study was to look at which size organization had the lowest staff error rate. Size was not found to be of statistical importance in differentiating organizations but other variables were indicated by the qualitative part of the study. While the size of the umbrella organization was not an indicator of performance the other variables may be a start toward selecting residential providers. The programs that deal with people with mental retardation will need to find empirically validated procedures similar to those used by the programs for people with mental illness.

The present study reflects a start in that direction; additional work is needed. Changes must occur before budget shortfalls begin to influence programs. Selection methods to find and contract with the residential contractors who make the least errors need to be studied and put into use before 70 million baby boomers begin to compete with the residential programs for funding. It should also be noted that the average age for
the population of the United States is also growing older. Demographic research again shows projected increased competition for government funds. Policy in the residential care area needs to shift to the improvement in the selection process. The selection of residential contractors needs to be based on scientifically measured success factors.
APPENDIX

Protocol Clearance from the Human Subjects Institutional Review Board
Date: August 25, 2003

To: Gary Wegenke, Principal Investigator
   Randy Parker, Student Investigator

From: Mary Lagerwey, Chair

Re: HSIRB Project Number: 03-07-15

This letter will serve as confirmation that your research project entitled “The Differences in Performance Between Large Organizations and Small Organizations in Mental Health” has been approved under the expedited category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: August 25, 2004
BIBLIOGRAPHY


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


Bibliography—Continued


Bibliography—Continued


Bibliography—Continued


Bibliography—Continued


79


