

Predictors of Well-Being and Social Integration in Residential
Facilities for the Chronically Mentally Disabled

by

Linda Cantelon

A Thesis presented to the Faculty of Graduate Studies
University of Manitoba
In Partial Fulfillment of the Requirements
for the Degree of

MASTER OF ARTS

Winnipeg, Manitoba

(c) Linda Cantelon, 1988

Permission has been granted to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film.

The author (copyright owner) has reserved other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without his/her written permission.

L'autorisation a été accordée à la Bibliothèque nationale du Canada de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur (titulaire du droit d'auteur) se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation écrite.

ISBN 0-315-47988-4

PREDICTORS OF WELL-BEING AND SOCIAL INTEGRATION IN RESIDENTIAL
FACILITIES FOR THE CHRONICALLY MENTALLY DISABLED

BY

LINDA CANTELON

A thesis submitted to the Faculty of Graduate Studies of
the University of Manitoba in partial fulfillment of the requirements
of the degree of

MASTER OF ARTS

© 1988

Permission has been granted to the LIBRARY OF THE UNIVERSITY OF MANITOBA to lend or sell copies of this thesis, to the NATIONAL LIBRARY OF CANADA to microfilm this thesis and to lend or sell copies of the film, and UNIVERSITY MICROFILMS to publish an abstract of this thesis.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

I hereby declare that I am the sole author of this publication.

I authorize the University of Manitoba to lend this publication to other institutions or individuals for the purpose of scholarly research.

Linda Cantelon

I further authorize the University of Manitoba to reproduce this publication by photocopying or by other means, in total or in part, at the request of other institutions or individuals for the purpose of scholarly research.

Linda Cantelon

ABSTRACT

The present study investigates the qualities of community-based residential facilities and their operators that contribute to the functioning and well-being of residents. Specifically, perceptions of restrictiveness, expectations, adherence to authoritarian and benevolent beliefs, family-like qualities of the facility, and size of facility were examined with regard to several dependent variables. These variables were global quality of life, quality of living arrangements, external integration, internal integration, and psychopathology.

Findings provided support for external integration being associated with a family-like atmosphere, low operator expectations, and a moderate number of residents per facility. Internal integration is associated with operators who have a nonauthoritarian belief system and facilities which have medium to large numbers of residents. Quality of living arrangements is associated with a family-like atmosphere, few restrictions, operators with benevolent beliefs, and facilities which have medium numbers of residents. Findings were also discussed with regard to methodological issues, sample size, relevance of confounding variables, and directions for future research.

ACKNOWLEDGEMENTS

I would like to thank several people for making it possible to complete this thesis. I am grateful to my thesis supervisor, Bruce Tefft, for his hard work and thoroughness. I would like to thank my advisor, Jim Nickels, for his support and encouragement. I would also like to thank my other committee members, Barry Trute and Alex Segall, for their help.

I am indebted to Tom Walters, previous Director of the Mental Health Directorate, who gave his approval for this project, and to the regional resource coordinators Claudette Moquin, Marnie Barker, and Keith Lashley for their assistance. I would also like to thank the mental health workers who assisted with compiling the eligibility list. Most importantly, I am grateful to the residents and operators of the facilities. Without their participation, this project would not have been possible.

My friend, Pat Rycroft provided invaluable support and assistance throughout this study. I would also like to acknowledge my raters, Orysia Kostiuik and Sandra Dean for their efforts.

Finally, I wish to acknowledge my husband, Len Greenwood, who has provided unwavering patience, support, and assistance throughout this project.

CONTENTS

ABSTRACT	iii
ACKNOWLEDGEMENTS	iv

	<u>page</u>
INTRODUCTION	1
Definition of Terms	2
Effects of Deinstitutionalization	5
Historical Trends in Residential Treatment	11
Description of the Chronically Mentally Disabled	13
Quality of Life As An Outcome Measure	25
Quality of Life of the Chronically Mentally Disabled	32
Social Integration of the Chronically Mentally Disabled	43
External Integration	47
Internal Integration	51
Summary of Internal and External Factors	54
Factors Influencing Resident Behaviour in Facilities	57
Number of Residents	57
Level of Expectation	60
Restrictiveness	66
Ideological Beliefs of Sponsors	70
Summary of Factors Affecting Resident Behavior	76
Purpose and Research Hypotheses	77
METHOD	82
Participants	82
Selection Criteria	83
Potential Confounding Variables	84
Sampling Procedures	85
Characteristics of Resident Participants	86
Characteristics of Operators	92
Procedures	94
Pilot Testing	94
Operator Procedures	94
Resident Procedures	95
Instrumentation	97
Restrictiveness	97
Level of Expectations	101
Beliefs About the Mentally Ill	105
Family-Like Environment	106
Quality of Life Scales	109
Social Integration	110
Resident Psychopathology	111

Social Desirability	113
RESULTS	115
Overview of Statistical Analyses	115
Hypothesis Results	117
Hypothesis One	117
Hypothesis Two	119
Hypothesis Three	121
Hypothesis Four	123
Hypothesis Five	125
Hypothesis Six	128
Hypothesis Seven	130
Hypothesis Eight	132
Hypothesis Nine	134
Hypothesis Ten	136
Hypothesis Eleven	139
Summary of Hypothesis Findings	146
Post-Hoc Analysis	147
DISCUSSION	154
Directions for Future Research	161
Conclusions	164
REFERENCES	167
 <u>Appendix</u>	 <u>page</u>
A. LETTERS	178
Letter to Workers, Supervisors and Resource Coordinators	178
Letter to Operators	180
B. RESIDENT MEASURES	182
Content of Initial Contact With Residents	182
Content of Initial Part of Interview	182
Resident Data and Inclusion Criteria	183
Consent to Participate	186
Consent to Release Information	187
Resident Perception of Restrictiveness	188
Resident Knowledge of Expectations	191
Resident Perception of Expectations	193
Residents Family-Like Environment Scale	195
Quality of Life Scale	197
Social Integration Scale	203
External Integration	203
Internal-Integration Scale	214
Twenty-Two Item Screening Score for Psychiatric Symptoms	220
Brief Psychiatric Rating Scale	224

Directions	224
Social Desirability Scale	228
C. OPERATOR MEASURES	229
Content of Initial Contact With Operators	229
Content of Subsequent Contact With Operators	229
Operator Data	230
Operator Restrictiveness Scale	232
Operator Expectation Scale	238
Beliefs About Mental Illness	240
Family-Like Environment Scale	242
Social Desirability Scale	244
D. ADDITIONAL ANALYSES	245
Confounding Variables	245
Principal Component Analysis	251

INTRODUCTION

Community-based residential facilities for the chronically mentally disabled received attention as much as a quarter of a century ago (Dorgan, 1958). Even at that time, the need for a rehabilitative focus was discussed in terms of improving the lives of the chronically mentally disabled (CMD). Care in community-based residences has become increasingly important, especially with the dramatic increases in the past twenty five years of chronically mentally disabled individuals in the community (Barnes & Toews, 1983; Borus, 1981; Segal & Aviram, 1978). Community tenure, that is whether the CMD remain in the community or return to the hospital, has been the primary outcome focus of the CMD placed in community residences (Braun et al., 1981; Fakhruddin, Majivran, Nairn, & Newfeldt, 1972; Kirk, 1976). In the last decade, the definition of successful outcome for community placement has been broadened to include such areas as social functioning, integration within the community residence, employment, and amelioration of psychiatric symptoms (Kruzich & Kruzich, 1985; Lamb & Goertzel, 1971; Linn, Klett, & Caffey, 1980; Segal & Aviram, 1978).

Factors that determine successful community tenure, such as the influence of community residences, have received relatively little attention. Even though the majority of CMD spend most of their time in community residential facilities, there has been relatively little

emphasis on the characteristics of these facilities and the attributes of the individuals (sponsors or operators) who manage them (Morrissey, 1965). It has only been in the most recent literature that quality of life and the effects of facility and sponsor characteristics have been included (Baker & Intagliata, 1982; Lehman, 1983a, 1983b; Segal & Aviram, 1978). In recent years, society has increasingly come to view well-being in such psychologically-oriented terms as satisfaction and goodness of life, rather than in terms of economically oriented aspects such as cost-effectiveness. This suggests that further research ought to include the quality of life dimension (Bureau of Community Support Systems, 1980).

Definition of Terms

Community-based residential facility is a general term that refers to a variety of living arrangements for the mentally disabled in the community. Specific living arrangements cited in the literature include board and room homes, board and care homes, foster or family homes, halfway houses, and supervised apartments. As outlined in Table 1 developed by the author, these residential facilities vary according to size, operator type, supervision of medication, level of care, emphasis on rehabilitation, social structure of the group, and degree of social control. Size refers to the number of residents in the facility. The type of operator is defined in terms of whether they manage their home on a profit or nonprofit basis. Supervision of medication refers to whether the operator dispenses the medication or allows the resident to manage his/her own medication. Level of care

Table 1

Classification of Living Arrangements

DIMENSIONS OF FACILITIES							
RESIDENTIAL FACILITY	SIZE	OPERATOR TYPE	SUPERVISION OF MEDICATION	CARE	REHABILITATION ¹	SOCIAL STRUCTURE	DEGREE OF SOCIAL CONTROL
Board and Room	Usually 10 - 40	Profit business	None	Meals	None	Tenant	None
Board and Care	Usually 10 - 40	Profit business	Yes	Meals, laundry	Sometimes	Tenant, patient	Usually curfew and smoking rules
Foster or Family Homes	Usually 1 - 3	Non-profit	Usually	Meals, laundry	Sometimes	Part of family	Sometimes, e.g., curfew
Halfway House	Usually 10 - 15	Professionally staffed, usually by hospital	Yes	Emphasis on autonomy	Yes	Resident, part of group	Rules determined in collaboration with staff and residents
Supervised Apartments	Usually 1 - 3	None	Sometimes, but may self-monitor	Emphasis on autonomy	None, resident goes out for work or day-care	Part of group	Sometimes, self-regulating

¹ Rehabilitation refers to the provision of daytime activities, encouragement of autonomy, and assistance with interpersonal skills.

is usually defined in terms of the services (e.g., meal preparation) regularly provided to residents. The rehabilitative component deals with the provision of recreational activities and an emphasis on interpersonal skill development and on promotion of autonomy. Social structure of the group is defined in terms of whether the resident is viewed by the operator as a tenant, a patient, or as part of the family. The assumptions behind each of these labels are related to the operator's ideology and beliefs about mental health. The labels "tenant" and "part of the family" suggest that the CMD are expected to perform the same roles as the general population in such areas as daily living skills and employment. The "patient" label assumes illness, with lower expectations for daily living skills and employment than the general population. For example, the operator may only expect the patient to lounge all day because he/she is "not well." The degree of social control refers to rules about locked doors, curfew, and smoking.

Based on the preceding criteria, board and care facilities are usually large residences, operated for profit. Supervision of medication, meals, laundry, and the enforcement of smoking and curfew rules are typical. The resident is usually considered a patient. There may be a rehabilitative emphasis (Lehman, 1983a, 1983b).

Foster or family homes most frequently have one to three residents. They are usually non-profit operations. The major distinguishing factor is that the resident is often considered a part of the family by the operator (Linn, Klett, & Caffey, 1980).

Halfway houses, consisting of 10 to 15 residents, are usually professionally staffed and funded by hospitals. The residence is considered a transitional place between hospital and community. The goals for the resident are autonomy. As such, the resident usually works or is involved in some day-time activity. Medication may be supervised or self-monitored, depending on the ability of the resident. Rules are usually determined by group consensus, although some curfew rules may be imposed by the staff (Rauch & Rauch, 1968).

Supervised apartments do not have a live-in operator. They are usually supervised by visiting mental health program staff. Supervision often consists of helping residents to negotiate landlord-tenant disputes and other major issues. For the most part, the resident is self-sufficient (Segal & Aviram, 1978).

Effects of Deinstitutionalization

Institutionalization of the CMD grew out of a number of social, political, and economic trends in the nineteenth century (Bassuk & Gerson, 1978; Rothman, 1971; Scull, 1977). Three public policies related to the care of the chronically mentally disabled at that time were: 1) the humanitarian ideology of protecting dependent persons, 2) the social control of deviant groups, and 3) rehabilitation at minimum cost (Segal & Aviram, 1978).

Prior to the nineteenth century, the mentally disabled were sequestered in alm houses, jails, or the homes of relatives. The era of rapid industrialization in nineteenth century America and England,

when the work ethic and social order became important social values, saw asylums, prisons, poorhouses, and orphan asylums as methods of managing the unwanted members of society. Surplus labour could be controlled in work houses, thereby protecting economic stability. Expanding cities could be protected from criminals by segregation in prisons. Similarly, society could be protected from the mentally disturbed by isolation in asylums. Medical superintendents and politicians of the day believed that asylums would rehabilitate the mentally disturbed by creating an artificial, corruption-free, humanitarian, structured environment. They assumed that the chaos of families and communities lacking in discipline and regularity was contributing to insanity. By curing the insane in asylums, they hoped to promote in the public the virtues of order and discipline. From an economic viewpoint, it was seen as less costly to support the insane in institutions than to pay "outdoor relief" to families with a mentally-disabled member. Further, the authorities believed it was politically unwise to create inequities among poor working class families by subsidizing certain households that cared for an unemployed, mentally-disabled relative.

Moral treatment became the mode for many mental hospitals in Europe and North America early in the 19th century (Goldenberg, 1977). In Europe, Pinel's institution of therapeutic programs based on kindness and sympathy was replacing shackles and chains. Similarly, in America, a Quaker named Tuke was establishing retreats, where individuals could receive restful and dignified care. Tuke's model of care resulted in the establishment of two hospitals that aimed at changing sick behaviour by stimulating self-control.

During the second half of the 19th century, moral treatment programs came to be regarded as unscientific. In America, they were slowly replaced by rural institutions that focused on biophysical methods of treatment. It was hoped that scientific advances would produce easy cures. This proved naive and unfounded as mental hospitals became little more than long-term custodial institutions. In addition, these institutions became overcrowded, especially with the indigent and disturbed among the new waves of immigrants. As the proportion of hospitalized patients increased, patient care deteriorated to a level devoid of treatment in any true sense. This situation continued unchanged for almost one hundred years.

During the 1950s and 1960s, publications began to appear describing the outmoded and harmful effects of mental hospital backwards (Solomon, 1958; Goffman, 1961). Social breakdown syndrome (Gruenberg, 1967) became recognized as an iatrogenic effect of institutionalization. This syndrome referred to losing the ability to socialize and becoming overly dependent due to the lack of opportunities for self-direction and stimulation. Scull (1977) cites many professionals who suggested that this syndrome could be treated by moving the patients out into the community. However, these recommendations were made with little research into the effects of community care and were based on an alleged improvement in community tolerance towards the mentally disabled.

During the 1950s, development of psychoactive drugs for the management of disturbed behavior was seen, particularly by the psychiatric community, as another major factor in permitting transfer

of patients to the community (Bassuk & Gerson, 1978). From a sociological perspective, this causal relationship has not been proven (Scull, 1977). Patterns of discharge in British and American hospitals demonstrated increased rates of release prior to the introduction of drugs. The emphasis on discharge was partly an administrative policy by certain hospitals to prevent accumulation of long-stay institutionalized patients. Based on research done by Lehmann and Hanrahan (1954) and Crane (1973), Scull proposed that the behavioral control offered by drugs was used primarily to ease institutional management problems rather than affect discharge patterns. Behavioral control by drugs resulted in induced lethargy and decreased spontaneous interest in the environment (Lehmann & Hanrahan, 1954). Moreover, patients who presented serious management problems in institutions were more likely to be given larger quantities of drugs, even though severe psychotic symptoms did not disappear (Crane, 1973).

A large, retrospective study of the impact of drugs on release rates was undertaken in California (Epstein, Morgan & Reynolds, 1962). They compared release rates of male schizophrenics in three high and three low drug usage hospitals. The non-drug treated schizophrenics in both hospital settings had shorter periods of hospitalization, whereas the drug treated group had longer periods of hospitalization. Moreover, first admission schizophrenic patients treated with drugs tended to have longer hospital stays compared to patients not treated with drugs. A limitation of this study was that the criteria used to prescribe drug treatment was not discussed. As well, the severity of the illness was not controlled.

Scull (1977) proposed that the advent of the welfare system made community living possible for the CMD. With federally-funded social assistance, the burden on local governments to assume total economic support of the mentally disabled was markedly reduced. It was good economic policy for the states to abandon exorbitantly costly institutions in favour of community placement of the mentally disabled. The historical irony of this situation was that, in the 19th century, institutions were created for humanitarian and economic reasons. Deinstitutionalization was promulgated for these very same reasons.

After 1955, deinstitutionalization began in earnest in the United States. Legislation in 1963 called for the establishment of a new kind of community-based service centre. The concept of deinstitutionalization (Braun et al., 1981) was defined in 1975 by the National Institute of Mental Health as:

1) The prevention of inappropriate mental hospital admissions through the provision of community alternatives for treatment, 2) the release to the community of all institutionalized patients who have been given adequate preparation for such a change, and 3) the establishment and maintenance of community support systems for non-institutionalized people receiving mental health services in the community (p. 739).

The laudable goals of deinstitutionalization were not achieved. Rather, "dumping" occurred (Allan, 1974; Bachrach, 1976; Lamb & Goertzel, 1971; Reich & Siegel, 1973; Scherl & Macht, 1979; Scull, 1977; Stewart, Lafave, Greenberg, & Herjanic, 1968; Talbott, 1979). Dumping refers to the premature release of patients prior to the establishment of community support systems (Scull, 1977). These

accounts described the regrettable appearance of large numbers of obviously mentally disturbed persons, poorly clothed, wandering in the streets, hallucinating, and acting in a socially inappropriate manner. Board and care homes, to which many chronically mentally disabled were discharged, did not provide recreation, organized socialization, or other day-time activities. The majority of patients were too dysfunctional to travel independently, to seek out community activities, or to even maintain involvement once contact was established. Consequently, most of them stayed at home, sleeping, watching television, or staring blankly into space. There was considerable public and professional concern regarding the quality of life experienced by the mentally disabled in the community (Lamb, 1981; Reich & Siegel, 1973). Critics have suggested that the mentally disabled moved from the backwards of hospitals to back alleys of the community (Lamb, 1979; Murphy, Pennee & Luchins, 1972).

Dumping led many entrepreneurs to take advantage of the supplements paid by provincial or state governments for the care of the mentally disabled. Money-making residential facilities could maximize profits by overcrowding residents, offering poor quality meals, and hiring untrained, uncommitted staff (Reich & Siegel, 1973).

In the United States, thousands of elderly, mentally disturbed individuals were transferred to acute hospital beds from mental institutions, where they had to wait months for nursing home placement. The nursing homes were ill-prepared for these elderly, mentally disturbed individuals, in that staff had little or no training in psychopathology or psychiatric nursing (Reich & Siegel, 1973; Talbott, 1979).

A further consequence of dumping was the increasing prominence of the "revolving door" and "falling between the cracks" phenomena. Although not confined to the chronically mentally disabled, the "revolving door" referred to multiple re-admissions of the mentally disturbed to acute-care hospitals because they were not able to cope in the community. "Falling between the cracks" referred to inadequate community follow-up and inappropriate community programs for the target population (Talbott, 1979).

Historical Trends in Residential Treatment

The history of board and care homes for the chronically mentally disabled closely followed the general history of the care for the mentally disabled (Dorgan, 1958; Scull, 1977). In Europe, the oldest example of boarding out the mentally disabled was at Gheel in Belgium. This was largely a historical accident. The site in Gheel where St. Dymphna was martyred in the sixteenth century became a shrine. Pilgrims, especially the mentally disabled, came from all over Europe. Because treatment in those times was a matter of religion, the church built an annex, where mentally disabled persons could stay for nine days. If a cure was not forthcoming in that time, they sought shelter in the homes of Gheel residents, to await a religious cure. Some incentive for the residents had been provided a century earlier, by the pope's absolution for all those who housed the mentally disabled.

In the twentieth century, the Belgian government is still facilitating community placement of the mentally disabled. Emphasis is placed on matching the patient to the family. Follow-up care is

provided by community nurses and physicians. The magnitude of the community program is reflected in the ratio of 20,000 Gheel families to 2,700 mentally disabled boarders (Dorgan, 1958).

Several American States have been noteworthy in their focus on community residential care of the mentally ill (Dorgan, 1958; Segal & Aviram, 1978). In 1885, Massachusetts passed legislation which provided for the placement of patients in private homes. By 1890, family care provided for 150 patients. By 1935, Maryland had also begun to place special emphasis on the therapeutic aspects of family care programs. Each participating family took up to two patients and there was close liaison with a caseworker. By policy, caseloads never exceeded 25 patients, which allowed for thorough preparation for placement and follow-up with the families and patients.

Overall, however, growth of family-care programs was not impressive, considering the eighty years between 1885 and 1950. In 1963, there were 17,000 CMD persons in family-care homes and similar programs operated by government and the Veterans Administration (Segal & Aviram, 1978).

Segal and Aviram (1978) suggested several factors that may have accounted for the slow growth in family care programs. American cultural patterns, such as the nuclear family, were not conducive to the care of extended family members, including the mentally ill, in their homes. Low board and care rates for families did not provide a financial incentive. While paying lip service to the concept of family care, the majority of the public still feared the CMD living in

their neighbourhoods. Legislators did not allocate enough money to provide for the growing need for community health-care professionals. Many "institutional" psychiatrists saw family care as a professional threat because the diminishing hospital population would reduce the need for their full-time services. Further, many psychiatrists viewed therapeutically-oriented family-care homes as a threat to their authority. According to psychiatrists, therapy occurred in hospital, leaving custodial care as the domain of family-care homes.

Description of the Chronically Mentally Disabled

The chronically mentally disabled have been defined traditionally in terms of medical diagnosis and chronicity. This practice has been criticized due to the absence of clear and validated diagnostic criteria (Barnes & Toews, 1983; Braun et al., 1981). The main diagnoses are schizophrenia, chronic affective disorders, chronic brain syndrome, and severe personality disorders. Chronicity traditionally has referred to continuous hospitalization for two or more years. The research need for standardized criteria resulted in the development of a more comprehensive definition that specifies diagnosis, disability, and duration in detail. These factors are embodied in the definition by the National Institute of Mental Health (Tessler & Goldman, 1982):

The chronically mentally ill population encompasses persons who suffer certain mental or emotional disorders (organic brain syndrome, schizophrenia, recurrent depressive and manic-depressive disorders, paranoid and other psychosis, plus other disorders that may become chronic) that erode or prevent the development of their functional capacities in relation to three or more primary aspects of daily life - personal hygiene and self care, self direction, interpersonal relationships, social transactions, learning,

and recreation - and that erode or prevent the development of their economic self-sufficiency.

Most such individuals have required institutional care of extended duration, including intermediate-term hospitalization (90 days to 365 days in a single year), long-term hospitalization (one year or longer in the preceding five years), or nursing home placement because of a diagnosed mental condition or a diagnosis of senility without psychosis. Some such individuals have required short-term hospitalization (less than 90 days); others have received treatment from a medical or mental health professional solely on an outpatient basis, or - despite their needs - have received no treatment in the professional service system. Thus included in the target population are persons who are or were formerly residents of institutions (public and private psychiatric hospitals and nursing homes) and persons who are at high risk of institutionalization because of persistent mental disability (p. 5).

Enumerating the chronically mentally ill has been fraught with difficulties. Population counts vary with the criteria used for categorization in community facilities, the policies for admission and discharge, and the adequacy of mental health outreach programs. In the United States, the estimated number of chronically mentally ill persons ranges from 1.7 million to 2.4 million, including 900,000 who have been institutionalized. Of the estimated 1.5 million chronically mentally ill persons living in the community, 800,000 individuals have a severe disability, which means inability to work or working only occasionally. The remaining 700,000 individuals have a partial disability and includes those whose work has been limited by a mental disorder (Goldman, Gatlozzi, & Taube, 1981). As an example of the numbers of chronically mentally ill persons living in community residences, Segal and Aviram reported that there were 12,430 individuals in California. Compared to the general population, this figure represents 1.4/1000. Segal and Aviram suggested that the

population in community facilities was ten times greater than it was twenty years ago (Segal & Aviram, 1978).

Canadian statistics have generally followed the declining mental hospital population reported in the United States. Specifically, there was a 70% decline in the number of patients in public mental hospitals between 1950 and 1981 in the United States (Borus, 1981). In Canada, during the interval between 1960 and 1972, there was a 43% reduction in the hospital population (Kedward, Eastwood, Allodi, & Duckworth, 1974). An accurate Canadian census is even more problematic than a U.S. census, in that not all treatment sites report to Statistics Canada. Further, community mental health services do not have effective outreach programs so that, although many chronically mentally disabled receive services, many are unknown to the formal mental health program (Kedward, Eastwood, Allodi, & Duckworth, 1974). There are reported to be 78,000 chronically mentally disabled people in Canada or 3.4/1000 population. For every one chronically mentally disabled person in hospital, there are four in the community requiring support (Bland, 1984).

The characteristics of the chronically mentally disabled can be conveyed by outlining findings from a 1980 NIMH survey of 18 community mental health programs in the United States (Tessler & Goldman, 1982). These descriptive data, although specific to a client population engaged in a comprehensive program called community support system (CSS), provides a picture of several groups of chronically mentally disabled living in the community.

As reported in Table 2, the chronically mentally disabled are middle-aged, with a slight predominance of females (53.0% versus 47.0%) when compared to the general U.S. population. Only a small proportion (10.9%) are married. Over half (52.3%) have some high school education, but only 25.9% are employed. A small percentage (10.8%) are employed competitively, with the remainder being employed in sheltered workshops, transitional employment programs, unpaid training programs, or as volunteers. An estimated yearly income of \$3900 indicates that this is a relatively poor segment of the general population.

Table 3 shows that approximately 92.3% of the CMD have been hospitalized for psychiatric care. The median number of hospitalizations per client is 4.3. A very large proportion (27.5%) of the CMD have been institutionalized for a duration of longer than ten years. Schizophrenia (68.9%) is the predominant diagnosis, with depression following at 12.1%. Other diagnoses include non-psychotic disorders and organic brain syndrome, with 6.6% and 4.6%, respectively. Compared to another unpublished NIMH report on resident populations in U.S. state and county hospitals, Tessler and Goldman's data show a higher percentage of diagnosed schizophrenia (69% versus 52%) and depressive disorders (12% versus 6%). Psychotropic medications are prescribed for 84.4% of the clients.

Continuing with Table 3, somatic problems are experienced by 44.7%. The most common somatic problems are obesity and undernourishment (27.4%), medication side effects (21.8%), impaired motor control (20.4%), and heart and circulatory problems (18.1%).

Table 2

Demographic Profile of the Chronically Mentally Disabled

DEMOGRAPHIC INFORMATION

Median Age	41.8 years
Males	47.0%
Females	53.0%
Marital Status ¹	
Married/Living with Someone	10.9%
Never Married	56.0%
Divorced/Separated	25.7%
Widowed	6.2%
Education	
High School Graduate	33.0%
Some College Education	19.3%
Employed At Time of Survey	
Sheltered Workshop	9.6%
Transitional Employment Programs	2.9%
Unpaid Training Programs	2.3%
Volunteers	.3%
Employed at Competitive Job	10.8%
Total	25.9%
Estimated Yearly Income	\$3900
Supplemental Security Income	47.7%
Social Security (Disability)	34.9%
Social Service Benefits	22.1%

Note. Adapted from The Chronically Mentally Ill (p. 97) by Tessler and Goldman, 1982, Massachusetts: Ballinger Publishing Company.

¹Round off error accounts for .2% of the total.

Table 3

Clinical Profile of the Chronically Mentally Disabled

CLINICAL HISTORY

Proportion Hospitalized for Psychiatric Care	92.3%
Age of First Contact with Psychiatric Care	24.0 (median)
Number of Hospitalizations per Client	4.3 (median)
Months Spent Receiving Hospitalized Psychiatric Care	22.5 (median)
Proportion of Clients Institutionalized Ten Years Or More	27.5%
Distribution of Primary Diagnosis	
Schizophrenia	68.9%
Depressive and Affective Disorders	12.1%
Nonpsychotic Disorders	6.6%
Organic Brain Syndrome	4.6%
Proportion of Clients Where Psychotropic Medications Used to Control Symptoms and Behavior	84.4%

CURRENT FUNCTIONING

Somatic Problems	
Obesity or Undernourishment	27.4%
Medication Side Effects	21.8%
Impaired Motor Control	20.4%
Heart and Circular Problems	18.1%
Total	44.7%
Victimization	
Victimized in Violent or Property Crimes (unduplicated count in past 6 months)	6.2%

Note. Adapted from The Chronically Mentally Ill
(p. 99) by Tessler and Goldman, 1982, Massachusetts: Ballinger
Publishing Company.

The NIMH survey also looked at the mentally disabled as victims in the community. Combined figures for violent or property crimes reveal that 6.2% (unduplicated count) have been victimized at least once during a six month period. This rate is significantly higher than the victimization rates in the general population, according to Tessler and Goldman.

Table 4 outlines repeated behavioral problems of the CMD. Contrary to community beliefs about the CMD, case managers reported that approximately 90% of the clients did not experience behavioral problems in the areas of incontinence, inappropriate sexual behavior, trouble with the law, destruction or theft of property, abuse of drugs, suicidal threats or attempts, and hazardous use of matches, cigarettes, or fires. Approximately 10% of the CMD were reported as having moderate to serious problems at work or school, as causing complaints for households, as exhibiting temper tantrums, or as engaging in bizarre behaviour. Finally, 5 - 10% were identified as posing moderate to serious problems in the areas of wandering or loitering, causing community complaints, or abusing alcohol.

The frequency of client participation in social activities is presented in Table 5. The majority of the CMD lead lonely, socially isolated lives. For example, 16.9% never engage in day-time activities and nearly one quarter (23.5%) do so only once a week. Almost one fifth (19.9%) never socialize with family and almost one eighth (11.7%) never socialize with friends. Over two-thirds (71.8%) of the CMD rarely (never or once a week) engage in recreational activity outside the home with others.

Table 4
Percentage of Reported Behavioral Problems

PROBLEMS	DEGREE OF PROBLEM	
	None	Moderate-Serious
Incontinence	93.7	6.1
Inappropriate Sexual Behaviour	91.4	8.6
Trouble with the Law	92.7	7.2
Destroy or Steal Property	93.8	6.2
Abuse Drugs	90.8	13.3
Make Suicidal Threats or Attempts	88.9	13.1
Use Matches, Cigarettes or Fire Hazardously	92.3	7.6
Have Trouble at Work or School	76.0	14.2
Cause Complaints From Households	66.2	18.4
Exhibit Temper Tantrums	80.6	10.2
Engage in Bizarre Behavior	74.7	12.5
Wander/Loiter	85.7	6.2
Cause Community Complaints	84.8	7.9
Abuse Alcohol	86.8	7.4

Note. Adapted from The Chronically Mentally Ill
 (p. 105) by Tessler and Goldman, 1982, Massachusetts: Ballinger
 Publishing Company.

Table 5

Frequency of Client Participation In Social Activities

SOCIAL ACTIVITY	FREQUENCY ¹			
	Never	Once/ Week	2-5 Days/ Week	6-7 Days/ Week
Socializes with Family	19.9	45.5	15.4	18.8
Socializes with Friends	11.7	30.2	34.7	23.5
Engages in Scheduled Daytime Activity	16.9	23.5	48.1	11.5
Engages in Recreational Activity in Home, Other than TV or Radio	25.6	37.0	20.1	9.2
Engages in Recreational Activity Outside of Home, Alone	48.7	34.6	13.4	3.4
Engages in Recreational Activity Outside of Home, with Others	26.1	45.7	25.2	3.0
Attends Clubs, Lodges or Other Meetings	67.9	21.6	9.4	1.1
Attends Religious Services	54.2	40.6	4.3	0.9

Note. Adapted from The Chronically Mentally Ill
(p. 104) by Tessler and Goldman, 1982, Massachusetts: Ballinger
Publishing Company.

¹Frequency is expressed in number of days per week that an
individual engages in social activity.

Table 6 outlines the most problematic life skill areas. They include verbalizing needs, securing necessary support services, medication compliance, using available transportation on unfamiliar routes, preparing and obtaining meals, and managing available funds. Approximately 80% or more were able to independently or with minor assistance maintain personal hygiene, dress themselves, walk and get around, perform household chores, shop, and use available transportation familiar routes. These results document the need for a continuum of supportive services available to the CMD in order to facilitate adjustment to community living.

Table 7 shows the distribution of the mentally disabled in a variety of living arrangements. Besides demonstrating the spectrum of residential arrangements, the table illustrates that, after private residences (40.4%), board and care, and foster care constitutes the next largest percentage of dwellings for the CMD (22.9%). Over, one-half (55.2%) of the CMD live in settings which provide little or no supervision.

In summary, this brief snapshot of the CMD suggests that they are largely white, middle-aged, single individuals. Few of them are competitively employed. They live in a variety of residential settings, varying greatly in the incentives they provide and in their restrictiveness. Approximately two out of three are diagnosed with schizophrenia. Chronic medical conditions include obesity and/or malnourishment, medication side effects, and impaired motor control. Problematic life skill areas are transportation, managing money, adhering to prescribed medication regimes, preparing and obtaining meals, and verbalizing their needs.

Table 6

Basic Living Skills Of Chronically Mentally Disabled

BASIC LIVING SKILL	LEVEL ¹		
	1	2	3
Areas Of Least Difficulty			
Maintains Personal Hygiene	89.7	7.6	2.7
Dresses self	97.4	2.4	0.2
Walks or Gets Around	97.0	1.8	0.6
Maintains Adequate Diet	80.3	11.1	8.6
Performs Household Chores	80.4	10.9	12.9
Goes Shopping	80.2	9.6	10.2
Using Available Transportation on Familiar Routes	78.7	4.6	16.6
Areas Of Most Difficulty			
Verbalizing Needs	74.9	19.4	5.7
Securing Necessary Support Services	69.1	17.4	13.4
Medication Compliance	73.1	14.5	12.4
Using Available Transportation on Unfamiliar Routes	68.5	9.9	21.8
Preparing and Obtaining Meals	76.1	10.9	12.9
Managing Available Funds	72.4	14.1	13.5

Note. Adapted from The Chronically Mentally Ill
(p. 102) by Tessler and Goldman, 1982, Massachusetts: Ballinger
Publishing Company.

¹Level 1 refers to performing skill independently or with some assistance. Level 2 refers to performing skill with moderate assistance. Level 3 refers to clients who are unable/unwilling to act independently.

Table 7

Housing Arrangements of Chronically Mentally Disabled

Dwelling Type	Percent
Private House or Apartment	40.4
Board and Care Home (supervised)	12.6
Family or Foster Care	10.3
Cooperative Apartment (unsupervised)	7.8
Group Living (supervised)	6.2
Inpatient Psychiatric Hospital	4.8
Boarding House (meals, unsupervised)	4.7
Cooperative Apartment (supervised)	3.7
Skilled Nursing Facility	3.5
Transitional Group Home	3.4
Rooming House or Hotel (no meals)	2.3
Intermediate Care Facility	0.4
Living Arrangement	
Client Living Alone	14.8
Client Living With Family	31.8
Other	53.4
Family Involvement	
Living Within One Hour's Drive of Involved Family Member	67.0
Living Within One Hour's Drive of Uninvolved Family Member	10.0
Other	23.0

Note. Adapted from The Chronically Mentally Ill
(p. 98) by Tessler and Goldman, 1982, Massachusetts: Ballinger
Publishing Company.

Quality of Life As An Outcome Measure

Evaluation of residents living in community facilities has come to include such client-centered terms as quality of life. There is a lack of common understanding of the quality of life concept due to different ethical views and different opinions about how to improve life quality (Nickels, Harvey, & Ledger, 1976). The next section will attempt to summarize the current literature.

Quality of life generally refers to the long term sense of well-being, satisfaction, and goodness of life experienced by people under their current life conditions (Baker & Intagliata, 1982; Lehman, 1983). Beyond this general definition, however, professionals have disagreed as to the theoretical underpinnings, determinants, definition, and measurement tools.

The two approaches to measuring quality of life that have received the most attention are objective or social indicators, and subjective or psychological indicators. Objective or social indicators are quantitative measures of community milieu such as health, social welfare, education, public safety, leisure, housing, and population density (Zautra & Goodhart, 1979). Various researchers have sought to arrive at clusters of indicators, specific to their particular geographic location, that affect the quality of life of residents living in that area (Bloom, 1975; Zautra & Simons, 1978). For example, taking psychiatric difficulties as a social indicator of quality of life, Zautra and Goodhart (1979) suggested that neighbourhoods characterized by high divorce rates, high transiency,

and renter-occupied housing have high rates of psychiatric difficulties. Lower rates of psychiatric difficulties were found in areas characterized by economic affluence and high numbers of young, married couples. A major problem with this research is the equation of life quality with the absence of psychiatric difficulties. Although relatively easy to measure as a dependent variable, it is narrow and limiting. A more general difficulty with social indicators research is that it often does not measure conditions that affect most people directly (Zautra & Goodhart, 1979). A high unemployment rate in one neighbourhood, for example, may have little bearing on a resident's perceived quality of life, unless he or she is unemployed.

Subjective or psychological variables deal with phenomenological life satisfaction. The terms "satisfaction," "happiness," and "well-being" have been used interchangeably by most authors. Empirical attempts to differentiate among them have not been conclusive (Perry, 1980). After evaluating six national quality of life surveys, George (1979) concluded that life satisfaction referred to an assessment of the overall conditions of existence as derived from a comparison of one's aspirations with one's actual achievements. Happiness referred to transitory moods of euphoria reflecting the affect that people felt towards the current state of affairs. George further pointed to the need for measurement tools to discriminate between those constructs. She suggested that global affect measures, such as Bradburn's (1969) Affect Balance Scale and satisfaction surveys of global and domain-specific satisfaction, offer the greatest potential for discriminant validity between the affective and cognitive components of quality of life.

Efforts to measure subjective quality of life have followed several alternative strategies. The first strategy, involving global measures of satisfaction, asks about overall level of life satisfaction or well-being (Baker & Intagliata, 1982). Bradburn's (1969) Affect Balance Scale (ABS) is one example of a global measure of satisfaction. In his study, respondents were asked about recent, positive, affective experiences, such as feeling particularly excited or interested in something, and recent, negative experiences such as feeling bored. Through factor analysis, Bradburn found two, five-item clusters that became subscales of the ABS. He theorized that happiness was a function of both positive and negative affect, which could vary independently. The overall sense of happiness was determined by the difference between the two affects.

A somewhat different approach to measurement of global satisfaction was taken by Lehman (1983a, 1983b). Based on the work of Andrews and Withey (1976), Lehman developed global satisfaction questions that asked respondents to rate, on a scale from delighted to terrible, how they felt about life in general.

A second strategy for measuring quality of life, involving domain-specific measures of satisfaction, asks about satisfaction in specific areas of one's life. Again adapting from Andrew and Withey's (1976) work, Lehman's (1983a, 1983b) research also provides an example of a domain-specific approach. Andrews and Withey had previously identified fifteen life domains, for measuring satisfaction in the general population, from factor analysis of 118 items. Lehman chose eight domains relevant to the CMD population including, living

situation, family, social, leisure, finances, law-safety, work, and health. An example of the living situation domain is, "How do you feel about the living situation here?" Responses were scored on a scale from 1 (delighted) to 7 (terrible).

A third strategy for measuring quality of life entails assessing behavior, as opposed to perceptions, in specific life domains (Evans, Burns, Robinson, & Garrett, 1985). Evans et al. argue that, while perceived life satisfaction is part of quality of life, behavioral components also interact with affect and perceived satisfaction to determine overall quality of life. Based on responses of 298 participants from the general population, 12-item scales were derived for the following domains: material well-being, physical well-being, personal growth, marital relations, parent-child relations, altruistic behavior, political behavior, job characteristics, occupational relations, job satisfiers, creative/aesthetic behavior, sports activity, and vacation behavior. As an example in the job satisfiers domain, respondents were asked to reply, true or false, to "I am given little chance to get ahead at work" (p. 375). Concurrent validation, using another quality of life measure, revealed moderate correlations, ranging from .22 to .52. Based on their findings, Evans et al. suggested that their questionnaire directly assessed an individual's quality of life in several domains. Further research needs to be done using other populations, however. As well, the factorial structure of the scales requires future investigation. The importance of this research is that it offers a tool for measuring the behavioral component of quality of life.

Beyond the measurement of subjective quality of life, Zautra and Reich (1983) attempted to develop a model to explain how individuals arrived at their subjective ratings of well-being. They theorized that a two-factor model could account for psychological well-being. They proposed that people have two independent sets of needs. One need system is concerned with avoidance and/or reduction of negative states, while a second need system is thought to be centered on promoting positive emotional states, such as satisfaction and personal growth.

Zautra and Reich reviewed seventeen studies about the impact of life events in a specified period of time on reported quality of life. Life event changes were correlated with various measures of distress and positive well-being, affect, and satisfaction. They found that, in general, positive events were associated with increased well-being and positive affect, and higher ratings of life satisfaction. Negative events were predictably related to greater distress. However, positive events were uncorrelated with distress. They concluded that people seem to have two separate systems for coding their affective experiences. One system tallies up negative events and their impacts while another system tallies the impact of satisfying events. Quality of life could move up or down one domain without necessarily affecting another domain. In other words, positive events influence positive affective states but not negative ones, and negative events influence negative states but not positive ones.

In addition to the negative and positive affect model, cognitive determinants of satisfaction or quality of life include level of aspiration, comparison level, and perceived control (Guttek, Allen, Tyler, Lau, & Majchrzak, 1983). Level of aspiration refers to the discrepancy between what one has and what one wants. Comparison level refers to the level of well-being in others that one adapts as a relevant comparison to oneself. Perceived control refers to the extent to which one believes that they are in control of outcomes.

Guttek et al. used survey data from 417 randomly-selected telephone interviews with Los Angeles residents to show the independent contribution of these cognitive factors towards domain satisfaction. The four life domains selected were family, jobs, experiences with government agencies, and neighbourhood.

Objective data, subjective assessments, demographic variables, cognitive data, and satisfaction levels were collected in the four life domain areas. Guttek et al. found that the three cognitive factors explained from 23% to 40% of the variance in terms of satisfaction, whereas objective indicators explained 0% to 9% of the variance. Further, subjective affective assessments accounted for 17% of the variance in both government agency and neighbourhood domains. Guttek et al. concluded that aspiration level, comparison level, and perceived control were important personal indices used by individuals to arrive at domain satisfaction. This conclusion supports the need for including both cognitive and affective measurements in quality of life research.

The assumption that objective variables and subjective indicators vary together has also been examined. Schneider (1976) compared objective and subjective data collected in 15 cities. For example, level of satisfaction with one's housing, family life, job, income, personal efficacy, and available services were correlated with comparable objective data. An example of objective data for the income category was percent of households with income less than \$3000. Schneider concluded that well-being as described by objective indicators did not predict the quality of life subjectively experienced by individuals living in those cities.

Lehman (1983a, 1983b), previously described, suggested that some objective measures ought to be included in quality of life studies. Lehman reported low but significant correlations between life satisfaction of the CMD and several objective variables, including having privacy in homes, being employed, having intimate social contacts in the homes, lower use of health care services, and not being a crime victim. He concluded that quality of life studies ought to include selective objective measures.

The conclusions drawn from the existing quality of life research must be tentative due to the young and unsettled nature of the area. Nonetheless, they are as follows:

1. Although objective variables have generally been found to weakly predict satisfaction, one study using a CMD population found a low but significant correlational basis to include selective objective measures.

2. Subjective indicators found to be useful in the assessment of quality of life include both global and domain-specific measures.
3. A recently developed, behavioral measure of quality of life (Evans et al., 1985) has neither been tested on CMD populations nor been proven reliable and valid.
4. Several psychological processes influence perceived quality of life. First, affect may entail a two-factor model that includes decreasing negative experiences and increasing positive emotional experiences. Positive events appear to influence positive affective states but not negative ones, and negative events appear to influence negative states but not positive ones. Second, cognitive determinants, such as level of aspiration, comparison with others, and perceived control may be important indices used by individuals to arrive at domain satisfaction.

Quality of Life of the Chronically Mentally Disabled

Although assessment of quality of life of the general population has been advanced by several national American surveys (Andrew and Withey, 1976; Campbell, Converse, and Rogers, 1976), quality of life of the chronically mentally disabled has received relatively little attention. With regard to the latter group, only two studies have been reported. These studies are described below, beginning with Lehman et al. (1982).

Life conditions and satisfaction of 278 mentally disabled residents in thirty large board and care homes in Los Angeles County were collected through interviews (Lehman et al., 1982; Lehman, 1983a, 1983b). These interviews, based on Andrew and Withey's (1976) scales, inquired about residents' global well-being and satisfaction in eight domains, including living situation, family relations, social relations, leisure activities, work, finances, personal safety, and health.

Global well-being was measured by three separate scales. Measure A asked the residents how they felt about life in general. Measure B, described as a scale of positive well-being, asked such questions as, "during the past month, how much of the time have you felt that the future looked hopeful and promising" (p. 370). Measure C required several semantic differential responses to the statement, "I think my life is ...", such as "boring - interesting" and "useless - worthwhile" (p. 370). These three measures were used to ask about global well-being from both affective (Measure B) and cognitive (Measure A & C) perspectives.

In addition, residents were asked how satisfied they were in each of the eight domains. An example of a family relations domain question is, "How do you feel about the amount of time you spent with your family?" Residents answered on a scale from 1 (delighted) to 7 (terrible).

As indicated in Table 8, objective indicators most consistently related to the three global well-being measures were privacy in the

home, more frequent and intimate social contacts in the home, being employed, not having been a crime victim, and lower use of health care services. Overall, the correlations, although weak except in the area of work, were consistent (.11 to .27) across the three measures. Noted as well in Table 8, correlations between domain satisfaction and objective life conditions ranged from no agreement to strong agreement (-.04 to .57).

Correlations of subjective quality of life indicators with global well-being measures, as indicated in Table 9, showed strong correlations in the domains of social relations, leisure, finances, and health (.40 to .66).

Most demographic characteristics, including gender, age, race, parental social class, and length of stay did not correlate significantly with global satisfaction. Marital status showed the most significant relationship to well-being. Most spouses of the few married residents lived in the residence. As well, educational level and drug abuse correlated significantly with global satisfaction.

In comparing board and care residents to the general public, Lehman found that board and care residents were significantly less satisfied with their living situations, family relations, social relations, finances, personal safety, personal health, and life in general. Only in the areas of leisure activities, job, and health care were there no significant differences. In comparison to other socially disadvantaged groups, such as Blacks and poor people, the overall trend was for the board and care residents to be less satisfied.

Table 8

Correlations of Objective Quality of Life Indicators With Global Well-Being And Satisfaction Measures

DOMAIN	OBJECTIVE INDICATOR	GLOBAL SUBJECTIVE CORRELATIONS WITH OBJECTIVE INDICATORS			DOMAIN SATISFACTION CORRELATIONS WITH OBJECTIVE INDICATORS
		Global Measure A	Global Measure B	Global Measure C	
Living Situation	Security	.12*	-.01	.07	-.04
	Privacy	.08	.11*	.12*	.19**
	Autonomy	.08	-.09	.01	.09
Family	Frequency of Contacts	-.09	-.05	-.09	.22***
Social Relations	Total Contacts	.16*	.18*	.13*	.27***
	Contacts in Home	.14	.22**	.13*	.22***
	Contacts Outside of Home	-.02	-.05	-.04	.07
	Intimacy of Contacts	.16*	.16*	.12*	.27***
Leisure	No. of Leisure Activities	.05	-.01	-.03	.07
Work	No. of Hr/Week	.47***	.30*	.47***	.50***
	Weekly Pay	.37**	.20	.34**	.57***
Law/Safety	Criminal Activities	-.05	.00	.00	-.04
	Victim of Crime	-.27***	-.21**	-.18*	-.19**
	Access to Legal Services	.18*	.06	.14*	.15*
Finances	Monthly Spending	-.09	.01	.02	.12
Health	Number of Illnesses	-.11*	-.04	-.08	-.17**
	Total Use of Health Care	-.21**	-.19**	-.18*	-.22***
	In Psychotherapy	-.18*	-.17*	-.21**	-.09
	Use of Acute Psychiatric				

Services	-.15*	-.18*	-.08	-.19**
Use of General				
Medical Serv.	-.14*	-.11*	-.10	-.19**
Access to				
Medical Serv.	-.17*	-.07	.10	.24

Note. From "The well-being of chronic mental patients: Assessing their quality of life" by A. Lehman, 1983b, Archives of General Psychiatry, 40, p. 371.

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$.

Table 9

Correlations of Domain Satisfaction with Global Well-Being Measures

Domain	Correlations With Well Being		
	Measure A	Measure B	Measure C
Living Situation	.45***	.39***	.48***
Family	.37***	.29**	.33***
Social Relations	.58***	.50***	.49***
Leisure	.59***	.55***	.56***
Finances	.40***	.41***	.45***
Law/Safety	.42***	.44***	.38***
Work	.17	.24	.24
Unemployment	.33***	.29*	.27*
Health	.66***	.55***	.43***

Note. From "The well-being of chronic mental patients: Assessing their quality of life" by A. Lehman, 1983b, Archives of General Psychiatry, 40, p. 371.

* $p \leq .001$ ** $p \leq .01$ *** $p \leq .001$.

Specifically, in the areas of family and social relationships, board and care residents were significantly less satisfied than other disadvantaged groups.

Lehman's discussion revealed some noteworthy findings. Residents who had their own rooms or a place where they could go for privacy were significantly more satisfied with their living arrangements than other residents. Lehman found that relationships within and outside the home were separate dimensions. Specifically, greater social contact with other residents within the home increased satisfaction, whereas greater social contact outside the home did not. Two-thirds of the residents had a close friend or intimate relationship with another person, often another resident in the home. The results suggested that efforts should focus on improving relationships within the home, at least when large facilities are being considered.

Autonomy, as indicated by the opportunity to make decisions and cook their own meals, was not significantly related to satisfaction. Apparently, many residents did not wish to have a voice in day-to-day decisions. One factor in this apparent lack of motivation, not cited by Lehman, may have been anti-psychotic drugs known to produce lethargy. In addition, an apathetic, institutionalized attitude may have carried over from the mental hospitals to the community facilities. Residents who engaged in more leisure activities were not significantly more satisfied. This again might be explained by drug and institutional effects.

Lehman cautioned against uncritical generalization of his results. Only large facilities with at least 40 beds were studied. Whether the same relationships and resident views would hold for smaller board and care homes has yet to be determined.

Another key issue examined by Lehman (1983a) was the possible biasing effect that psychopathology may have on self-reports of quality of life. This issue arose from the question of whether seriously mentally ill persons could provide meaningful assessments of their quality of life. Using three self-report subscales from the Rand Health Insurance Study Mental Health Battery, Lehman measured depression, anxiety, and self control. Using difference-score reliabilities, Lehman established that the subjective quality of life and mental health scales measured different constructs. Difference-score reliability assesses the degree to which individual scores on any two scales differ consistently from each other. The more consistent the difference, the higher the reliability. Lehman found that global quality of life and psychopathology could be differentiated from each other with a reliability of .61. The domain-specific subjective quality of life indicators were even more distinct from psychopathology than were the global quality of life measures. Therefore, Lehman concluded, that global quality of life may be more related to mental health than domain-specific, quality of life.

To further determine the biasing effects of psychopathology on quality of life reports, Lehman employed bivariate and multivariate analysis. Correlations between objective and subjective quality of

life domain indicators, compared to partial correlations removing the effects of psychopathology, showed no significant overall change due to mental health.

Two regression analyses were performed to determine the effects of mental health on the multivariate prediction of global quality of life. In the first regression, three variables (personal characteristics, objective quality of life, and satisfaction with subjective quality of life) predicted 66% of the variance in general quality of life. In the second regression, there was only a slight decrement (59%) in the ability to predict after removing psychopathology. Health related variables, however, did show a statistically significant decrease in their standardized regression coefficients. Lehman suggested that the inverse relationship between health and psychopathology is not surprising because it is known that (a) use of health services is associated with higher rates of mental health problems and (b) physical illnesses are related to higher rates of depression. Overall, Lehman's study illustrates that psychopathology does not significantly affect quality of life reports except in the health area.

In the second major study regarding quality of life of the CMD, Baker and Intagliata (1982) provided mixed support for the findings of Lehman et al. One hundred and eighteen chronically mentally disabled individuals from New York State's Community Support Systems program were asked questions in the areas of demographics and affective well-being, satisfaction in fifteen life domain areas, and mental health status. They came from a variety of supervised and

unsupervised settings. The supervised settings included adult homes (25%), family-care homes (14%), nursing homes (2%), and group homes (1%). Unsupervised settings included rooming houses (8%), private residence with spouse (5%), private residence with parents (16%), private residence with unrelated others (5%), and alone in private residence (22%).

Demographic characteristics and residence type were not significantly related to overall quality of life. In regard to global affect, respondents were more likely to remember positive experiences than negative experiences, which was consistent with Campbell's (1978) survey of the general population. However, respondents were twice as likely to report negative feelings as the general population on such items as "feeling very lonely or remote from other people," "bored," and "depressed or unhappy" (p. 76). The authors reported that these results were consistent with observations that respondents have relatively fewer social interactions and little to do during their waking hours, compared to the general population.

The distribution of client responses on the satisfaction in life domain scales showed a substantial clustering at the positive end of the scale. Compared to the general population, however, a lower proportion remembered positive experiences in the past few weeks and a higher proportion reported negative experiences. Baker and Intagliata suggested that the positively skewed satisfaction of life domains reflected a combination of a desire to please the interviewer, a "grateful testimony" to being out of the hospital, and the efficacy of the Community Support Systems program.

Baker and Intagliata found a positive and significant relationship between the two quality of life measures. Although positive affect and satisfaction with life domains represent a global measure of happiness and a cognitive measure of satisfaction in specific life areas, respectively, they also tap overlapping aspects of life quality.

In contrast to Lehman, ratings of clients' mental status were significantly related to reported life quality on both the global affective measure and the specific life domains measure. This discrepancy may be due in part to the different scales used to measure psychopathology. Lehman used several self-report scales measuring anxiety, depression, and self control. Baker and Intagliata used the Global Assessment Scale, administered by case managers. These scales may assess different constructs because the Global Assessment Scale uses psychiatric terms whereas, Lehman's battery of scales uses psychological-health terms, such as anxiety and self-control.

Although the quality of life literature lacks a comprehensive model and there have been limited numbers of studies, some tentative conclusions regarding the chronically mentally disabled can be drawn:

1. Satisfaction with specific life areas (domain satisfaction) correlates with global satisfaction more strongly than do objective indicators. The highest correlations are in the areas of health, leisure, finances, and social relations.
2. Moderate to strong correlations are found between domain satisfaction and objective indicators, particularly in the

areas of privacy in the home, more frequent and intimate social contacts in the home, being employed, not having been a crime victim, and lower use of health care services.

3. Several demographic characteristics correlate weakly with global satisfaction. These include marital status and educational level.
4. The literature is inconclusive on the ability of the CMD to reliably report their quality of life. Lehman (1983a) found that the CMD can reliably report their quality of life. Only in the area of health satisfaction was there a tendency for psychopathology to introduce a negative bias. This finding was not replicated by Baker and Intagliata (1982), who found a significant relationship between mental status and both global and domain satisfaction.
5. Residence type and size need further investigation in terms of their effects on resident life and quality. Residence type was not significantly related to life quality in one study. The other major study only considered large facilities.

Social Integration of the Chronically Mentally Disabled

In addition to quality of life, the CMD living in community-based residential homes can be evaluated in terms of social integration. One of the more comprehensive studies describing community-based facilities and identifying factors facilitating social integration was by Segal and Aviram (1978). They interviewed 439 residents and 211 operators in California. The types of homes evaluated were family care facilities, board and care homes, and half-way houses.

According to Segal and Aviram, social integration involves two related but separate components, namely the extent to which the CMD individuals are involved in the internal environment (facility) and in the external environment (community). In their study, internal integration was defined as the extent to which a resident's life centered around and was mediated by the facility. The internal integration scale consisted of: a) availability of transportation through the operator; b) facilitation of activities by the operator in the home; c) provision of basic necessities in the home; d) socialization with the other residents and operator; and e) ability to purchase supplies at the residence. External integration was defined as the extent to which a resident's life focused outside the facility. The external integration scale consisted of: a) being present and consuming in the community; b) having access to community resources; c) having access to basic and personal resources; d) having access to and participating in family life; e) having access to and participating in friendships; f) participating in community groups; and g) participating in community recreational facilities.

The theoretical relationship between external and internal integration was considered in three ways. First, Segal and Aviram proposed that external and internal integration could both be enhanced by residents' social skills. A high level of social skill would not only improve functioning within the facility but outside the facility as well. Second, external and internal integration could be independent of each other, in that a resident may enjoy one area his/her life with no cross-over to another area. Finally, external

and internal integration could have a conflictual relationship in which, for example, external involvements in the community may be sacrificed for internal involvements within the facility. This represented the traditional conflict between living in a sheltered environment and attempting to leave that environment.

Data were collected on resident demographics such as number of residents, facility characteristics, operator characteristics, resident psychological characteristics, neighbourhood characteristics, and consumer response. The Consumer Response Scale collected satisfaction ratings from residents about various aspects of the facility such as privacy, food, relationships, recreational activities, and influence on the household. Psychometrics on this latter scale were not reported. Internal consistencies for the internal-external integration subscales ranged from .62 to .91. Further, high item-to-subscale correlations (.65 to .78) for each subscale and low item-to-other subscale correlations (.11 to .39) were found.

The residential facilities were located in suburban (44%), downtown (28%), rural (18%), and urbanghetto (3%) neighbourhoods. The majority of the facilities were characterized as primarily middle-class (47%).

Residential facilities were categorized as board and care, family-care, and half-way houses (see Table 1 for distinguishing characteristics). In terms of location, 57% of the family-care facilities were found in suburban areas, compared with 41% of board

and care homes, and 20% of half-way houses. Consumer response scores rated 60% of board and care and family-care facilities as very good, while only 20% of half-way houses received this score. Segal and Aviram commented that these ratings might be clouded by fear of, or gratefulness to, the operators. The half-way houses' more transitional nature may have detracted from the ratings.

In terms of residence size, one-half of the facilities had between one and six beds, serving 22% of the CMD population; 43% of the facilities had 7 to 50 beds, serving 51% of the population; and 6% of the facilities had more than 50 beds, serving 25% of the population. Satisfaction was reported by a larger proportion of residents in smaller facilities (69%) as opposed to 53% in the mid-sized and 36% of the large facilities. Facilities that were profit businesses tended to solicit a more negative response than other facilities. Only 37% of facilities operated for profit were viewed favorably, compared with 62% of non-profit facilities.

Operators of facilities were predominantly female (80%), middle-aged (65% of operators were over 50 years of age), had a high school education (50%), and had related backgrounds such as hospital attendants and vocational nurses. Operators who used supplemental services, such as health care workers, tended to have a treatment orientation and a more professional facility. Over one-half viewed themselves as a friend as compared to a parent (one-third). To a lesser degree, other roles included caretaker, landlord, and therapist. Over half (60%) of the operators had their families live with them in the facilities and two-thirds ate with their residents

regularly. Facility rules often suggested an institutional overlay, however. For example, only half of the residents had control of their own spending money. Half of the facilities exercised curfew rules and over three-quarters had set up rules to supervise medication.

External Integration

External integration of the CMD into the community has been a primary focus in the past couple of decades. Segal and Aviram classified predictors of social integration according to community, facility, and resident factors (Table 10).

Of community characteristics, positive response of neighbours (.31) was most important in promoting the external integration of the individual. Neighbours' interaction, in the form of inviting residents into their homes or having more than a casual conversation with them, had a differential impact on social integration depending on whether the interaction was directed towards one individual or the group. Efforts of neighbours to interact with one resident tended to increase external integration whereas efforts of neighbours to interact with the whole group tended to decrease external integration. Segal and Aviram suggested that outreach to residents as a group may have been in response to them as former mental patients, which the residents may have found demeaning.

The next most important community factor was closeness to community resources. The closer a facility was to community resources, the higher the external integration (.11). Single-family homes in

Table 10

Predictors of Social Integration

PREDICTORS	EXTERNAL INTEGRATION	INTERNAL INTEGRATION
	Beta	Beta
Community Factors		
Neighbours positive response	.31**	.19*
Rural area	-.13**	.11*
Complaints to authorities	-.11**	ns
Closeness to resources	.11**	ns
Downtown area	ns	-.17*
Facility Factors		
Ideal psychiatric environment	.11**	.31*
Social isolation of resident group	-.03**	-.07*
Operator perceives resources as helpful	ns	.11*
Residence clubs	ns	-.09*
Female operator	ns	.06*
Resident control of medication	ns	.04*
Resident Factors		
Sufficient spending money	.17**	.06*
Involuntary resident	-.15**	ns
Resident's control of money	.05**	ns
Psychological distress	ns	-.18*

Note. From The mentally-ill in community-based sheltered care: A study of community care and social integration (p. 170 & 188) by S. Segal and U. Aviram, 1978, New York: John Wiley & Sons.

* $p \leq .10$ ** $p \leq .05$

suburban neighbourhoods had negative impact on external integration because of their distance from parks, libraries, and community centres. In addition, the perceived dissimilarity of the CMD with neighbours may have accounted for diminished external integration in suburban neighbourhoods.

Another community factor was rural location (-.13), which had a negative influence on external integration. A rural location made it difficult for residents to move about independently and interact with the community.

Finally, complaints to local authorities (-.11), as the last community factor, had a negative effect on residents' external integration. Large board and care homes, and half-way houses in lower class and ghetto areas, were most likely to have complaints made about them to authorities. In addition, such residences were more likely to have alcohol-related arrests and hospitalization of residents. Segal and Aviram suggested that these effects may be reciprocal, in that more complaints lead to greater dependence on alcohol. In other words, complaints which reinforce social isolation may contribute to a resident's use of alcohol.

Of the facility characteristics, ideal psychiatric environment enhanced external integration (.11) the most. Ideal psychiatric environment emphasized program involvement, support from staff and residents, spontaneity, a structured program with clear expectations, encouragement of autonomy, open expression of anger, and open discussion of personal problems. Ideal psychiatric environments

tended to be family-oriented, where staff ate with residents. Segal and Aviram suggested that ideal psychiatric environments may have been crucial in the development of social skills necessary for external integration.

Another facility factor was social isolation. The extent to which the residents were isolated from neighbours and abandoned by families (-.03) hindered external integration. Operators of socially isolated facilities may have contributed to isolation. They tended to operate the business for companionship. They often isolated themselves from the professional service community and local associations. They were less likely to transport their residents outside the facility

The most important resident factor was having sufficient spending money (.17). Residents who reported that they had enough money were predominantly single and engaged in an educational program that offered inexpensive or free access to recreational courses.

Control of spending money by residents, as opposed to operators and conservators, was the next most important resident factor, in terms of facilitating external integration (.05). Residents who controlled their own money were more likely from facilities where operators were active in local associations and the Department of Health. Operators who controlled resident spending money were more likely from large board and care facilities and were less likely to be affiliated with a government program.

The final resident factor was being an involuntary resident, which hindered external integration (-.50). This was defined as a resident

that did not choose the facility in which he/she was currently living. Involuntary residents were more likely to be placed in old YMCA's, hotels, fraternity houses, and boarding homes. They were less likely to plan their daily activities. Segal and Aviram suggested that denial of the right of these individuals to choose their own residence may have encouraged dependence on the operator to make other important decisions.

Internal Integration

Internal integration, or focusing one's life inward on the living arrangement, was viewed by Segal and Aviram as offering some CMD individuals a high level of social support that otherwise might not be available outside of the facility. They suggested that internal integration might be very desirable for some individuals and valued in its own right, contrary to popular assumptions regarding the superiority of external integration. Internal integration may serve as an important substitute for the family by providing support and promoting a healthy response to one's environment.

The most important community characteristic was positive response from neighbours, which enhanced (.19) internal integration. The authors suggested that, as a result of a resident's visit to a neighbour, the resident can bring new experiences back to the facility and can improve his or her functioning by engaging in normal social interactions.

The next most important community characteristic was rural location, which enhanced (.11) internal integration. Facilities in those areas tended to be family oriented, where the operator and his or her family lived with the residents.

A downtown location, as a community characteristic, hindered (-.17) internal integration. Downtown facilities tended to offer minimal possibility for the development of commitment on the part of the resident. In part, this is explained by the transient nature of the facilities, such as old YMCA's that have little home-like quality. In addition, the residents who occupy them are more likely to have been picked up by the police in the past year, which suggests a transient life style.

Ideal psychiatric environment (.31) was the most important facility characteristic in enhancing internal integration, especially as it related to the degree of involvement and support between staff and residents.

Operator's favorable opinions about the importance of community services in helping residents was another facility characteristic which enhanced (.11) internal integration. Operators were more likely to report that community services were helpful if the operators were involved in the lives of the residents, if they viewed themselves as more than caretakers, and if the facility offered in-house programs.

Another facility characteristic which enhanced internal integration was female operators (.06). Female operators tended to operate their facility with a family-oriented atmosphere, whereas male operators were more likely to operate larger, professional facilities.

Facilities that did not permit the residents to control their medication, as a facility characteristic, enhanced internal integration (.04). Facilities that controlled medication tended to be family-oriented and operated by females. In addition, they were most likely to have received more complaints from neighbours. Segal and Aviram suggested that operators who controlled medication were trying to ensure safety for resident and to derive a sense of control for themselves.

Social isolation of the group from their community, as another facility characteristic, hindered (-.07) internal integration. A number of resident and facility characteristics are relevant here. First, the socially isolated group tended to be individuals who needed help with their basic life functions. As a result, these individuals may have lacked the necessary skills to even engage in social interactions within the facility. A second influencing factor regarding social isolation was related to the type of resident. Mentally retarded individuals were less likely to be socially isolated, whereas the mentally ill were more socially isolated. Segal and Aviram proposed that the community is less threatened by mentally retarded individuals. Third, residents were less isolated as a group when the facility program offered work training programs, as opposed to offering a non-directive living arrangement. Fourth, too much social control, as well as too little control, hindered internal integration. For example, isolation was increased with both no curfew and a very early curfew. Segal and Aviram suggested that operators who are in the business for companionship must resist the temptation to be "one of the gang" by setting appropriate limits and structure.

The final facility characteristic was facilities that operated as board and room lodgings, which hindered (-.09) internal integration. The operators do not live in the facility and operate the business for profit. Board and room facilities have a transient quality, where staff are less involved with the ongoing lives of their residents.

In terms of the resident factors, having sufficient spending money enhanced (.06) internal integration. Residents with sufficient spending money were more likely to be independent in their activities and to have chosen the facility. As well, they tended to rate the facility positively.

Psychological distress, as a resident factor, hindered (-.18) internal integration. Residents experiencing psychological distress were likely to feel unsafe on the streets, suicidal, overtly delusional, and depressed. They were likely to describe their facility as one that placed few demands on them, lacked organization and order, and tolerated the expression of anger.

Summary of Internal and External Factors

Factors that hindered both internal and external integration included psychological distress of the resident. Social isolation of the resident group also hindered both internal and external integration. While it seems obvious that a socially isolated resident would have less contacts outside the facility, the more puzzling question concerns why a socially isolated resident would have less social contacts within the facility. Segal and Aviram suggested,

using Gruenberg's (1967) social-breakdown model, that following the process of being labelled as incompetent or dangerous, the individual goes through "normalization." Normalization was explained as attempting to maintain a normal self-concept by withdrawing from the immediate group associated with the illness. In fact, Segal and Aviram found that residents tended to define everybody else as crazy.

Some factors enhanced a resident's involvement within the facility at the expense of his/her involvement in the external community. A rural environment was found to enhance internal integration and reduce external external integration. An attractive and supportive rural facility focuses its involvement within the home. Within the city, facilities that were a long distance from community resources tended to be family-oriented, where the operator lived with the residents. As a result, internal integration was enhanced and external integration was diminished. These facilities were more likely to have in-house therapy or rehabilitation programs. Lack of resident control over medication tended to increase internal integration, likely because the resident was tied to the facility schedule, at the expense of external integration.

Segal and Aviram concluded that the key to designing an optimum facility depended on promoting factors that facilitate both internal and external integration. These factors include an ideal psychiatric environment, sufficient spending money, and positive neighbour response. Specifically, family-oriented homes in middle-class neighbourhoods, in which operators live and eat with the residents and make use of support services are important to social integration.

Neighbours who invite residents into their home and have more than casual conversation with them are also important to social integration.

Although this research offers several major advantages over smaller studies, including its large sample size and comprehensiveness in terms of multiple predictor variables (650), there is one methodological limitation that bears discussion. The significance level of $p < .10$ chosen for internal integration predictors increases the likelihood of chance prediction. This is particularly important because the predictors for the regression equation were selected on the basis of their high correlation with the outcome measures. A more valid method of selecting predictors would have been to identify those which best represented constructs of interest and then entering them into a regression equation. It is also worth noting that predictors which correlate below .10 account for very little variance and are of questionable importance.

Social integration was also addressed by Trute (1986), in terms of the influence of operators' levels of social alienation on neighborhood contacts by residents. In a cross-sectional survey of 47 residents, he found that women residents under the care of socially integrated operators experienced the highest levels of neighborhood contacts. This relationship held even when the influence of residents' psychopathology, time a resident lived in a facility, and the number of residents in the facility was controlled. This research lends support to Segal and Aviram's findings that operators involved in their local neighbourhoods improves the social integration of residents.

Factors Influencing Resident Behaviour in Facilities

Besides Segal and Aviram's (1978) large and comprehensive study, a number of smaller studies have examined a variety of community-based residential facility characteristics for their effects on residents. These effects have ranged from limited and narrowly-focused criteria, such as recidivism, to more broadly ranging criteria discussed previously, such as quality of life. Characteristics reported to improve behavioral outcomes include (a) number of residents in the home and (b) sponsor attitudes and behaviours such as expectations, restrictiveness, and beliefs about mental illness.

Number of Residents

A characteristic of community-based residential facilities reported to influence resident behaviour is the number of residents in the home. Linn, Klett, and Caffey (1980) investigated this factor, among others, in their survey of 150 foster home residents and sponsors. Foster homes in this study were defined as traditional family settings in which a patient lived with at least one responsible adult (i.e., sponsor). The homes were assessed in terms of number of occupants, supervision provided by the sponsor, the sponsor's tolerance for deviant behavior, expectations for performance, amount of activity provided in the home, and supervision provided by hospital social work staff. Where possible, responses were rated on a five-point scale. Improved outcome, as measured by social dysfunction, was found to be significantly related to fewer residents in the home (two or less), having children in the home, and fewer overall occupants, including

family members and residents. A limitation of this study was that it did not give examples of how foster home characteristics were operationally defined.

A nonexperimental survey designed to assess the needs of the CMD from the client and sponsors point of view (Marion & Grabaski, 1979) also addressed the number of residents issue. A total of 139 residents and 26 sponsors in California were interviewed. Licensing regulations restricted family care homes to no more than six residents, whereas group homes were licensed for more than six residents. The residents' questionnaire covered such areas as rules of the facility and activities available. The operators' questionnaire, which focused on the resident, assessed behavior control, self-care, social, community, vocation, and academic categories. Out of control behaviors included setting fires, attacking others, and wandering away from the facility.

The results indicated that 95% of family care home residents did not have overt problems with behavior control, compared with 83% of group home residents. The authors suggested that smaller family care homes were less tolerant of deviant behaviour than larger group homes. Although not discussed by the authors, perhaps the operators' attitude of less tolerance for deviant behaviour also included higher expectations for more socially desirable behavior. It may be that family care residents, having more opportunities for sponsor interaction, developed an awareness of socially acceptable behaviour and responded with less unacceptable deviant behaviour. Marion and Grabaski did not draw conclusions from their study because the

differences may not have been statistically significant and causal attribution was impossible. The most straightforward observation, however, is that smaller homes had fewer problems with behavioral control.

A study of 50 foster homes in three Canadian provinces (Murphy, Engelsmann, & Tchong-Laroche, 1976) found evidence contrary to the previously described reports. A total of 106 residents were interviewed who: a) were between the ages of 20 and 60; b) had been hospitalized for six months over the previous two years; c) had a diagnosis of psychosis; and d) had an apparent inability to live outside a sheltered setting. As well, 23 controls who met the same criteria but who lived in hospitals were assessed. The home included either five or fewer residents or 10 - 30 residents. The residents were evaluated at the time of placement in the home and 18 months later for psychotic signs; neuroticism and self-image; role performance; adjustment in terms of affect, cooperation, and communication; and intellectual functioning.

The results showed no significant difference between the social improvement made by residents in small homes and those placed in large residences. Further, both the hospital patient group and the community residence group demonstrated roughly the same degree of clinical improvement. For example, improvement on total pathology, thought-disorder, and anxiety-depression for the foster home residents were 20.8%, 23.2%, and 6.6%, respectively. The analogous scores for hospital patients were 34.8%, 21.2%, and 5.8%, respectively.

Although the authors did not describe how they collected their sponsor data, they reported sponsors to be very tolerant and undemanding. Examples were given of everything being done for the residents, rarely asking the residents to help with household chores, rarely encouraging the residents to attend sheltered workshops, and rarely encouraging them to explore the neighbourhood. Murphy et al. concluded that sponsors were not geared towards resocialization of the residents. He suggested that, for passive and poorly-motivated residents, excessive sponsor tolerance and acceptance lead to little social or clinical improvement. In other words, it was not the number of residents in the home but the sponsors undemanding attitude, reflective of custodial care as opposed to a rehabilitative philosophy, that determined improved outcome.

Overall, the literature is inconclusive on the effect of number of residents in the home on resident functioning. Further research needs to study the degree to which large, bureaucratic facilities and small, family-like facilities are associated with specific resident outcomes such as quality of life and social integration.

Level of Expectation

Level of expectation of the chronically mentally disabled by operators is another characteristic of community-based residential facilities reported to influence resident behaviour. Expectations generally refer to participation in day-time activities, employment, household tasks, and socially acceptable behaviour. Studies attempting to define optimum expectations for individuals are described below.

A comparative study of high expectation and low expectation settings was undertaken by Lamb and Goertzel (1971, 1972). Ninety-three chronic psychiatric patients were randomly assigned to either a high expectation or low expectation group. The high expectation group consisted of hospitalized patients who were gradually released to a community-based rehabilitation program. The program consisted of a halfway house where residents were expected to participate in day-time activities such as work, school, recreational activities, household tasks, and meal preparation. Activities outside the residence were available through a hospital-connected day treatment centre, as well as vocational services such as sheltered workshops. The low expectation group was released from the hospital to boarding homes where there were few responsibilities and the residents related to operators as children do to parents.

The groups were assessed at 6, 12, 18, and 24 month intervals on rates of rehospitalization, and vocational and social functioning. Vocational functioning was evaluated in terms of percentages of days spent in some vocational activity, such as paid employment, workshop activity, and homemaking. Social functioning was evaluating using a modified version of Fairweather's socialization scale (cited in Lamb & Goertzel, 1972).

At the 24 month interval, 50% of the high-expectation group was involved in structured activity 90 percent of the time, as compared to .19% of the low expectation group ($p < .05$). Although social and vocational functioning improved in the high expectation setting, it was not more effective in keeping patients out of the hospital than

the traditional low-pressure setting. Rates of rehospitalization were similar except at the sixth month interval, when the high expectation group exceeded the low expectation group by 27% ($p < .02$). Lamb and Goertzel concluded that the high expectation program was well worth the effort in terms of rehabilitating and enriching the lives of the chronically mentally disabled, rather than moving them from one custodial situation to another. Lamb and Goertzel did not address the factors that might have contributed to the similar recidivism rates of the two groups.

Social learning theory (Bandura, 1977) may, in part, explain these comparable recidivism rates. It suggests that optimum performance occurs when an individual believes he or she can successfully execute the required behavior. Performance expectations are raised through repeated successes and lowered through repeated failures, especially if mishaps occur early in the course of events. It may have been that initially high expectations were too high for residents to achieve sufficient success. This may have overwhelmed them, which resulted in increased psychiatric symptoms. Conversely, the low expectation setting may not have challenged the residents enough to perform, as suggested by their significantly lower social and vocational functioning.

A study exploring the effects of community reaction on external integration of the chronically mentally disabled living in community residents offers another view of how expectations affect behavior (Segal, Baumohl, & Moyles, 1980). One hundred and ninety-nine Californian residents and 211 operators were interviewed. Community

data were obtained from census and other public records. Individual characteristics of each resident were controlled by assessing psychopathology, age, and gender. Community reaction was defined as the degree of neighbourhood restrictiveness. The term included the extent to which the community did not invite or encourage the participation of facility residents. As such, the facility operators and residents were asked whether they knew the names of their neighbours, whether residents had been invited into neighbour's homes, whether neighbours complained, threatened, or harassed the operators, and whether complaints had been made to local authorities.

The results suggested that moderate levels of negative community reaction (i.e., complaints) enhanced external integration of the residents, whereas extreme levels of negative community reaction reduced external integration of the residents ($p < .05$). The authors proposed that moderately negative reactions of neighbours was well-intended concern meant to stimulate the operators into promoting social integration, whereas extreme negative reactions were perceived as obdurate and destructive. More concretely, in cases where neighbours offered constructive criticism or expected moderate levels of conformity to neighbourhood standards of behaviour, residents achieved greater external integration.

A pilot study that assessed a high-expectation half-way house over one year attempted to identify the factors that led to successful outcome (Wilder, Kessel, & Caulfield, 1968). The study did not attempt to compare the high expectation group to any other group. The half-way house rewarded productive daily activity with reduced rent.

Residents had their own keys and were responsible for their own household duties and meals. The half-way house emphasized the health of residents and expected residents to assume primary responsibility for meals, budgeting, laundry, and activity programs.

The 44 residents studied were characterized as having relatively severe psychiatric disorders, as diagnosed by their therapist. The authors retrospectively rated the residents on clinical, vocational, and social outcome. The rehospitalization rate of 40% was similar to that found in the literature. Rates of vocational performance found 55% of the women and 50% of the men employed. At a six month follow-up after discharge from the half-way house, 41% of the women and 50% of the men were living on their own. While the authors reported separate gender outcome, they did not statistically analyze the differences. These employment rates are high compared to Tessler and Goldman's (1980) findings of approximately 26% employment.

Although Wilder et al. (1968) recognized the limitations of an impressionistic, post hoc study, they characterized the results as a beginning to further systematic studies. They proposed that older, better motivated, more employable residents with mild to moderate adjustment problems do best in high expectation settings.

Another impressionistic study addressed the expectation issue by observing operators and residents of 50 foster homes in Canada (Murphy, Pennee & Luchins, 1972). It described resident status at 18 month follow-up from hospital discharge and the character of the homes and operators. The study used in-vivo observations and open-ended

interviews. For the most part, the authors observed that foster mothers expected very little from residents. Residents were described as generally passive and withdrawn. The authors suggested that these foster mothers had probably acquired their low expectations from general community attitudes, which continued to classify the chronically mentally ill as sick. Sick role behaviour includes passivity, submission, and helplessness. Murphy concluded that beliefs about mental illness as sickness had resulted in the foster mothers creating a dependency relationship with the residents that impeded self-sufficiency, resocialization, and acceptance.

Overall, the literature indicates that the typically low expectations of operators and neighbours are inadequate to improve the social functioning of the chronically mentally disabled. Social learning theory and Segal et al. (1980) suggest that moderate expectations are most beneficial by challenging the CMD to improve while not overwhelming them. Lamb and Goertzel (1971, 1972), although labelling their high expectation environment as most conducive to improving social and vocational functioning, may in fact be supporting the moderate expectation argument. The environment that the authors labelled as high expectation consisted of half-way housing, sheltered workshops, and day-care activity programs. As such, this environment would not demand the rigours of the competitive workplace nor the responsibilities of independent living. Perhaps it reflected moderate as opposed to high expectations in such areas as competitive employment and independent living.

Restrictiveness

Hospital and residential facility restrictiveness has been reported to be an important factor in the behaviour and care of the chronically mentally disabled. The concept of least restrictive environment had its beginnings in the landmark trial of Wyatt vs Stickey (Killebrew, Harris, & Kruckeberg, 1982). The judgment from the trial stated that individuals had the right to the least restrictive conditions necessary for treatment.

Restrictiveness has come to refer to several features of treatment that can infringe on individual freedoms. Broken down into six dimensions, restrictiveness is comprised of limitations to physical freedom, legal status of treatment, time restraints, legal status of finances and living arrangements, medications, and somatic treatment (Ransohoff, Zachary, Gagnor & Hargreaves, 1982). Limitations to physical freedom refers to interference with freedom of movement and choice of activities. Legal status of treatment refers to being either a voluntary or involuntary patient, as defined by a mental health law. Time restraint refers to the time commitments imposed by treatment. For example, a daily life skills program may involve all or most daytime hours. Legal status of finances and living arrangements refers to whether a court-ordered public trustee or the disabled person is responsible for finances or living arrangements. The medication dimension involves the prescribed amount of antipsychotic medication. Medication is considered restrictive in situations where a high dosage is maintained over long periods of time, when low to moderate dosages would suffice. Somatic treatment

denotes the use of physical treatments such as electroconvulsive therapy.

Ransohoff et al. (1982) sought to validate empirically these six dimensions. Mental health professionals including nurses, psychologists, social workers, and psychiatrists were asked to make quantitative judgments about the restrictiveness of a set of alternatives within each dimension. The least restrictive alternative received a score of 0 and the most restrictive alternative a score of 100. As well, the six dimensions were rated from 1 (most important) to 10 (least important).

Inter-rater agreement was high (.92) regarding the importance of the dimensions. The judges' raw scores for the importance of each dimension were converted into comparable average weights. The differences among the weighted dimensions were significant ($p < .001$). Most important was the physical dimension (27.3). Somatic treatment and legal status of treatment were rated moderately important (21.5 and 18.8, respectively). Legal status of financial and living arrangements, medications, and time constraints were rated least important (11.5, 11.2, and 9.7, respectively). Correlations among the dimensions suggested to Ransohoff that only the physical limitations (.94) may be needed to adequately represent restrictiveness for research purposes.

Ransohoff et al. discussed several limitations to their findings. They surveyed only mental health professionals. A broader spectrum of patients and patient-rights advocates might have resulted in different

weightings. Further, the formula developed to assess various situations using all of the dimensions could have benefited from validation on actual situations as opposed to hypothetical ones.

A study in the United Kingdom compared restrictiveness between the chronically mentally disabled living in hospital and community (Pryce, 1977). Forty residents transferred from hospital to a large community residential home were assessed on several variables, including restrictiveness, thought to affect resident outcome. A comparison hospital group consisted of 27 patients. The other variables assessed were work, contact with the outside world, and nurses attitudes about the residents' ability to cope with daily activities. Restrictiveness was assessed by an observer rating restrictions on resident movement and more general rules and routines. Resident outcome was evaluated on Wing and Brown's (1970) Symptom and Behavior Rating Scale. The residential and hospital group were assessed at discharge from hospital and 24 months after discharge. The scale was based on a semi-structured questionnaire. Incongruity, blunting of mood, poverty of speech, incoherence, irrelevance of speech, and coherent delusions were rated on five-point scales. The pattern of ratings enabled classification of schizophrenic symptoms according to type and severity.

Although Pryce did not report tests of significance, he stated that resident men experienced the least restrictiveness (4.0). Resident women experienced the second least restrictive environment (2.4), followed by hospital women (1.0) and hospital men (0.5). He described elements in the residence that were similar to the regime of the

hospital, however, such as an expectation of being in bed by 9:30 p.m.; telling the staff person why they wished to go out; and some restrictions on bathing, hairwashing, and bedmaking. Thus, it appears that status as a residential facility does not guarantee a nonrestrictive environment. Clinical improvement, another outcome of the study, occurred for residence women but not the men. Pryce suggested that the men, who showed more severe symptoms in the residence, were vulnerable to overstimulation in the residence. Overstimulation apparently contributed to their deteriorated clinical state. This hypothesis is similar to the expectation literature (Lamb & Goertzel; 1971, 1972), which found that high expectations resulted in increased symptoms and hospital recidivism rates.

A four-year follow-up study of 27 chronically mentally disabled persons, attempting to assess the effects of institutionalization, also addressed the issue of restrictiveness (Dickey, Gudeman, Hellman, Donatelle, & Grinspoon, 1981). The 27 residents were interviewed four years after they had been discharged from the Boston State Hospital. The average length of hospital stay had been 24 years. At time of discharge from the state hospital, 12 CMD persons were given community placements that included homes of relatives, nursing homes, and family care homes. Fifteen CMD persons were placed in a local hospital. The placements were assigned as part of normal hospital practice, rather than any study design. At follow-up, questions, among others, were asked about restrictions, such as going out of the building and whether they were permitted to leave at staff discretion.

Dickey et al. found no difference between the rules at the two locations. Although the population sampled was small and there were no statistical analyses to assess significance, the study again suggests that being in a community residence does not guarantee a less restrictive environment.

To summarize, the literature on restrictiveness suggests that it is a multidimensional concept, including not only physical freedom but legal status of finances and treatment, time restraints, medications, and somatic treatment. A community residence, as opposed to a hospital ward, is not a guarantee of less restrictiveness. Rather, the specific rules of the environment appear to determine the restrictiveness experienced by the chronically mentally disabled. There is some suggestion that a less restrictive environment may be a factor in clinical improvement.

Ideological Beliefs of Sponsors

The influence of sponsor beliefs about mental illness on the functioning of the CMD has received anecdotal attention but little empirical investigation (Dubin & Cavarelli, 1978; Murphy et al., 1972; Van Putten & Spar, 1979). The nature of beliefs about the CMD held by sponsors may influence the type of interaction in the home. For example, a sponsor caring for a resident as if he/she were a child by doing their daily chores and imposing strict household rules may foster complacency, and dependence. A sponsor who holds beliefs consistent with a rehabilitative focus, however, may challenge the resident to independent and semi-competitive living.

Beliefs about the chronically mentally disabled vary as a function of the characteristics of patients and treatment situations, and characteristics of individuals within the general public (Dear & Taylor, 1982). The best documented belief regarding the CMD shown to affect the behaviors of others is perceived unpredictability. The more unpredictable disabled people are perceived to be, the greater the avoidance and rejection by the public. Moreover, rejection of the CMD is more likely if they are seen as not responsible for their behaviour. Behavioral symptoms such as violence are strongly correlated with rejection. Negative attitudes are held towards males of lower social status who lack social ties within the community.

Characteristics of the treatment situation can influence public beliefs about the CMD. Somatic treatments, such as medication and electroconvulsive therapy are viewed more negatively than verbal therapies. Less stigma is attached to the CMD individual receiving treatment from personnel with non-psychiatric affiliations (e.g., social workers).

Characteristics of the general public also influence beliefs. Individuals in the general public with lower occupational status tend to believe that CMD individuals need to be directed as to how to behave, whereas those with higher occupational status tend to believe that they can generally direct their own behavior. Younger age and higher education in the general public are associated with more "enlightened" beliefs about the CMD. Older people with lower educations tended to have beliefs that lead them to be socially distant and rejecting.

Most scales constructed prior to the onset of community mental health care did not tap beliefs about social integration and rehabilitation. Rather, they addressed attitudes of staff in institutional settings. As community mental health care developed, scales measuring attitudes and beliefs were adapted to measure beliefs and attitudes of the public regarding CMD individuals living in community settings.

An example of a study using a scale developed to measure beliefs consistent with community mental health care is Del Gardio Stein, Ansley, and Carpenter, 1976. They looked at the relationship of mental health beliefs and attitudes towards patients. Beliefs were narrowly defined using the Community Mental Ideology Scale (Baker & Schulberg, 1967). The CMHI scale was designed specifically to measure the ideology underlying the community mental movement. The scale is unidimensional and addresses five categories of beliefs. The first category involves beliefs that mental health services should have a population focus. The second category involves beliefs that services should counteract harmful environmental forces before they produce illness. The third category involves beliefs that the proper focus of treatment should be maximizing social adjustment rather than reconstructing personality. The fourth category involves beliefs that services should be comprehensive and delivered in a manner to ensure continuity of care. Finally, the CMHI scale involves beliefs that mental health professionals should function as specialists but also work with and through other caregivers. The scale's validity was reflected in its ability to significantly ($p < .001$) discriminate groups known to be for and against community mental health services.

In Del Gardio's et al. study, thirty-three therapists rated each of eight case histories of psychiatric outpatients on likeability, comfort, interest in treating, interest in friendship, and prognosis. Therapists scoring high on the CMHI scale were found to like patients significantly more than lower scoring therapists. Further, the high CMHI therapists assigned patients significantly more favourable prognostic ratings. Del Gaudio et al. speculated that professionals who believe that socio-cultural factors produce psychological distress tend to believe in the essential goodness of people and to have a sense of optimism about helping people in distress.

Dear and Taylor (1982) attempted to develop a scale that could be used with the general public. Their goal was to develop a scale to measure beliefs about the mentally disabled which incorporated current principles of community mental health and beliefs about the chronically mentally disabled. They borrowed heavily from three validated instruments, namely the Custodial Mental Illness (CMI) scale (Gilbert & Levinson, 1956), the Opinions About Mental Illness (OMI) scale (Cohen & Struening, 1962), and the Community Mental Health Ideology (CMHI) scale (Baker & Schulberg, 1967). Limitations of the OMI and the CMI scales had been that they were constructed to measure beliefs of professionals and therefore, assumed psychiatric knowledge beyond that of the general public.

Dear and Taylor's (1982) new scale, patterned mainly after the OMI scale, is based on the principle that beliefs about the CMD comprise multiple dimensions (Cohen & Struening, 1962). Cohen and Struening had empirically derived five subscales from factor analysis of 100

opinion statements (1962). Dear and Taylor adapted those subscales that were most likely to discriminate between individuals who were positively versus negatively disposed towards the mentally ill and mental health facilities. As a result, they came up with three subscales, namely authoritarianism, benevolence, and social restrictiveness. A fourth subscale, community mental health ideology, was adapted from the CMHI scale. The authoritarianism subscale reflects a view of the mentally ill as an inferior class, requiring coercive handling. A sample item is, "Mental patients need the same kind of control and discipline as an young child." The benevolence subscale reflects a paternalistic, sympathetic view of patients based on humanistic and religious principles. A sample item is, "We need to adopt a far more tolerant attitude toward the mentally ill in our society." The social restrictiveness scale views the mentally ill as a threat to society. A sample is, "I would not want to live next door to anyone who is mentally ill." The community mental health ideology subscale measures the ideology underlying the community mental health movement. A sample is, "Locating mental health services in residential neighbourhoods does not endanger local residents."

Factor analysis revealed that authoritarianism and social restrictiveness loaded almost equally and strongly (.73 and .72) on the first factor, suggesting that they measure nearly the same dimension. Community mental health ideology loaded strongly (.86) on the second factor and benevolence loaded strongly (.81) on the third factor (Dear & Taylor, 1982).

There is no literature, to date, using Dear and Taylor's scale. An important issue however, regarding the measurement of beliefs, is whether there is a relationship between beliefs and behavior. For example, does someone with an authoritarian belief system, influence another's behavior because of it. The literature suggests that there may be a relationship between beliefs and behaviour. Cohen and Struening (1964) studied 12 psychiatric hospitals containing largely chronic schizophrenic patients. Staff beliefs, as measured by the OMI scale, demonstrated a significant relationship to staff decisions regarding patients' length of hospital stay. Specifically, hospitals characterized by authoritarian and restrictive beliefs had lower rates of early discharge.

Ellsworth (1965) also supported the hypothesis that mental health related beliefs and behaviour covary. In a large psychiatric hospital, aides and nurses were given the OMI scale, among others. In turn, staff behaviour was rated by patients, including such characteristics as dominance and interpersonal distance. The first finding was that staff who held authoritarian beliefs were seen by patients as controlling, restricting, and domineering. Second, staff who endorsed either restrictiveness or protective benevolence were described similarly as showing lack of respect toward patients. Ellsworth concluded, however, that staff beliefs affected the patient perceptions about the staff but not necessarily patient behaviour. He pointed out that the relationship between beliefs and effectiveness in treatment probably depends on the beliefs being measured, the prevailing treatment philosophy of the hospital, and the kind of patient being treated.

The literature on community mental health ideology, although it has not been applied to residential operators suggests that therapists with a CMHI orientation may hold more favourable prognostic views about their clients. As well, hospital staff endorsing authoritarian and restrictive beliefs were found to keep patients hospitalized longer. The above findings suggest a research direction, in terms of exploring the influence of operator beliefs on resident behavior. For example, will operators endorsing authoritarian and restrictive views tend to keep residents from being externally integrated? In addition, will operators with authoritarian and restrictive beliefs hamper well-being, and reducing overall functioning? Finally, will authoritarian operators be perceived by residents as hindering their quality of life within the facility?

Summary of Factors Affecting Resident Behavior

Factors influencing resident behavior in community facilities can be summarized in a number of areas:

1. Family-like facilities enhance external and internal integration, and quality of life. The most important factor seems to be whether operators live and eat with residents, which is symbolic of family activity.
2. Internal integration is enhanced by operators who view themselves as more than caretakers.
3. Both internal and external integration are enhanced by neighbours who invite residents into their homes and have more than a casual conversation with them.

4. The effect of number of residents on resident functioning is inconclusive. There is some suggestion that smaller homes are associated with improved social functioning.
5. Operator expectations that challenge but do not overwhelm the resident enhance social and vocational functioning of the CMD.
6. Restrictiveness is a multidimensional concept. The specific rules of the residence appear to determine the restrictiveness experienced by the CMD. A less restrictive environment may be a factor in clinical improvement of residents.
7. There has been no research, to date, on the affects of operator beliefs on resident functioning. Research done with hospital staff suggests that those with authoritarian and restrictive beliefs keep patients hospitalized longer. Therapists with community mental health ideology beliefs like their patients more and hold more favourable prognostic opinions.

Purpose and Research Hypotheses

The present research is primarily concerned with qualities of community-based residential facilities and their operators that contribute to the functioning and well-being of residents. With the exception of a few large, comprehensive studies (Baker & Intagliata, 1982; Lehman, 1983; Segal & Aviram, 1978), the literature has narrowly defined outcomes in terms of resident functioning. Those studies that did use measures of well-being or life quality had, for the most part, ill-defined conceptions of life quality. Thus, studies regarding the influence of community-based residential facilities on the CMD are in their infancy.

This research integrates some of these research directions. Specifically, it investigates the effects of a number of operator, resident, and residence variables on resident perceptions of global life quality, quality of living arrangements, and internal and external integration. Additionally, the study looks at the influence of operator, resident, and residence variables on the psychopathology of residents. Operator variables include operators' perceptions of the restrictiveness of the facility, their expectations of residents, their adherence to authoritarian and benevolent beliefs, and their perceptions of the family-like qualities of their facility. Resident variables include their perceptions of operator restrictiveness, operator expectations, and family-like environment. The residence variable is number of residents. Table 11 groups these predictor and dependent variables.

Perhaps, with a more comprehensive understanding of the characteristics of residential facilities and operators that influence the well-being and functioning of the CMD, policy makers and other professionals will be better able to design facilities.

The hypotheses are as follows:

1. Higher operator expectations, lower operator restrictiveness, lower operator adherence to authoritarian and benevolent beliefs, and higher operator perception of a family-like environment will be associated with higher resident quality of life.

Table 11

Independent and Dependent Variables

<u>Independent Variables</u>	<u>Dependent Variables</u>
I. Operator Variables	I. Global Quality of Life
Operator restrictiveness	II. Quality of Living Arrangements
Operator expectations	III. External Integration
Operator beliefs	IV. Internal Integration
Authoritarian	V. Psychopathology
Benevolence	
Operator perception of family-like environment	
II. Resident Variables	
Resident perception of expectations	
Resident perception of restrictiveness	
Resident perception of family-like environment of expectations	
III. Residence Variables	
Number of residents	

2. Higher operator expectations, lower operator restrictiveness, lower operator adherence to authoritarian and benevolent beliefs, and higher operator perceptions of a family-like environment will be associated with higher quality of resident living arrangements.
3. Higher operator expectations, lower operator restrictiveness, lower operator adherence to authoritarian and benevolent beliefs, and higher operator perceptions of a family-like environment will be associated with greater external integration.
4. Higher operator expectations, lower operator restrictiveness, lower operator adherence to authoritarian and benevolent beliefs, and higher operator perceptions of a family-like environment will be associated with greater internal integration.
5. Higher operator expectations, lower operator restrictiveness, lower operator adherence to authoritarian and benevolent beliefs, and higher operator perceptions of a family-like environment will be associated with lower psychopathology.
6. Residents' perceptions of higher operator expectations, greater family-like environment, and lower restrictiveness will be associated with higher global quality of resident life.
7. Residents' perceptions of higher operator expectations, greater family-like environment, and lower restrictiveness will be associated with higher quality of resident living arrangements.
8. Residents' perceptions of higher operator expectations, greater family-like environment, and lower restrictiveness will be associated with greater external integration.

9. Residents' perceptions of higher operator expectations, greater family-like environment, and lower restrictiveness will be associated with greater internal integration.
10. Residents' perceptions of higher operator expectations, greater family-like environment, and lower restrictiveness will be associated with lower psychopathology.
11. Small facilities as compared to large facilities will be positively associated with higher global quality of resident life, higher quality of resident living arrangements, higher internal integration, higher external integration, lower psychopathology.

METHOD

Participants

The participants in this study were chronically mentally disabled adults living in Winnipeg and the operators of their residential facilities. All participants were from the Community Mental Health Program in the three Winnipeg regions of the provincial Department of Health. The regions consist of the north/northeast, central/west, and south/southeast areas of Winnipeg. The central part of the central/west area of Winnipeg is generally considered the core area, with citizens of lower socio-economic status and deteriorated neighborhoods.

At the time of the study, there were 20 large residences, operationally defined as greater than four residents, and 17 small residences, defined as three or fewer residents, in Winnipeg.

Within the Community Mental Health Program, the number of residents per facility is controlled. Operators caring for more than four residents have to adhere to many more stringent building and management standards, such as fire-proof doors and twenty-four hour staffing. Operators with three or fewer residents have comparatively fewer requirements for operation. Operators are paid by the Department of Health, based on the degree of resident care involved.

Selection Criteria

The criteria for defining the chronically mentally disabled participants were those derived by the National Institute of Mental Health (Tessler & Goldman, 1982):

1. Diagnosed as suffering from schizophrenia, recurrent depressive and manic-depressive disorders, paranoia or other psychoses which may become chronic.
2. As judged by the residence operator, having serious difficulties in daily functioning (over a period of at least two years), in at least three of the following areas:
 - a) Personal hygiene and self-care
 - b) Self direction
 - c) Interpersonal relationships
 - d) Social transactions
 - e) Learning
 - f) Recreation
 - g) Economic self-sufficiency
3. Having received institutional and/or supervised community care for at least two consecutive years. Care may include hospital out-patient programs, personal care homes, approved homes, licensed facilities, and other service programs designated to provide supervision.

Other selection criteria included resident age, level of care, and diagnosis.

Potential Confounding Variables

Only adult CMD residents from ages 19 to 65 were included because elderly individuals generally report higher life satisfaction (Andrews & Withey, 1976). Age was statistically controlled by partialing out its influence from predictor and outcome variables.

Residents with organic brain syndrome, drug abuse, alcoholism, and minor affective disorders were excluded because of previously found correlations with well-being (Lehman, 1983b).

Another potential confounding variable was level of care. Level of care, ranging from one to five and assigned at time of placement by the mental health worker, represents impairment regarding activities of daily living, socialization, and degree of autonomy. Generally, severely impaired residents (levels 4 - 5) are placed in large facilities, where there are more staff. To avoid over-sampling severely impaired residents in large facilities, only residents requiring a moderate amount of care, in the 2 - 4 range, were included. As well, the potential influence of level of care was partialled out of predictor and outcome variables.

Order of interview between resident and operator was also considered a potential confounding variable. Residents could respond differently if they knew that the operators had already completed their questionnaires. However, it was not possible to randomly alternate order of resident interview. Therefore, order was statistically controlled by partialing out its influence.

Other potentially confounding resident variables were education, gender, marital status, and psychopathology. Operator variables considered as potential confounds were age and gender. Their influence was also partialled out statistically.

Sampling Procedures

Subsequent to approval of this study by the Mental Health Directorate and Executive Directors of the Winnipeg regions, all supervisors, resource coordinators, and case workers were contacted by letter (Appendix A). This letter included an outline of the project and a statement of endorsement by the Mental Health Directorate. A follow-up telephone contact was made with the resource coordinators, supervisors, and case workers to clarify any concerns arising from the letter. Appointments were made with resource coordinators to review potential participants from each home. The lists of residents were carefully updated regarding residents who may have moved, been hospitalized, or deemed ineligible because of age, length of time in the CMH program, or diagnosis. Of 211 eligible residents, 70 residents were randomly selected. Of those, nine residents did not participate. Five refused, two were ineligible because their operators refused to participate, and two were hospitalized. This represents a 87.1% participation rate. Those who did not participate did not differ from the recruited participants on age, gender, number of residents in the home, or diagnosis (based on two-tailed t-tests and chi-square analyses, $p > .05$ for all variables).

Of 21 eligible operators, only two refused to participate. Both were owners of large facilities. This represents a 90.4% participation rate.

Characteristics of Resident Participants

All of the recruited participants fulfilled the criteria for chronicity. As illustrated in Table 12, the pattern in both large and small residences was for residents to have most difficulty with social transactions, interpersonal relations, and economic self-sufficiency. Residents in the two types of facilities differed significantly in terms of some daily functioning activities. Residents in small facilities had more difficulty with hygiene and self care ($t = 2.05$, $p \leq .05$), interpersonal relations ($t = 2.05$, $p \leq .05$), learning ($t = 2.32$, $p \leq .05$), and recreation ($t = 2.56$, $p \leq .05$) than residents in large facilities.

As presented in Table 13, residents of small and large homes were very similar on demographic characteristics. The mean age of residents in small and large homes was 42.3 and 46.9, respectively. There were generally more males than females (83.3% males and 16.2% females in small homes, 63.3% males and 36.7% females in large homes). Only a small percentage of residents in small and large homes had completed high school (8.3% and 14.3%, respectively). The majority of residents were single (83.3% in small homes and 81.6% in large homes). Relatively few residents were employed (8.3% in small homes and 6.1% in large homes). Over half of the residents did not attend day programs (58.3% in small homes and 51.0% in large homes).

Table 12

Resident Daily Functioning

Daily Functioning	Residents of Small Homes (N = 12) <u>M</u> ¹	Residents of Large Homes (N = 49) <u>M</u>	T-Test
Hygiene and Self Care	3.1	2.4	2.05*
Social Transactions	4.5	4.6	- .39
Interpersonal Relations	4.9	4.6	2.05*
Economic Self-Sufficiency	4.9	4.7	1.34
Learning	2.8	2.2	2.32*
Recreation	3.2	2.5	2.56*

Note. Scale ranged from (1) no difficulty to (5) very severe difficulty.

* $p \leq .05$

Table 13

Demographic Profile of Residents

Resident Characteristic	Residents of Small Homes (N = 12) %	Residents of Large Homes (N = 49) %	Test ¹	p
Age	42.3(mean)	46.9(mean)	t = -1.16	n.s.
Gender				
Males	83.3	63.3		
Females	16.2	36.7	X ² = 1.7(1)	n.s.
Education				
Completed to Gr 6	25.0	18.4		
Completed to Gr 9	16.6	20.3		
Some High School	41.7	26.5		
Completed H.S.	8.3	14.3		
Some University	16.6	2.0	U = 279.5	n.s.
Completed Univ.	--	2.0		
Vocational School	--	2.0		
Marital Status				
Single	83.3	81.6		
Separated	8.3	6.1		
Widowed	8.3	12.2	X ² = .02(1)	n.s.
Employed	8.3	6.1	X ² = .08(1)	n.s.
Day Program				
Work Rehab	41.7	8.2		
Hosp Day Care	--	2.0		
Community Group	--	34.7		
In-House Group	--	2.0		
School	--	2.0		
No Day Program	58.3	51.0	X ² = .21(1)	n.s.

¹Tests are t = test, X² = chi square, U = Mann-Whitney.

Approximately forty percent (41.7%) of the residents in small homes attended a work rehabilitation program. In large homes, the largest attendance was not at work rehabilitation but at community groups (34.7%). This generally consisted of 3 hours attendance per week at a facility away from the residence, such as a church basement, with a focus on social activities.

Table 14 shows that the majority of residents had a diagnosis of schizophrenia (75.0% in small homes and 85.7% in large homes). Other diagnostic categories in small and large homes were depression (16.7% and 4.1%, respectively) and manic-depression (8.3% and 10.2%, respectively). The majority of residents were hospitalized only once or less in the past five years (100.0% in small homes and 85.7% in large homes). The major reason for hospitalization was psychiatric care (85.7% in small homes and 84.6% in large homes). Length of time in the Community Mental Health Program was generally evenly distributed over two to twenty years and beyond. Many residents had been in the program for over twenty years (33.3% in small homes and 20.4% in large homes).

As shown in Table 15, the size of all small residential facilities was 3 beds. Across large facilities, the number of beds ranged from 5 to 44. Over half of the large homes (61.1%) contained 5 - 8 beds. Level of care was generally evenly distributed across the 3 levels in small and large facilities. Small facilities had 25.0% (level 2), 33.3% (level 3), and 41.7% (level 4). Large facilities had 20.4% (level 2), 44.9% (level 3), and 34.7% (level 4). Length of stay at the residences was generally similar. The major difference was that

Table 14

Clinical Profile of Residents

Clinical History	Residents of Small Homes (N = 12) %	Residents of Large Homes (N = 49) %	Test ¹	p
<hr/>				
Diagnosis				
Depression	16.7	4.1		
Manic Depression	8.3	10.2		
Schizophrenia	75.0	85.7	$\chi^2 = 2.49(2)$	n.s.
Hospitalizations In Past 5 Years: ²				
0 Times	41.7	46.9		
1 Times	58.3	38.8		
2-4 Times	--	12.2		
9 Times	--	2.0	$\chi^2 = 2.6(2)$	n.s.
Reason for Hospital- izations: ²				
Psychiatric	85.7	84.6		
Medical	14.3	7.7		
Medical & Psych.	--	7.7	$\chi^2 = .11(2)$	n.s.
Time In Program ²				
2-5 Years	25.0	26.3		
6-10 Years	25.0	32.7		
11-19 Years	16.6	20.2		
> 19 Years	33.3	20.4	U = 247.0	n.s.

¹ Tests are X² = chi square, U = Mann-Whitney. ² Round off error accounts for .1% of the total.

Table 15

Residential Profile

Characteristic	Residents of Small Homes (N = 12) %	Residents of Large Homes (N = 49) %	Test ¹	p
Size: ²				
3	100	--		
5-6	--	30.8		
7-8	--	30.8		
22-24	--	23.1		
35	--	7.7		
44	--	7.7	t = -3.49	n.s.
Level of Care				
Two	25.0	20.4		
Three	33.3	44.9		
Four	41.7	34.7	X ² = .53(2)	n.s.
Time at Residence				
< 6 Months	8.3	2.0		
7 Months - 1 Year	33.3	26.5		
2-3 Years	33.3	36.7		
4-5 Years	--	16.3		
6-9 Years	25.0	6.1		
> 10 Years	--	12.2	U = 247.0	n.s.
Share a Room				
Yes	16.7	59.2		
No	83.3	40.8	X ² = 5.37(1)	.05

¹ Tests are t = t test, U = Mann-Whitney, X² = chi-square.² Round off error accounts for .1% of the total.

no residents at small homes had been there for more than 10 years, whereas 12.2% of large facility residents had been there for more than 10 years. Only 16.7% of residents in small homes shared a room, compared to 59.2% of residents in large facilities.

Tests of significance on demographic characteristics generally showed that small and large facilities and their residents were not significantly different. The only area of significance was sharing a room. Residents of large facilities were more likely to share a room than residents of small facilities ($\chi^2 = (1, N = 61) = 5.37, p \leq .05$).

Characteristics of Operators

As shown in Table 16, operators of small and large homes were generally middle-aged (46.3 years for operators of small homes and 51.6 years for operators of large homes). The majority of operators were female in both small and large homes, 83.3% and 92.3% respectively.

Table 16

Demographic Profile of Operators

Operator Characteristic	Operators of Small Homes (N = 6) %	Operators of Large Homes (N = 13) %	Test ¹	p
Age	46.3(mean)	51.6(mean)	t = -.65	n.s.
Gender				
Males	16.6	6.3		
Females	83.3	92.3	P = .54	n.s.

¹ Tests are t = t test, P = Fisher's Exact Test

Procedures

Pilot Testing

Pilot testing of the measurement scales was carried out with two operators and two residents who were not included in the study. Testing did not result in any changes to the instruments. As well, the length of the interview was assessed to be appropriate by both operators and residents.

Operator Procedures

The operators of the residences in which the 70 residents lived were each contacted by letter (Appendix A) to introduce the project. A telephone call was made a week later to discuss their interest in participating and to arrange an appointment time at their home/facility. The initial telephone contact with operators gave information regarding the purpose of the project, confidentiality, and the required time commitment (see Appendix C). All operators agreed to complete their questionnaires at the time of the first interview. During the first interview, operators were thanked for agreeing to participate. The purpose of the study was explained again to the operator, using the content of the initial telephone contact. In addition, reassurance about participation being voluntary, and information regarding confidentiality and feedback were discussed (Appendix C).

After indicating that they understood the terms of the project, operators were asked to sign a consent form (Appendix C), which

formalized their commitment to participate. Operators were administered the resident functioning section of the "Resident Data and Inclusion Criteria" form and asked to complete the Operator-Restrictiveness Scale, Level of Performance of Socially-Expected Activities Scale, Benevolence subscale, Authoritarian subscale, Social Desirability Scale, and Family-Like Environment Scale (Appendix C). The investigator was available to assist operators while they completed the questionnaires. Most operator interviews took approximately 45 minutes, with the longest interview taking two hours and the shortest interview taking 30 minutes. Two interviews required a longer amount of time because, in one situation, the operator wanted to conduct a tour and describe the facilities' goals and methods of operation in some detail. In the other situation, the operator required a great deal of explanation and, as well, conducted a detailed tour of the facility.

As well, the investigator used the time to meet as many selected residents as possible and to arrange appointment times. Appointment times for other selected residents were made through the operators.

Resident Procedures

Following their interviews, operators were asked to introduce the researcher to available residents. The investigator gave information regarding the purpose of the study, confidentiality, and the required time commitment (Appendix B).

At the time of the individual resident interviews, reassurance about participation being voluntary, and information regarding confidentiality and feedback were discussed (Appendix B). After the investigator was satisfied that residents understood the terms of their participation in the project, they were asked to sign a consent form and release of information form (Appendix B). The release of information was necessary to utilize information about diagnosis, age, and length of time in the Community Mental Health Program already obtained from case workers during the selection process. The investigator administered the Langner Psychiatric Symptom Scale, Brief Psychiatric Rating Scale, Quality of Life Scale, Resident Knowledge of Expectations Scale, Resident Perception of Expectations Scale, Resident Restrictiveness Scale, Family-Like Environment Scale, Social Desirability Scale, and Social Integration Scale to residents (Appendix B).

Most resident interviews took approximately one hour, with the longest interview taking 2 hours and the shortest interview taking 45 minutes. Generally, the resident interviews were conducted as planned. For the most part, residents gave comments which suggested interest in the project and pleasure about being asked for their opinions. The only remarkable difference in the interview protocol occurred when one resident began expressing unusually depressive thoughts. At the end of the interview, the investigator spent some time exploring her feelings and mood. Subsequently, concerns about the resident were conveyed to the operator and case worker.

Instrumentation

Restrictiveness

The ratings of restrictiveness for both the operator (Appendix C) and resident (Appendix B) were devised by the investigator for this study. The operator scale was devised to assess their restrictiveness in terms of the kinds and extent of the rules they imposed. An example of an operator item is, "What proportion of the time is your facility locked?" The respondents answered on a three-point scale ranging from (1) not at all to (3) most of the time. The items covered 10 content areas including curfews, laundry, and visitors. In addition, the operators were asked to list any rules that they had in each of the 10 areas, as well as any other rules that they considered important.

Operator restrictiveness ratings only were checked for inter-rater reliability because restrictiveness was thought to be most subject to social desirability bias. For example, it was thought that asking about rules would be perceived as more threatening than asking about expectations of residents. Two individuals with Bachelor of Social Work degrees rated each home, based on the operators responses to each item and their list of rules. Samples of operator responses that corresponded to low, moderate, and highly restrictive environments were discussed with the raters. During the training session, raters assigned ratings to samples until there was agreement on 8 out of 10 items on three trials. After training, they achieved .99 agreement on their actual restrictiveness ratings.

The resident restrictiveness scale was devised to parallel the operator scale. It asked the resident how controlled or restrictive was their residence in areas that matched the operator items. As an example, the resident was asked, "To what extent do the rules about meals, such as where and when you can eat, limit your freedom concerning meals?" The respondents answered on a three-point scale ranging ranging from (1) not at all to (3) a great deal.

For operators and residents, item scores were added to give a total score. The range of scores for both scales was 10 (very unrestrictive) to 30 (very restrictive). Items were not weighted differently because there was no strong evidence to suggest that one rule was more important than another.

The operator and resident scales had adequate inter-item reliability (Cronbach's alpha (α) = .72 and .67, respectively) as illustrated in Table 17.¹ Item to total scale correlations ranged from .12 to .81 for the operator's scale and -.02 to .65 for the resident's scale. It was decided not to drop items with low item to total scale correlations because items with very low correlations on one scale had high correlations on the other scale. Maintaining similarity of items between operators and residents was important for comparative purposes. The scaled results were skewed for both operators and residents (-4.18 and 5.80, respectively, $p \leq .01$). Briefly, this means that most operators tended to perceive their homes as highly restrictive, while most residents tended to perceive their homes as

¹ Tables with reliability information are only provided on the scales that were developed for this study and not scales published by other researchers.

not very restrictive. It was decided not to transform the data, given the ongoing controversy regarding the procedures and the problems with interpreting the results.

Table 17

Restrictiveness Scale for Operators and Residents

Item	Operators (N = 19)		Residents (N = 61)	
	Item - Total Correlation	Item Mean	Item - Total Correlation	Item Mean ¹
Locked	.57	2.41	.01	1.08
Curfew rules	.43	1.90	.38	1.23
Permission to leave	.40	2.36	.65	1.24
Bedtime	.25	1.67	.31	1.07
Smoking	.12	2.01	.58	1.38
Laundry	.16	2.46	.21	1.23
Mealtime	.54	2.40	-.02	1.34
Visitors	.24	1.97	.40	1.23
Music	.81	1.79	.51	1.09
T.V.	.41	1.46	.33	1.07
Cronbach's Alpha		.72		.67
Standardized Item Alpha		.72		.66
Mean Inter-Item Correlation		.21		.16
Scale Range		10 - 30		10 - 30
Observed Range		13 - 25		10 - 20
Mean		20.44		11.97
S.D.		2.77		2.30
Skewness		-4.18		5.80

¹ Scale ranged from (1) not at all, to (3) all the time.

Level of Expectations

The Level of Performance of Socially-Expected Activities Scale (Appendix C) was modified by Katz and Lyerly (1963) from a previously developed scale by Freeman and Simmons (1958). Katz and Lyerly adapted the scale to assess the expectations of the CMD by their relatives following their return home from hospital. It covers a range of 12 activities from helping with household chores to working. They asked a relative or involved person to indicate, on a three-point scale from (1) not at all to (3) regularly, whether he/she expected the patient to be doing that activity (e.g., help with household chores). In the present study, operators completed this scale for each resident. The theoretical range of scores is from 12 (low expectations) to 36 (high expectations).

Katz and Lyerly tested concurrent validity by administering the scale to the relatives of a group of clinically assessed, poorly-adjusted and well-adjusted patients living in the community. There was good agreement between relatives and clinicians regarding expectations. For example, the correlations between socially-expected activities as judged by relatives and the criterion (clinical) group was .79 ($p = .01$) (Katz & Lyerly, 1963, p. 520). No tests of reliability were reported.

The residents' perceptions of operator expectations were measured in two steps using the Residents Knowledge of Expectations Scale and Resident Perceptions of Expectations Scale (Appendix B), devised by the investigator for this study. The rationale was to first determine

if the residents accurately knew what was expected of them and then to determine their perceptions of those expectations. This method of questioning was based on the idea that residents may not know what is expected of them and/or may disagree with operator expectations. The resident scales were developed to parallel the operator scales in terms of the 12 activities. Using the Resident's Knowledge of Expectations Scale, the resident was first asked what was expected of him/her in the home. An example is, "To what extent does the operator expect you to perform household chores?" The resident answered on a three-point scale ranging from (1) not at all to (3) a great deal/regularly.

The second step, using the Resident's Perception of Expectations Scale, asked the resident about their feelings concerning these expectations. For example, the resident was asked, "Do you feel the operator's expectations of you regarding household chores is too high, about right, or too low?" Too high was scored 3, about right 2, and too low 1. The range of scores for the Residents' Knowledge of Expectations was 12 (low knowledge) to 36 (high knowledge). Similarly, the range of scores for the Resident's Perception of Expectations was 12 (resident perceives that operator's expectations are too low) to 36 (resident perceives operator expectations are too high).

As shown in Table 18, the resident's knowledge and perception scales had adequate inter-item reliability ($\alpha = .63$ and $.71$, respectively). Item to total scale correlations ranged from $.05$ to $.46$ for the knowledge scale and $.15$ to $.47$ for the perceptions scale.

As with other scales, it was decided not to drop items with low item to total score correlations because some items with low correlations on one scale had high correlations on the other scale. Maintaining similarity of items between the two resident scales was important for comparative purposes. Neither scale was significantly skewed.

As well, the operator perception scale had adequate inter-item reliability ($\alpha = .68$). Item to total scale correlations ranged from .10 to .63. Items with low item to total score correlations were not dropped to maintain continuity among scales.

Table 18

Expectations Scale for Operators and Residents

Item	Operators		Residents (Knowledge)		Residents (Perceptions)	
	Item - Total Correlation	Item Mean	Item - Total Correlation	Item Mean	Item - Total Correlation	Item Mean
Household Chores	.15	2.30	.36	1.87	.15	1.80
Visitors	.13	2.67	.17	1.64	.37	1.80
Self-Care	.10	2.72	.40	2.90	.16	2.08
Finances	.41	2.30	.09	2.43	.24	2.05
Remember Important Things	.44	2.26	.29	2.33	.42	1.89
Get Along With Residents	.19	2.73	.42	2.72	.24	2.18
Social Activities	.16	2.26	.29	1.89	.47	2.03
Get Along With Neighbors	.35	2.72	.25	2.03	.32	1.97
Help With Shopping	.50	2.02	.24	1.38	.42	1.57
Church	.28	1.75	.05	1.13	.47	1.70
Hobbies	.63	2.13	.46	1.38	.44	1.72
Work	.38	1.98	.46	1.80	.42	2.03
Cronbach's Alpha		.68		.63		.71
Standardized Item Alpha		.66		.65		.70
Mean Inter-Item Correlation		.14		.13		.17
Scale Range		12 - 36		12 - 36		12 - 36
Observed Range		20 - 36		13 - 31		15 - 31
Mean		27.85		23.49		22.84
S.D.		4.13		3.89		3.21
Skewness		.88		1.20		.24

Note. Scale ranged from (1) low to (3) high.

Beliefs About the Mentally Ill

The literature on attitudes about the mentally disabled suggests that there are at least four dimensions of beliefs, namely authoritarianism, benevolence, restrictiveness, and community mental health ideology (Dear & Taylor, 1982). However, this investigator chose to use only the authoritarianism and benevolence subscales (Appendix C), for several reasons. First, there is strong evidence to suggest that two of the scales, authoritarianism and restrictiveness, represented very similar constructs (Dear & Taylor, 1982, p. 91). Authoritarianism was chosen over restrictiveness because it was likely that restrictiveness was already being measured by the restrictiveness scale. Thus, the authoritarianism scale would add nonredundant information. Second, the benevolence subscale also provided another dimension to describe operator's attitudes. Third, the community mental health ideology subscale assesses the belief in community-based treatment. The majority of operators would necessarily agree with this belief since their livelihood depends on it. Thus, the ideology scale would probably not distinguish between operators.

The authoritarianism and benevolence scales were completed by operators. They each contain four beliefs statements. The investigator chose only those items that had been shown in another study to load .50 or greater only on their intended factor (Tefft, personal communication). An example of an authoritarian item is, "One of the main causes of mental illness is lack of self-discipline and will power." An example of a benevolence item is, "We have a responsibility to provide the best possible care for the mentally

ill." Operators agreed or disagreed with each statement. Statements that reflected strong authoritarian or benevolent beliefs were scored with 2 points. Statements which weakly reflected these beliefs were scored with 1 point. Thus, the theoretical range of each scale was from 4 (weak belief) to 8 (strong belief).

Reliability of these subscales, as measured by an alpha coefficient, was .67 for authoritarianism and .33 for benevolence. Item to total scale correlations for authoritarianism ranged from .36 to .56 and for benevolence ranged from .11 to .33. Results from the authoritarian scale had a moderate, significant skew, while results from the benevolence scale were not skewed. For the authoritarian scale, this means that most operators tended not to report authoritarian beliefs.

Family-Like Environment

The Operator's Family-Like Environment Scale (Appendix C) was devised by the investigator for this study. The six items comprising this scale were based, in part, on questions asked by Segal and Aviram (1982, p. 121). It is intended to measure the extent to which the operator and his/her family interact with the residents as a family. The questions cover such activities as eating with the residents and spending leisure time with them. An example is "How frequently do you eat with the residents?" Operators responded on a scale from (1) rarely to (5) all the time.

The range of the scale is 6 (not family-like) to 30 (family-like). Table 20 shows that reliability, as measured by an alpha coefficient, was modest at .58. Item to total scale correlations ranged from -.20 to .65. Items with low correlations were not dropped because items with low correlations on operator scale had high correlations on the resident scale. The scaled results were not significantly skewed.

Similarly, the Resident's Family-Like Environment Scale was devised to parallel the operator's scale (Appendix B). It is intended to measure, from the resident's perspective, the extent that the resident interacts with the operator in a family-like manner. An example of one of the six items is, "How frequently do you eat with the operator?" Residents responded on a scale from (1) rarely to (5) all the time.

The range of the resident scale was also 6 to 30. As demonstrated in Table 20, reliability, as measured by an alpha coefficient, was modest at .57. Item to total scale correlations ranged from .20 to .54. Items with low correlations were not dropped for reasons explained in the preceding section. Results demonstrated a moderate, but significant positive skew. This means that most residents reported a low family-like environment. For reasons discussed elsewhere, it was decided not to transform the data.

Table 20

Family-Like Environment Scale for Operators and Residents

Item	Operators (N = 19)		Residents (N = 61)	
	Item - Total Correlation	Item Mean	Item - Total Correlation	Item Mean ¹
Operator's Family at Facility	-.20	4.02	.40	3.41
Eat With Operator	.51	3.16	.54	1.98
Walks With Operator	.65	2.66	.35	1.19
Play Cards With Operator	.15	2.70	.25	1.16
T.V. With Operator	.58	2.73	.23	1.62
Part of Family	.37	3.79	.20	1.60
Cronbach's Alpha		.58		.57
Standardized Item Alpha		.58		.59
Mean Inter-Item Correlation		.19		.19
Scale Range		5 - 30		5 - 30
Observed Range		12 - 30		6 - 22
Mean		19.01		10.97
S.D.		4.35		3.92
Skewness		1.40		3.00

¹ Scale ranged from (1) rarely to (5) all the time.

Quality of Life Scales

Lehman's Quality of Life Scale (Lehman, 1983a, 1983b) inquires about both global satisfaction and satisfaction in eight life (domain specific) areas, namely living situation, family relations, social relations, leisure activities, work, finances, personal safety, and health. The scale was adapted from previously developed instruments (Andrews & Withey, 1976; Campbell et al., 1976).

Residents were administered three measures of global satisfaction, including: a) a delighted-terrible scale question, "How do you feel about life as a whole?"; b) several semantic differential responses to the statement, "Which pair of words best describes your life in general?" (e.g., "boring-interesting" and "miserable-enjoyable"); and c) a scale of positive well-being, consisting of items such as "Where on the scale would put your life in the past month?" Residents answered from (1) worst life I could expect to (7) best life I could expect (Appendix B). In addition, residents completed the ten-item, living situation subscale (Appendix B). An example of this subscale is, "How do you feel about the living arrangements here?" Residents answered from (1) terrible to (7) delighted.

Scores on the three global satisfaction questions were summed to range from 12 to 84, with higher scores representing higher life quality. Scores on the living arrangement scale were summed to range from 10 to 70. Again, higher scores reflected higher perceived life quality.

Scale reliabilities for the global satisfaction measures ranged from .75 to .87, which is more than adequate (Lehman, 1983a, p. 146). Internal consistency reliability on the living situation subscale has been also shown to be very good (.86) In the present study, scaled results were not significantly skewed. (Lehman, 1983a, p. 146).

Social Integration

Segal and Aviram's (1978) Social Integration Scale (Appendix B) consists of an external integration subscale and an internal integration subscale. The external integration subscale asks questions in seven areas: a) Attending to oneself, b) access to community resources, c) access to basic or personal resources, d) familial-access and participation, e) friendship access and participation, f) social integration through community groups, and g) use of community facilities. The internal integration subscale asks questions in five areas: a) Operator transporting residents to community resources, b) operator facilitating activity through facility, c) operator providing basic necessities, d) socializing with other residents and operator, and e) supplies purchased at the house.

Both subscales were administered to residents. An example of an external integration item is, "On a typical day, do you go to a restaurant?" The resident answered from (1) never to (5) very often. An example of an internal integration item is, "How easy would it be for you to arrange laundry services at your home?" Residents answered from (1) very difficult to (5) very easy. External integration subscale scores range from 46 to 220. Internal integration subscale

scores range from 28 to 140. For both subscales, high scores represent greater integration.

Internal consistency of the external integration subscale has been shown to range from .65 to .91 (Segal & Aviram, 1978, p. 295). The internal integration components had an internal consistency range of .62 to .91 (Segal & Aviram, 1978, p. 295). The external and internal integration subscales overlap to some extent, as illustrated by a modest correlation of .35 ($p < .01$).

Measures of concurrent validity were demonstrated by the ability of the scales to predict relevant constructs. For example, a positive neighbour response (.31) was the strongest predictor of external integration and an ideal psychiatric environment (.31) was the strongest predictor of internal integration (Segal & Aviram, 1978, p. 170, 188).

Resident Psychopathology

Resident psychopathology was measured in two ways to compensate for the limitations of individual scales. The Brief Psychiatric Rating Scale was developed by Overall and Gorham (1962) to provide a rapid assessment of psychiatric patients (Appendix B). Sixteen items each measure one symptoms area (somatic concern, anxiety, emotional withdrawal, conceptual disorganization, guilt feelings, tension, mannerisms and posturing, grandiosity, depressive mood, hostility, suspiciousness, hallucinatory behaviour, motor retardation, uncooperativeness, unusual thought content, and blunted affect). The

symptoms are rated on a scale from 1 (not present) to 7 (extremely severe). Overall and Gorham provided behaviour and verbal descriptions for use in rating. They also recommended that two clinical raters jointly interview patients and arrive at independent ratings. This was not possible in the present study. However, the investigator followed the recommended procedure in other ways. During the initial part of the interview, when the investigator was establishing rapport, and subsequent middle phase, where the resident was completing other scales, the investigator observed verbal content and behaviour necessary for some of the ratings. After the majority of the questionnaire was finished, the investigator probed for additional information necessary to complete the scale.

Overall and Gorham did not present reliability and validity data. In the present study, the investigator found reliability, as measured by an alpha coefficient, to be adequate ($\alpha = .64$). Item to total correlations ranged from $-.14$ to $.48$, which suggests that the scale needs some refinement. The possible range of scores was from 16 to 112.

The second psychiatric scale administered to residents was Langner's Twenty-Two Item Screening Score of Psychiatric Symptoms Indicating Impairment (Langner, 1962) (Appendix B). The scale provides a global indication of impairment of life functioning due to common types of psychiatric symptoms. Examples of the twenty-two items include, "I feel weak all over much of the time" and "I have personal worries that get me down physically" (Langner, 1962, p. 272). The respondent answers using different response scales

depending on the item, such as, "yes, no, and don't know" and "poor, fair, good, and too good". The theoretical range of scores is 0 (no symptoms) to 22 (many symptoms).

Langner tested validity by administering the scale to known ill and well groups. The items discriminated between the groups at a $p \leq .01$ confidence level or better.

As mentioned previously, there are limitations in both scales. Overall and Gorham's (1962) scale is meant to be rated by two clinicians, which was not possible in the present study. Another possible limitation was unreliability concerning some categories, such as uncooperativeness, where the rater is required to choose between seven possible ratings. For example, it seemed somewhat arbitrary to choose between moderate, moderately severe, severe, and extremely severe on the issue of uncooperativeness. Langner's (1962) scale has been criticized for having a preponderance of physical symptoms, such as weakness and headaches. Between-scale correlation was relatively high ($r = .67$, $|p| < .001$), which is strong evidence that the two scales are measuring similar but not identical constructs.

Social Desirability

Strahan and Gerbasi's (1972) short version of the Marlowe-Crowne Social Desirability Scale (M-C 10) is a 10-item scale formed by principal component analysis of the larger 33-item scale (Appendix B). Crowne and Marlowe (1960) originally developed their scale as a measure of the need of respondents to obtain approval by answering

questions in a culturally appropriate and acceptable manner. The scale items consist of behaviours that are improbable. In addition, items that had any relationship with psychopathology were not included in the scale. An example of a scale item is, "I'm always willing to admit it when I make a mistake" (Strahan & Gerbasi, 1972, p. 192). Respondents answer either true or false. Items are totaled to yield scores ranging from 10 to 20, with the higher scores representing a tendency to respond in a socially desirable manner.

Reliability for the M-C 10 scale was shown to be adequate at .70 for females and .66 for males (Strahan & Gerbasi, 1972). Correlations between the shorter version and the larger version has been shown to range from .80 to .90.

Both operators and residents completed the M-C 10 scale. In the present study, reliability for operators was low at $\alpha = .25$. Item to total score correlations varied widely from $-.32$ to $.62$. In addition, the operator results were significantly skewed (-3.18). This means that operators tended to respond in a socially desirable manner.

The results for residents demonstrated an acceptable level of internal reliability ($\alpha = .66$). Item to total score correlations ranged from $.09$ to $.53$. The resident results were not skewed.

RESULTS

Overview of Statistical Analyses

Standard multiple regression, Pearson product-moment correlation (Pearson r), principal component analysis, and multivariate analysis of covariance (MANCOVA) were used to test the hypotheses in this study.

Hypotheses 1 to 10 were tested by standard multiple regressions. To control for the influence of confounding variables, each hypothesis predictor and outcome variable was residualized (Draper & Smith, 1981; Segal & Aviram, 1978, p. 304). This procedure was accomplished in three stages. The first stage was to partial out the variance due to the confounding variable(s) from the outcome variable and save that residual (E_1). The next stage was to partial out the variance due to the confounding variable(s) from each of the predictor variables and save each residual ($E_2 \dots E_n$). The third stage was to test the hypothesis using all the residuals, such that E_1 became the new dependent variable and E_2 to E_n became the new predictor variables. Following the hypothesis test, a step-wise regression was used to identify the most parsimonious model.

Squared semi-partial correlations were calculated to assess the differences in ability of the predictor variables to account for the variance of the outcome variable. Sr² correlations provide

information about the unique contribution of the predictor variable to R squared. The amount of variance in an Sr2 correlation does not include any variance that a predictor variable may share with any other variable in the regression equation. Shared variance is the sum of Sr2's, which is the variance that is contributed to R squared by two or more predictor variables (Tabachnick & Fidell, 1983).

Pearson product-moment correlations were used to examine the relationships among the confounding variables and each set of predictor and dependent variables (Appendix D). The resident confounding variables were age, education, gender, marital status, rated psychopathology,² reported psychopathology, level of care, and social desirability. Operator confounding variables were gender, age and social desirability. Order of interview was also included as a confounding variable. Only those confounding variables that significantly correlated with both predictor and dependent variables were controlled by partialing out their influence from the predictor and dependent variables, as described previously.

Principal component analysis was used to determine if the dependent variables represented more than one outcome dimension.

² Because rated and reported psychopathology were found to be similar but distinct constructs, they were each considered separately as confounding variables.

Hypothesis Results

Hypothesis One

Hypothesis one states that higher operator expectations, lower operator restrictiveness, lower operator adherence to authoritarian and benevolent beliefs, and higher operator perceptions of a family-like environment will be positively associated with higher resident quality of life.

Results of a residualized standard multiple regression, as demonstrated in Table 21, indicate that the R is not significantly different from zero ($F(5,55) = .73, p > .05$). None of the standardized regression coefficients differ significantly from zero, which indicates that none of the operator variables are significantly associated with resident quality of life. A step-wise regression did not find any predictor to be important. Altogether, only 6% of the variability in resident quality of life could be accounted for by the operator variables.

Overall, hypothesis one was not supported.

Table 21

Operator Predictors of Global Quality of Life

Operator Predictors	Global Quality of Life		
	Residualized Standard Regression ¹		Step-Wise Regression ²
	<u>Beta</u>	<u>Sr2</u>	<u>Beta</u>
Expectations	-.17	.02	--
Benevolence	.11	.01	--
Restrictiveness	.01	.00	--
Family-Like	.10	.01	--
Authoritarian	.05	.01	--
R ²	.06		--
<u>F</u>		.73	--
Unique variability		.05	

¹ The partialled out confound is rated psychopathology.

² There were no significant predictors.

Hypothesis Two

Hypothesis two states that higher operator expectations, lower operator restrictiveness, lower operator adherence to authoritarian and benevolent beliefs, and higher operator perceptions of a family-like environment will be associated with higher quality of resident living arrangements.

As indicated in Table 22, results of a residualized standard multiple regression demonstrate that R is significantly different from zero ($F(5,55) = 2.84, p \leq .05$). Two standard regression coefficients, namely operator expectations and operator adherence to benevolent beliefs, differ significantly from zero ($\beta = -.27, p \leq .05$ and $\beta = .27, p \leq .05$, respectively). Lower operator expectations and higher operator adherence to benevolent beliefs are associated with higher quality of resident living arrangements. The unique contribution of operator expectations and operator adherence to benevolent beliefs, as demonstrated by their Sr2 correlations, to predict resident quality living arrangements is .06 for both variables. A step-wise regression, however, suggests that benevolence is the most important factor ($\beta = .29, p \leq .05$). Altogether, 21% of the variability in quality of resident living arrangements is accounted for by these five variables.

Overall, hypothesis two was not supported. While operator adherence to benevolent beliefs is associated with quality of resident living arrangements, the direction is opposite from that which was hypothesized. As well, lower operator expectations is associated with

Table 22

Operator Predictors of Quality of Living Arrangements

Operator Predictors	Quality of Living Arrangements		
	Residualized Standard Regression ¹		Step-Wise Regression
	<u>Beta</u>	<u>Sr2</u>	<u>Beta</u>
Expectations	-.27*	.06	--
Benevolence	.27*	.06	.29*
Restrictiveness	-.16	.02	--
Family-Like	.15	.02	--
Authoritarian	.04	.00	--
R ²	.21		.09
<u>F</u>	2.84*		5.53*
Unique variability		.16	

¹ The partialled out confounds are rated psychopathology, reported psychopathology, and operator social desirability.

* $p \leq .05$.

higher quality of living arrangements, opposite from that which was hypothesized.

Hypothesis Three

Hypothesis three states that higher operator expectations, lower operator restrictiveness, lower operator adherence to authoritarian and benevolent beliefs, and higher operator perceptions of a family-like environment will be associated with greater external integration.

As demonstrated in Table 23, results of a residualized standard multiple regression indicate that R is significantly different from zero ($F(5,55) = 3.07, p \leq .05$). Two standard regression coefficients, namely operator expectations and operator perceptions of family-like environment, differ significantly from zero ($\beta = .43, p \leq .01$ and $\beta = .30, p \leq .05$, respectively). Higher operator expectations and higher operator perceptions of family-like environment are associated with greater external integration. The unique contribution of operator expectations and operator perceptions of family-like environment, as demonstrated by their Sr^2 correlations, to predict resident external integration is .16 and .08, respectively. A step-wise regression suggests that operator expectations ($\beta = .38, p \leq .05$) is the most important variable, followed by perceptions of family-like environment ($\beta = .28, p \leq .05$). Altogether, 22% of the variability of external integration is accounted for by the operator variables.

Table 23

Operator Predictors of External Integration

Operator Predictors	External Integration		
	Residualized Standard Regression ¹		Step-Wise Regression
	<u>Beta</u>	<u>Sr2</u>	<u>Beta</u>
Expectations	.43**	.16	.38**
Benevolence	.16	.02	--
Restrictiveness	.01	.00	--
Family-Like	.30*	.08	.28*
Authoritarian	.18	.02	--
R ²	.22		.18
F	3.07*		6.57**
Unique variability		.28	
Shared variance		--	

¹ The partialled out confounds are rated psychopathology and level of care.

* $p \leq .05$ ** $p \leq .01$

Overall, hypothesis three received considerable support. Two variables, namely operator expectations and perceptions of family-like environment, are associated with greater external integration in the hypothesized direction.

Hypothesis Four

Hypothesis four states that higher operator expectations, lower operator restrictiveness, lower operator adherence to authoritarian and benevolent beliefs, and higher operator perceptions of a family-like environment will be associated with greater internal integration.

As demonstrated in Table 24, results of a standard multiple regression indicate that R is not significantly different than zero ($F(5,55) = 1.89, p \geq .05$). None of the standardized regression coefficients differ significantly from zero, indicating that none of the operator variables are associated with internal integration. A step-wise regression, however, suggests that lower operator adherence to authoritarian beliefs ($\beta = -.30, p \leq .05$) is an important predictor of internal integration. Altogether, 15% of the variability in internal integration is accounted for by the operator predictor variables.

Overall, hypothesis four received some support. There is some evidence that lower operator adherence to authoritarian beliefs is associated with internal integration.

Table 24

Operator Predictors of Internal Integration

Operator Predictors	Internal Integration		
	Residualized Standard Regression ¹		Step-Wise Regression
	<u>Beta</u>	<u>Sr2</u>	<u>Beta</u>
Expectations	-.03	.00	--
Benevolence	-.06	.00	--
Restrictiveness	-.01	.00	--
Family-Like	.23	.04	--
Authoritarian	-.27	.05	-.30*
R ²	.15		.09
F	1.89		6.02*
Unique variability		.09	

¹ There are no confounds.

* $p \leq .05$

Hypothesis Five

Hypothesis five states that higher operator expectations, lower operator restrictiveness, lower operator adherence to authoritarian and benevolent beliefs, and higher operator perceptions of a family-like environment will be associated with lower psychopathology. Recall that psychopathology had been measured in two ways, namely as reported by the resident on a self-report scale and as rated by the investigator. Regressions were done using both outcome measures.

As demonstrated in Table 25, results of a residualized standard multiple regression, using the reported psychopathology outcome, indicate that R is not significantly different than zero ($F(5,55) = .31, p \geq .05$). None of the standardized regression coefficients differ significantly from zero, indicating that none of the operator variables are associated with reported psychopathology. A step-wise regression did not find any predictor to be important. Altogether, 3% of the variability in reported psychopathology is accounted for by the operator variables.

As demonstrated on Table 26, results of a residualized standard multiple regression, using rated psychopathology as the outcome indicate that R is not significantly different than zero ($F(5,55) = 1.23, p \geq .05$). None of the standardized regression coefficients differ significantly from zero. A step-wise regression did not find any predictor to be important. Altogether, 10% of the variability in rated psychopathology is accounted for by the operator predictor variables.

Table 25

Operator Predictors of Reported Psychopathology

Operator Predictors	Reported Psychopathology		
	Residualized Standard Regression ¹		Step-Wise Regression
	<u>Beta</u>	<u>Sr2</u>	<u>Beta</u>
Expectations	-.01	.00	--
Benevolence	-.04	.00	--
Restrictiveness	.10	.01	--
Family-Like	.01	.00	--
Authoritarian	.12	.01	--
R ²	.03		--
<u>F</u>	.31		--
Unique variability		.02	

¹ The partialled out confounds are level of care and operator social desirability.

Table 26

Operator Predictors of Rated Psychopathology

Operator Predictors	Rated Psychopathology		
	Residualized Standard Regression ¹		Step-Wise Regression
	<u>Beta</u>	<u>Sr2</u>	<u>Beta</u>
Expectations	-.14	.02	--
Benevolence	.13	.01	--
Restrictiveness	.09	.01	--
Family-Like	-.10	.01	--
Authoritarian	.24	.04	--
R ²	.10		--
<u>F</u>	1.23		--
Unique variability		.09	

¹ The partialled out confound is level of care.

Overall, hypothesis five was not supported when either reported or rated psychopathology was used as the dependent measure.

Hypothesis Six

Hypothesis six states that residents' perceptions of higher operator expectations, greater family-like environment, and lower restrictiveness will be associated with higher global quality of resident life.

As demonstrated in Table 27, results of a residualized standard multiple regression indicate that the R is not significantly different from zero ($F(3,57) = .29, p \geq .05$). None of the standardized regression coefficients differ significantly from zero, which indicates that none of the operator variables are associated with resident quality of life. The three predictor variables in combination contribute only .02 in unique variability. A step-wise regression did not show that any predictor is important. Altogether, 2% of the variability in quality of resident life is accounted for by the resident variables.

Overall, hypothesis six was not supported.

Table 27

Resident Predictors of Global Quality of Life

Resident Predictors	Global Quality of Life		
	Residualized Standard Regression ¹		Step-Wise Regression
	<u>Beta</u>	<u>Sr2</u>	<u>Beta</u> ²
Family-Like	.11	.01	--
Restrictiveness	.03	.00	--
Expectations	-.08	.01	--
R ²	.02		--
<u>F</u>	.29		--
Unique variability		.02	

¹ The partialled out confound is reported psychopathology.

² There were no significant predictors.

Hypothesis Seven

Hypothesis seven states that resident perceptions of higher operator expectations, greater family-like environment, and lower restrictiveness will be associated with higher quality of resident living arrangements.

As demonstrated in Table 28, results of a residualized standard multiple regression indicate that the R is significantly different from zero ($F(3,57) = 3.47$ $p \leq .05$). Two standard regression coefficients, namely resident perceptions of family-like environment and restrictiveness, differ significantly from zero ($\beta = .30$, $p \leq .05$ and $\beta = -.30$, $p \leq .05$, respectively). Higher resident perceptions of family-like environment and lower resident perceptions of restrictiveness are associated with higher quality of resident living arrangements. The unique contribution of family-like environment and restrictiveness, as demonstrated by their Sr2 correlations, to predict resident quality living arrangements is .30 for both variables. A step-wise regression suggests that resident perceptions of restrictiveness is the most important variable ($\beta = -.27$, $p \leq .05$). Altogether, 15% of the variability in quality of resident living arrangements is accounted for by the resident variables.

Overall, hypothesis seven received considerable support. Resident perceptions of family-like environment and resident perceptions of restrictiveness are associated with quality of resident living arrangements in the hypothesized direction.

Table 28

Resident Predictors of Quality of Living Arrangements

Resident Predictors	Quality of Living Arrangements		
	Residualized Standard Regression ¹		Step-Wise Regression
	<u>Beta</u>	<u>Sr2</u>	<u>Beta</u>
Family-Like	.30*	.08	--
Restrictiveness	-.30*	.09	-.27*
Expectations	-.18	.03	--
R ²	.15		.07
<u>F</u>	3.47*		4.50*
Unique variability		.20	

¹ The partialled out confound are reported psychopathology, resident social desirability, and operator social desirability.

Hypothesis Eight

Hypothesis eight states that resident perceptions of higher operator expectations, greater family-like environment, and lower restrictiveness will be associated with greater external integration.

As demonstrated in Table 29, results of a residualized standard multiple regression indicate that the R is significantly different from zero ($F(3,57) = 4.94, p \leq .01$). Two standard regression coefficients, namely resident perceptions of family-like environment and resident perceptions of operator restrictiveness, differ significantly from zero ($\beta = .43, p \leq .001$ and $\beta = -.35, p \leq .01$, respectively). Higher resident perceptions of family-like environment and lower resident perceptions of operator expectations are associated with greater external integration. The unique contribution of family-like environment and expectations, as demonstrated by their Sr2 correlations, to predict external integration is .16 and .11, respectively. A step-wise regression suggests that resident perceptions of family-like environment ($\beta = .42, p \leq .001$) is the most important variable, followed by operator expectations ($\beta = -.35, p \leq .01$). The three predictor variables in combination contribute .27 in unique variability. Altogether, 21% of the variability in external integration is accounted for by the resident variables.

Overall, hypothesis eight received mixed support. Resident perceptions of family-like environment is associated with external integration in the hypothesized positive direction. However, lower resident perceptions of operator expectations is also associated with greater external integration, opposite to what was hypothesized.

Table 29

Resident Predictors of External Integration

Resident Predictors	External Integration		
	Residualized Standard Regression ¹		Step-Wise Regression
	<u>Beta</u>	<u>Sr2</u>	<u>Beta</u>
Family-Like	.43***	.16	.42***
Restrictiveness	-.02	.00	--
Expectations	-.35**	.11	-.35**
R ²	.21		.21
<u>F</u>	4.94**		7.52***
Unique variability		.27	

¹ The partialled out confound is reported psychopathology.

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$.

Hypothesis Nine

Hypothesis nine states that resident perceptions of higher operator expectations, greater family-like environment, and lower restrictiveness will be associated with greater internal integration.

As demonstrated in Table 30, results of a residualized standard multiple regression indicates that R is not significantly different from zero ($F(3,57) = .73, p \geq .05$). None of the standardized regression coefficients differed significantly from zero, which indicates that none of the resident variables are associated with internal integration. A step-wise regression did not suggest that any predictor was important. Altogether, 4% of the variability in internal integration is accounted for by resident variables.

Overall, hypothesis nine was not supported.

Table 30

Resident Predictors of Internal Integration

Resident Predictors	Internal Integration		
	Residualized Standard Regression ¹		Step-Wise Regression
	<u>Beta</u>	<u>Sr2</u>	<u>Beta</u> ²
Family-Like	.02	.00	--
Restrictiveness	-.02	.00	--
Expectations	.19	.03	--
R ²	.04		--
<u>F</u>	.73		--
Unique variability		.03	

¹ There were no partialled out confounds.

² There were no significant predictors.

Hypothesis Ten

Hypothesis eleven states that resident perceptions of higher operator expectations, greater family-like environment, and lower restrictiveness will be associated with lower psychopathology. As with hypothesis five, psychopathology was measured by self-reports of the residents and on a scale used by the investigator.

Results of a residualized standard multiple regression, using the self-report measurement, as demonstrated in Table 31, indicate that the R is not significantly different from zero ($F(3,57) = .82, p \geq .05$). None of the standardized regression coefficients differed significantly from zero, which indicates that none of the resident variables are associated with reported psychopathology. The three predictor variables in combination contribute .04 in unique variability. A step-wise regression did not suggest that any predictor is important. Altogether, 4% of the variability in reported psychopathology is accounted for by the resident variables.

As demonstrated in Table 32, results of a residualized standard multiple regression, using rated psychopathology, indicate that the R is not significantly different from zero ($F(3,57) = 1.05, p \geq .05$). None of the standardized regression coefficients differ significantly from zero, which indicates that none of the resident variables are associated with rated psychopathology. A step-wise regression did not suggest that any predictor is important. Altogether, 5% of the variability in rated psychopathology is accounted for by the resident variables.

Table 31

Resident Predictors of Reported Psychopathology

Resident Predictors	Reported Psychopathology		
	Residualized Standard Regression ¹		Step-Wise Regression
	<u>Beta</u>	<u>Sr2</u>	<u>Beta</u> ²
Family-Like	-.07	.00	--
Restrictiveness	.13	.02	--
Expectations	.16	.02	--
R2	.04		--
<u>F</u>	.82		--
Unique variability		.04	

¹ The partialled out confounds are resident social desirability and operator social desirability.

² There were no significant predictors.

Table 32

Resident Predictors of Rated Psychopathology

Resident Predictors	Rated Psychopathology		
	Residualized Standard Regression ¹		Step-Wise Regression
	<u>Beta</u>	<u>Sr2</u>	<u>Beta</u> ²
Family-Like	.01	.00	--
Restrictiveness	.05	.00	--
Expectations	.22	.04	--
R2	.05		--
<u>F</u>	1.05		--
Unique variability		.04	

¹ The partialled out confound is resident social desirability.

² There are no significant predictors.

Overall, hypothesis ten was not supported by either method of measuring psychopathology.

Hypothesis Eleven

Hypothesis eleven states that small (three or fewer) numbers of residents in the facility, as compared to large numbers of residents (four or greater), will be positively associated with higher global quality of resident life, higher quality of resident living arrangements, greater internal integration, greater external integration, and lower psychopathology.

A principal component analysis of the dependent variables (Appendix D) determined that there are three clusters of dependent variables. The first cluster consisted on mainly four dependent variables and the other two clusters consisted of mainly one dependent variable each. Thus, hypothesis eleven was analyzed using the first dependent variable cluster and the remaining two single, dependent variables, reducing the overall number of tests from five to three.

Factor one consists of reported psychopathology, rated psychopathology, global quality of life, and quality of living arrangements. Results of multiple analysis of covariance are presented in Tables 33 and 34. As indicated in Table 33, there is a significant difference between large and small facilities (Wilk's $\Lambda = .78$, $p \leq .01$). Even when a more robust test that accounts for the unequal group size is considered, the difference is still significant (Pillais = .22, $p \leq .01$). As such, only 22% of the variance is accounted for by the dependent variables. Only rated

Table 33

Comparison of Large and Small Residential Facilities on Factor One.

Between Groups Effect	Value	F	
Wilk's Lambda	.78	3.79**	
Pallais	.32	3.79**	

Analysis of Covariance (Reported Psychopathology)			
Source of Variation	MS	df	F
Within Groups	14.77	56	
Covariate Regression	137.89	3	9.34**
Between Groups	.98	1	.07

Analysis of Covariance (Rated Psychopathology)			
Source of Variation	MS	df	F
Within Groups	77.03	56	
Covariate Regression	1002.61	3	13.02***
Between Groups	667.41	1	8.66**

Analysis of Covariance (Global Quality of Life)			
Source of Variation	MS	df	F
Within Groups	162.37	56	
Covariate Regression	350.28	3	2.16
Between Groups	390.74	1	2.41

Analysis of Covariance (Quality of Living Arrangements)			
Source of Variation	MS	df	F
Within Groups	48.44	56	
Covariate Regression	350.28	3	5.93***
Between Groups	4.38	1	.09

Note. The dependent variables comprising factor one are reported

psychopathology, rated psychopathology, global quality of life, and quality of living arrangements. None of the variables failed the test for homogeneity of regressions. The covariates that are partialled out, based on significant relationships with the dependent variables, are level of care, resident social desirability, and operator social desirability.

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

psychopathology distinguishes large and small facilities ($F(1,56) = 8.66, p \leq .01$). Examination of the observed and adjusted means in Table 34, indicates that residents of small facilities had greater rated psychopathology (adjusted mean = 44.25) than residents of large facilities (adjusted mean = 35.88).

In summary, there is a significant difference between large and small residences in terms of the first cluster of dependent variables. Specifically, residents of small facilities are rated as having greater psychopathology than residents of large facilities.

A comparison large and small facilities on external integration shows, as outlined in Table 35, that they are not significantly different $F(5,54) = .44, p \geq .05$. After adjusting for the influence of the covariates, there are no significant differences between the groups (mean of small residences = 130.67 and mean of large residences = 131.29). In summary, there were no differences between residents of large and small homes on external integration.

A comparison of large and small facilities on internal integration, as demonstrated in Table 36, shows that F is significantly different from zero ($F(5,54) = 8.95, p \leq .01$). After adjusting for the influence of the covariates, there are significant differences between the groups (mean of small residences = 61.51 and mean of large residences = 73.21). In summary, residents of large homes were more likely to report higher internal integration than residents of small homes.

Table 34

Comparison of Large and Small Facilities: Group Means

	Observed Means	Adjusted Means ¹
Reported Psychopathology		
Small Residences	7.67	7.76
Large Residences	7.53	7.44
Rated Psychopathology		
Small Residences	44.17	44.25
Large Residences	35.96	35.88
Global Quality of Life		
Small Residences	49.92	49.60
Large Residences	55.69	56.01
Quality of Living Arrangements		
Small Residences	49.00	48.79
Large Residences	47.92	48.12

¹ Adjusted for covariates, namely level of care, resident social desirability, and operator social desirability.

Table 35

Comparison of Large and Small Residential Facilities on
External Integration

Analysis of Covariance			
Source of Variation	MS	df	F
Within Groups	232.42	54	
Covariate Regression	552.38	5	2.38
Between Groups	101.28	1	.44

Covariate Regression	Beta	T
Care	-.09	-.63
Resident Social Desirability	-.19	-1.37
Operator Social Desirability	-.04	-.31
Rated Psychopathology	-.34	-1.78
Reported Psychopathology	-.10	-.58

Group Means	Observed	Adjusted Mean ¹
Small Residences	130.67	130.67
Large Residences	131.29	131.29

Note. None of the variables failed the test for homogeneity of regressions. The covariates that were partialled out were level of care, resident social desirability, operator social desirability, rated psychopathology, and reported psychopathology.

¹ Adjusted for covariates.

* $p \leq .05$

Table 36

Comparison of Large and Small Residential Facilities on
Internal Integration

Analysis of Covariance			
Source of Variation	MS	df	F
Within Groups	121.42	54	
Covariate Regression	169.18	5	1.12
Between Groups	1086.50	1	8.95**

Covariate Regression	Beta	T
Care	.20	1.30
Resident Social Desirability	.15	1.04
Operator Social Desirability	-.27	-2.05
Rated Psychopathology	-.00	-.00
Reported Psychopathology	-.13	-.71

Group Means	Observed	Adjusted Mean ¹
Small Residences	61.08	61.51
Large Residences	73.63	73.21

Note. None of the variables failed the test for homogeneity of regressions. The covariates that were partialled out were level of care, resident social desirability, operator social desirability, rated psychopathology, and reported psychopathology.

¹ Adjusted for covariates.

* $p \leq .05$ ** $p \leq .01$

Overall, these results do not support hypothesis eleven. Contrary to what was predicted, residents of small homes are more likely than residents of large homes to have higher rated psychopathology and lower internal integration.

Summary of Hypothesis Findings

1. Hypothesis one was not supported. Operator variables were not associated with global quality of life.
2. Hypothesis two was not supported. Operator adherence to benevolent beliefs and lower operator expectations of residents were associated with higher quality of living arrangements, opposite to that hypothesized.
3. Hypothesis three was supported. Higher operator expectations and higher operator perceptions of a higher family-like environment were associated with greater external integration.
4. Hypothesis four had some support. Lower operator adherence to authoritarian beliefs was associated with greater internal integration.
5. Hypothesis five was not supported. Operator variables were not associated with psychopathology.
6. Hypothesis six was not supported. Resident variables were not associated with global quality of life.
7. Hypothesis seven was supported. Resident perceptions of higher family-like environment and lower restrictiveness were associated with greater quality of living arrangements.

8. Hypothesis eight received some support. Resident perceptions of higher family-like environment was associated with greater external integration. However, lower resident perceptions of operator expectations was associated with greater external integration, which was opposite to that hypothesized.
9. Hypothesis nine was not supported. Resident variables were not associated with internal integration.
10. Hypothesis ten was not supported. Resident variables were not associated with psychopathology.
11. Hypothesis eleven was not supported. Contrary to what was predicted, residents of small homes were more likely than residents of large homes to have higher rated psychopathology and lower internal integration.

Post-Hoc Analysis

Issues secondary to hypotheses testing were analyzed to help interpret the results. Recall that facilities were independently evaluated by raters on degree of restrictiveness. In general, raters and operators report facilities to be moderately restrictive. Mean scores are 21.5(S.D. = 3.2) and 20.1(S.D. = 3.2), respectively. These ratings, although similar are significantly different, ($t = -3.63$, $p \leq .01$).

Residents also assess facilities as less restrictive than raters, as illustrated by their mean ratings of 12.1(S.D. = 2.4) and 21.5, respectively. These are significantly different, ($t = -12.39$, $p \leq .001$). Moreover, residents view their homes as less restrictive even

than operators ($t = -9.61$, $p \leq .001$). Their respective mean ratings are 12.1 and 20.1. In summary, residents perceive facilities to be significantly less restrictive than operators.

Another issue was whether residents knew what was expected of them. On average, across all 12 activities, residents knew what was expected of them 47.5% of the time. Conversely, residents underestimated the expectations of operators 38.9% of the time. For example, if an operator reported that a resident should be doing an activity all the time, the resident reported that he or she was only expected to do that activity some of the time or not at all. At the other extreme, residents overestimated the expectations of the operators only 13.5% of the time. For example, if an operator reported that a resident should be doing an activity some of the time, the resident reported that he or she was expected to do the activity all of the time. As indicated in Table 37, residents were most accurate in predicting expectations of operators in areas of self-care, managing their own finances, getting along with the other residents, going to church, and working. They underestimated what was expected of them in the areas of visiting with friends and neighbors, getting along with neighbors, helping with the shopping, and doing hobbies. They generally did not overestimate what was expected of them, except for remembering to do important things on time. This information suggests that, on average, only half of the residents know what is expected of them.

Another noteworthy result, in terms of expectations, is that generally residents perceived the expectations of operators to be about right (59.1%). Another large percentage perceived the

Table 37

Estimates of Operator Expectations by Residents

Item	Under Estimate %	Knows %	Over Estimate %
Household Chores	47.5	39.3	13.1
Visitors	77.0	19.7	3.3
Self-Care	1.6	82.0	16.4
Finances	9.8	72.1	18.0
Remember	27.9	44.3	27.9
Get Along, Residents	16.4	68.9	14.8
Social Activities	45.9	36.1	18.0
Get Along, Neighbours	52.5	37.7	9.8
Help With Shopping	54.1	34.4	11.5
Church	42.6	52.5	4.9
Hobbies	60.7	31.1	8.2
Work	31.1	52.5	16.4

expectations of operators to be low (29.4%), however. Only a small percent perceived operators' expectations to be high (11.5%), in that they could not handle them. The areas where residents felt the expectations were low were helping with shopping, going to church, and doing hobbies. Generally, over half of the residents perceived that operator expectations were about right or reasonable.

As an extension of hypothesis eleven, where small and large facilities were compared, number of residents per facility was further broken down to small (1 - 3 residents), mid-sized (4 - 9 residents), and large (10 - 44 residents). This was done to see if there was an optimum number of residents in terms of comparisons on the predictor variables. Multiple profile analysis found overall significant differences among the groups ($F(2,58) = 4.58, p \leq .001$). Subsequent T-Tests, as demonstrated in Table 38, found differences at $p \leq .05$ level of significance. Residents perceived large facilities ($M = 12.5$) to be more restrictive than small facilities ($M = 10.9$). Residents perceived small facilities as more family-like ($M = 14.3$) than large facilities ($M = 9.1$) and mid-sized facilities ($M = 11.7$) as more family-like than large facilities. Operators perceived small facilities ($M = 18.9$) to be less restrictive than large facilities ($M = 21.7$) and mid-sized facilities ($M = 19.4$) to be less restrictive than large facilities. Operators reported higher authoritarian beliefs in small facilities ($M = 5.7$) and mid-sized facilities ($M = 5.2$) than large facilities ($M = 4.3$). And finally, operators reported higher benevolent beliefs in large facilities ($M = 7.4$) than small facilities.

Table 38

Comparison of Small, Mid-sized, and Large Facilities on Predictor Variables

Predictor	Small Facilities (N = 12) Mean	Mid-Sized Facilities (N = 21) Mean	Large Facilities (N = 28) Mean
Resident Variable			
Restrictiveness	10.9a	11.8	12.5a
Expectations	23.8	22.9	22.4
Family-Like	14.3b	11.7c	9.1bc
Operator Variables			
Restrictiveness	18.9d	19.4e	21.7de
Expectations	27.1	28.3	27.9
Family-Like	19.7	19.6	18.5
Authoritarian	5.7f	5.2g	4.3fg
Benevolent	6.8h	7.2	7.4h

Note. Means with the same letter are statistically different at $p \leq .05$. Small facilities have 1-3 residents, mid-sized have 4-9 residents, and large facilities have 10-44 residents.

In addition, multiple profile analysis was used to compare small, medium, and large facilities on the dependent variables. The most important finding, as shown in Table 39, was that residents of mid-sized facilities ($M = 76.8$) were more internally integrated than residents of small facilities ($M = 61.1$). Residents of large homes had already been found to be more internally integrated than residents of small homes from testing hypothesis eleven. Residents of mid-sized facilities ($M = 137.2$) were more externally integrated than residents of large facilities ($M = 127.5$). Residents of mid-sized facilities ($M = 51.2$) reported higher satisfaction with their living arrangements than residents of large facilities ($M = 45.8$). There was higher rated psychopathology in small facilities ($M = 44.2$) than mid-sized facilities ($M = 33.5$), but higher reported psychopathology in large facilities ($M = 8.7$) than mid-sized facilities ($M = 5.6$).

Table 39

Comparison of Small, Mid-sized, and Large Facilities on Dependent Variables

Dependent Variables	Small Facilities (N = 12) Mean	Mid-Sized Facilities (N = 21) Mean	Large Facilities (N = 28) Mean
Internal Integration	61.1ab	76.8b	71.6a
External Integration	130.6	137.2c	127.5c
Global Quality of Life	49.9	58.1	54.2
Quality of Living Arrangement	49.0	51.2d	45.8d
Rated Psychopathology	44.2e	33.5e	37.5
Reported Psychopathology	7.6	5.6f	8.7f

Note. Means with the same letter are statistically different, $p \leq .05$. Small facilities have 1-3 residents, mid-sized facilities have 4-9 residents, and large facilities have 10-44 residents.

DISCUSSION

The purpose of the present study was to examine the qualities of community-based residential facilities and their operators that contribute to the functioning and well-being of the chronically mentally disabled. Specifically, operator perceptions of the restrictiveness of the facility, their expectations of residents, their adherence to authoritarian and benevolent beliefs, and their perceptions of the family-like qualities of their facility were examined with regard to several dependent variables. Resident perceptions of operator restrictiveness, operator expectations, and family-like environment, as well as size of facility were also examined with regard to these same dependent variables. They included global quality of life, quality of living arrangements, external integration, internal integration, and psychopathology. All dependent variables were reported by the resident, with the exception of investigator ratings of psychopathology.

The results lend considerable support for family-like environment being an important predictor of the functioning and well-being of chronically mentally disabled residents. Both residents and operators agreed that the more a facility was perceived as family-like, the more residents were integrated in the community. This finding is consistent with Segal and Aviram's (1978) conclusion that family-oriented facilities enhance external and internal integration.

Possible explanations for the finding in the present research may be found in the concept of family. One aspect of families is a sense of belonging, which is integral to the development of self-assurance. Armed with this sense of belonging and self-assurance, CMD residents may have developed enough confidence to cope with relationships and activities in the community. Another aspect of family life is learning social skills. Practice in social skills, within the confines of a safe, family environment, may have assisted residents in participating in community activities. Another aspect of families is companionship. The residents in the facility may have provided the companionship to attend community activities together.

Not only were residents more externally integrated within the community with a family-like environment, they were also more satisfied with such an environment. Residents said that when they had a sense of belonging and opportunities to eat and socialize with operators and residents, as a family, they felt more satisfied with their living arrangements. This is an important finding for community mental health planners interested in resident satisfaction.

The present research also found that small facilities, with three or fewer residents were more likely to be perceived by residents as family-like than facilities with large (four or greater) numbers of residents. More specifically, post-hoc analysis, in breaking down the number of residents per facility into three categories, revealed that mid-sized (four to nine) facilities were more family-like than facilities with large (ten or greater) numbers of residents. As well, post hoc analysis found that small facilities were more family-like

than large facilities. This is consistent with our societies norm of nuclear families, where relatively small numbers of people meet individual needs for nurturance, intimacy, and socialization. It suggests that greater than ten residents per facility is beyond the optimum number for residents to get enough individualized attention from the operator and other residents to feel like they are living in a family.

One theoretical inconsistency was that a family-like environment did not significantly predict greater internal integration. From Segal and Aviram (1978) it had been hypothesized that a family-like atmosphere, where residents received a sense of belonging, among other things, would facilitate participation in activities and relationships within the facility. One explanation of why this result was not found may be that there was not enough statistical power in the sample size to detect the relationship. In fact, the trend was for operator perceptions of family-like environment to predict internal integration of residents, although it did not reach statistical significance. Resident perceptions of family-like environment did not show any such trend however, in terms of predicting internal integration. From the resident point of view, it may be that having a family-like atmosphere does not mean that residents invest their time into activities and relationships within the facility. Rather, they focus their time on relationships outside the facility.

Concerning restrictiveness, residents were more satisfied with their living arrangements when they perceived that the rules of the operator were not very restrictive. Perhaps residents felt that less

restrictive rules treated them with more respect and gave them the opportunity to regulate their own environment. As a result, they felt more satisfied with their facility.

The degree of operator restrictiveness did not predict any other outcomes. One interpretation may be that rules do not influence global well-being, psychopathology, or external and internal integration. Another possibility may be that restrictiveness should have been measured with more inclusive criteria. Ransohoff (1982) suggested that measuring physical limitations only may be adequate for research purposes. Including other dimensions, previously described (e.g., time restraints imposed by treatment programs, legal status of finances, medication restrictions, and somatic treatments) may be important for fully measuring the concept of restrictiveness.

Differences in the way operators and residents rated restrictiveness was another important finding. Specifically, residents perceived homes to be less restrictive than operators. One plausible explanation is that operators may have tended to respond in a more socially desirable manner, whereas there was no such tendency among residents. If correct, this explanation suggests that operators perceived that authorities want facilities to be managed in a restrictive manner and, therefore, reported that their rules were relatively restrictive. Another explanation is that residents did not perceive rules as restrictive because they were not enforced. The investigator observed inconsistencies in terms of stated rules and resident behaviors. As examples, front doors that were supposed to be locked were often left open and, despite rules against smoking in bedrooms, residents openly smoked and had overflowing ashtrays.

In the area of expectations, one unpredicted finding was that lower resident perceptions of operator expectations was associated with greater external integration. Bandura's (1977) social learning theory suggested that optimum performance occurs when expectations are high enough to challenge and interest individuals, but yet moderate enough not to overwhelm them with unattainable goals. In accordance with Bandura's (1977) theory, perhaps low yet reasonable expectations gave residents enough successful achievements to take on challenges of community activities. Low expectations were the lower end of a continuum of expected activities. At the lower level, operators would likely have expected residents to be doing some tasks and not others. Support for the preceding explanation comes from looking at how residents perceived expectations. Well over half, not only knew what was expected of them, but also perceived that expectations were about right. That is, residents could handle them. This could further be interpreted as residents believing that expectations were reasonable. According to residents, operators expected relatively greater performance in, what could be described as, more easily achieved tasks, such as helping with household chores and self-care. They expected relatively less performance in areas of attending church and work, which are likely more difficult tasks. While the preceding suggests that expectations may have been perceived by residents as reasonable, the question of whether residents perceived expectations as challenging remains unanswered, however.

The finding of low expectations predicting greater external integration is inconsistent with the Lamb and Goertzel (1971, 1972)

who found that high expectations resulted in greater social and vocational functioning. In Lamb and Goertzel's study, high expectations were globally defined according to the setting. A community setting, with a rehabilitative emphasis was considered to have high expectations, in comparison to a board and care setting, which was considered to have low expectations. Unlike the present study, Lamb and Goertzel did not ask residents about their perceptions of expectations, however. If resident perceptions are not considered, but rather expectations are defined from the point of view of operators, then the operator findings support Lamb and Goertzel. The inconsistency suggests that future research should consider resident perceptions of operator expectations. Because discrepant results were found, future replications of this area of research will be needed before definitive conclusions can be drawn.

The results of the study suggest that operators' ideological beliefs may be important in terms of residents' satisfaction with living arrangements. Specifically, when operators had benevolent beliefs, residents were more likely to be satisfied with their living arrangements. This appears to be inconsistent with Ellsworth (1965), who found that staff with benevolent beliefs were seen by hospital patients as showing a lack of respect. Perhaps residents do not interpret these beliefs as a lack of respect, but rather as friendliness. Residents may be grateful that, at least with a benevolent operator, they receive kind and sympathetic treatment. Anecdotal comments made during the study support this line of reasoning. Residents sometimes complained about "absentee operators"

who left staff in charge, who appeared mainly concerned with operational tasks, such as meal preparation.

Another specific finding, in terms of ideological beliefs, was that residents were more internally integrated when operators were low in authoritarianism. Ellsworth (1965) found that staff who held authoritarian beliefs were seen by patients as controlling, restricting, and domineering. It may be that residents feel respected by operators who are non-authoritative and, thus, take more initiative in participating in relationships and activities within the facility.

The fact that ideological beliefs did not predict external integration may suggest that operator beliefs have less of a role in resident motivation and ability to participate in activities outside the facility. Perhaps operator beliefs have little to do with promoting confidence, skills, and companionship that may be necessary for participation outside the facility.

Finally, the number of residents per facility seems important for resident functioning within the facility. The hypothesis that small facilities would be more internally integrated than large facilities was not supported. Rather, residents of large facilities were more internally integrated. Post-hoc analysis, in which the numbers of residents per facility was further broken down into small, medium, and large homes, revealed that even residents in medium-sized homes were more internally integrated than residents of small homes. One explanation may be that residents in large and medium-sized facilities (as defined by the present study) have more residents and staff from

whom to select friends than residents in small facilities, in which there are, at most, only two other residents and one operator.

Post-hoc analysis also demonstrated that medium size may be important for other reasons. Residents of medium-sized facilities were more externally integrated than residents of large facilities. This may have occurred because of the greater family-like support that residents in medium-sized homes perceived, as compared to large homes. Perhaps with other residents to offer them belonging, companionship, and opportunities for skill-development, they gained enough confidence to participate in community activities and relationships.

A third post-hoc finding, related to facility size was that residents in medium-sized facilities were more satisfied with their living arrangements than residents in large facilities. An explanation may be found by examining resident perceptions of family-like atmosphere. Residents perceived mid-sized facilities to be more family-like, than large facilities, which they like. Thus, a mid-sized facilities' family-like environment appears to foster greater resident satisfaction.

Directions for Future Research

A major limitation of the current study was the size of the research sample. Although the size was adequate for the use of multiple regression statistics, it had limited statistical power. It was likely that only very substantial relationships attained statistical significance, leaving more subtle relationships

undetected. For example, the trend was for a family-like environment to predict internal integration, although it did not reach statistical significance.

Another limitation, was that the definition of large category was too inclusive, ranging anywhere from 4 to 44 residents. Post-hoc analysis demonstrated that results became significant and easier to interpret when mid-sized facilities (4 - 9 residents) were considered. Future research should delineate this category, at least.

Another limitation was the measures used. Although measures developed for this study had adequate reliability, item refinement would improve inter-item correlations. The measure developed for the restrictiveness dimension could perhaps have included other categories, as previously described. In addition, the operators' expectation measure may not have adequately answered the question of whether operators set expectation levels at attainable yet challenging levels.

In terms of overall research design, social desirability, psychopathology, and level of care were significant confounding variables. First, operators tended to respond to questions in a socially desirable manner. Operators are dependent upon government funding for their livelihood. Therefore, many may have felt vulnerable to giving anyone, including researchers, any information that may bring disfavor and lead to their license being revoked. Beyond careful explanations that research has nothing to do with licensing, researchers should statistically control for the influence of social desirability bias.

Second, in contrast to Lehman (1983a), psychopathology was an extremely relevant confounding variable. It was found to be highly correlated with global quality of life, quality of living arrangements, and external integration. An explanation is not found in the way that psychopathology was measured because both studies used self-report scales. Baker and Intagliata (1982) found results consistent with the present study, however. Overall, these results suggest that future studies should control for psychopathology to avoid spurious results.

Third, level of care, which indirectly measures levels of dysfunction, was a significant confounding variable, even though CMD residents with extreme levels of dysfunction were not sampled. Not only does this finding lend support for the position that psychopathology needs to be statistically controlled, but future studies should continue to statistically control level of dysfunction.

An area of future endeavor, based on the fact that family-like atmosphere was an important predictor will be to further refine the evaluation of that characteristic. Borrowing from the family literature, such as Moos and Moos (1976), measures including cohesiveness, supportiveness, flexibility, and conflict should be taken to determine which aspects of family living are most beneficial to the chronically mentally disabled resident's well-being and internal and external integration.

Another area of future research should be to develop a measure of ideological beliefs to include custodial versus non-custodial beliefs.

It would be interesting to know if operator beliefs about residents functioning at their maximum potential (i.e., non-custodial beliefs) predicted resident well-being and integration within and outside the facility.

In terms of operator expectations predicting resident functioning, a direction for future research could be to evaluate if resident participation in setting goals change any of the predictive relationships. For example, does being a part of the development of expectations influence the accuracy of resident knowledge and their ultimately their ability to be more externally integrated?

Conclusions

Overall, the results present a mixed picture, depending on the desired goal of residential care. If the goal is to promote external integration, a family-like atmosphere in which operators share meals and activities with residents is important. Aspects of family life, such as providing a sense of belonging, skill development, and companionship facilitate resident participation outside the facility. Low operator expectations, as perceived by residents, are also important for external integration. Residents who believed that expectations were reasonable, were able to feel competent enough to participate in community activities. In addition, a moderate number of residents, as compared to a large number of residents per facility, is important for external integration.

To promote internal integration, operators should have a nonauthoritarian belief system. With increased respect, residents feel more comfortable in taking the initiative to participate in facility relationships and activities. In terms of residence size, medium and large-sized facilities are more internally integrated than facilities with small numbers of residents.

To promote satisfaction with living arrangements, a family-like atmosphere, few restrictions, and operators with benevolent beliefs are important. Residents said that they like family activities with operators and residents, perhaps because it fulfills their needs for belonging and nurturance. Less restrictive rules may suggest to residents that operators respect and trust them. Residents may interpret benevolent beliefs as friendliness and understanding. As well, residents in mid-sized facilities are more satisfied with their living arrangements than residents in large facilities.

In terms of designing an optimally beneficial home for residents, where all these goals are considered, the results of this study suggest that family-like interactions and a benevolent, nonauthoritarian belief system on the part of operators are important. Residences should be large enough to permit residents to select their friends. An optimum number suggested by this study is four to nine residents. As well, operators who develop a nonrestrictive facility and who have low but reasonable expectations of residents are important.

Study of chronically mentally disabled residents and their operators in community-based facilities is an extremely relevant area, given that mental health professionals and perhaps government planners and policy-makers are committed to that modality of care. The present research suggests that perceptions of residents about operators and their facilities, in terms of expectations, restrictiveness, and family-like environment, are relevant to resident well-being and integration in the facility and community. As well, operator beliefs about mental illness are important to resident functioning. Finally, number of residents per facility may be important for satisfaction with the facility and external and internal integration. Future research should continue to develop and refine this line of research. Particularly in the area of family-like environment, studies should look at the specific attributes of families, such as using Moos and Moos' (1976) measure of family dimensions, that may predict resident internal and external integration and well-being. In addition, the area of operator expectations should be refined to more clearly measure whether operators set expectations at attainable yet challenging levels. Moreover, residents should be asked whether they find operator expectations to be reasonable yet challenging. Finally, measures of operator beliefs could be developed to include beliefs about custodial care versus belief in facilitating maximum potential.

REFERENCES

- Allan, P. (1974). A consumer's view of California's mental health care system. Psychiatric Quarterly, 48, 1-13.
- Andrews, F. R., & Withey, S.B. (1976). Social indicators of well-being: American's perceptions of life quality. New York: Plenum Press.
- Babbie, E. (1973). Survey research methods. Belmont, California: Wadsworth Publishing Co.
- Bachrach, L. (1976). Deinstitutionalization: An analytical review and sociological perspective. (Report No. ADM76-351). Washington, D.C.: U.S. Government Printing Office.
- Baker, F., & Intagliata, J. (1982). Quality of life in the evaluation of community support systems. Evaluation and Program Planning, 5, 69-79.
- Baker, F., & Schulberg, H. (1967). The development of a community mental health ideology scale. Community Mental Health Journal, 3, 216-225.
- Bandura, A. (1977). Social learning theory. New Jersey: Prentice-Hall Inc.

- Barnes, G., & Toews, J. (1983). Deinstitutionalization of chronic mental patients in the Canadian context. Canadian Psychology, 24, 22-36.
- Bassuk, E., & Gerson, S. (1978). Deinstitutionalization and mental health services. Scientific American, 238, 46-53.
- Bland, R. (1984). Long term mental illness in Canada: An epidemiological perspective on schizophrenia and affective disorders. Canadian Journal of Psychiatry, 29, 242-246.
- Bloom, B. (1975). Changing patterns of psychiatric care. New York: Human Sciences Press.
- Borus, J. (1981). Deinstitutionalization of the chronically mentally ill. New England Journal of Medicine, 305, 339-341.
- Bradburn, N. (1969). The structure of psychological well-being. Chicago: Aldine.
- Braun, P., Kochansky, G., Shapiro, R., Greenberg, S., Gudeman, J., Johnson, S., & Shore, M. (1981). Overview: Deinstitutionalization of psychiatric patients, a critical review of outcome studies. American Journal of Psychiatry, 138, 736-749.
- Bureau of Community Support Systems (1980). Quality of life: Evaluating the community support program. New York State Office of Mental Health.
- Campbell, A., Converse, P., & Rodgers, W. (1976). The quality of american life. New York: Russell Sage Foundation.

- Cohen, J., & Cohen, P. (1975). Applied multiple regression/correlation analysis for the behavioral sciences. London: John Wiley and Sons.
- Cohen, J., & Struening, E. (1962). Opinions about mental illness in the personnel of two large mental hospitals. Journal of Abnormal and Social Psychology, 64, 349-360.
- Crane, G. (1973). Clinical psychopharmacology in its twentieth year. Science, 181, 124-128.
- Crowne, P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. Journal of Consulting Psychology, 4, 349-354.
- Dear, M., & Taylor, S. (1982). Not on our street. London: Pion Limited.
- Del Guadio, A., Stein, L., Ansley, M., & Carpenter, P. (1976). Attitudes of therapists varying in community mental health ideology and demographic values. Journal of Consulting and Clinical Psychology, 4, 646-655.
- Dickey, B., Gudeman, J., Hellman, S., Donatelle, A., & Grinspoon, L. (1981). A follow-up of deinstitutionalized chronic patients four years after discharge. Defining and counting the chronically mentally ill. Hospital and Community Psychiatry, 32, 326-330.
- Dorgan, J. (1958). Foster home care for the psychiatric patient. Canadian Journal of Public Health, 49, 411-419.

- Dubin, W., & Ciavarelli, B. (1978). A positive look at boarding homes. Hospital and Community Psychiatry, 29, 593-595.
- Ellsworth, R. (1965). A behavioral study of staff attitudes toward mental illness. Journal of Abnormal Psychology, 70, 194-200.
- Epstein, L., Morgan, R., & Reynolds, L. (1962). An approach to the effect of ataraxic drugs on hospital release rates. American Journal of Psychiatry, 119, 36-47.
- Evans, D., Burns, J., Robinson, W., & Garrett, O. (1985). The quality of life questionnaire: A multidimensional measure. American Journal of Community Psychology, 3, 305-322.
- Fakhruddin, K., Manjooran, A., Nair, N., & Neufeldt, A. (1972). A five year outcome of discharged chronic psychiatric patients. Canadian Psychiatric Association Journal, 17, 433-435.
- George, L. K. (1979). The happiness syndrome: Methodological and substantive issues in the study of social-psychological well-being in adulthood. The Gerontologist, 19 210-216.
- Gilbert, D., & Levinson, D. (1976). Ideology, personality, and institutional policy in the mental hospital. Journal of Social Psychology, 53, 263-271.
- Goffman, E. (1961). Asylums: Essays on the social situation of mental patients and other inmates. New York: Doubleday.
- Goldenberg, H. (1977). Abnormal psychology: A social/community approach. Los Angeles: Brooks/Cole Publishing Company.

- Goldman, H., Gattozzi, A., & Taube, C. (1981). Defining and counting the chronically mentally ill. Hospital and Community Psychiatry, 32, 21-27.
- Gruenberg, E. (1967). Social breakdown syndrome - Some origins. American Journal of Psychiatry, 123, 1481-1489.
- Gutek, B., Allen, H., Tyler, T., Lau, R., & Majchrzak, A. (1983). The importance of internal referents as determinants of satisfaction. Journal of Community Psychology, 11, 111-120.
- Katz, M., & Lyerly, S. (1963). Methods for measuring adjustment and social behavior in the community: Rationale, description, discriminative validity and scale development. Psychological Reports, 13, 503-535.
- Kedward, H., Eastwood, M., Allodi, F., & Duckworth, G. (1974). The evaluation of chronic psychiatric care. Canadian Mental Health Association Journal, 110, 519-523.
- Killebrew, J., Harris, C., & Kruckeberg, K. (1982). A conceptual model for determining the least restrictive treatment-training modality. Hospital and Community Psychiatry, 33, 367-370.
- Kirk, R. (1978). Experimental design: Procedures for the behavioral sciences. Belmont: Brooks/Cole Publishing Company.
- Kirk, S. (1976). Effectiveness of community services for discharged mental hospital patients. American Journal of Orthopsychiatry, 46, 646-659.

- Kruzich, J., & Kruzich, S. (1985). Milieu factors influencing patient's integration into community residential facilities. Hospital and Community Psychology, 36, 378-382.
- Lamb, R., & Goertzel, V. (1971). Discharged mental patients - Are they really in the community? Archives of General Psychiatry, 24, 24-34.
- Lamb, R., & Goertzel, V. (1972). High expectations of long-term ex-state hospital patients. American Journal of Psychiatry, 129, 131-135.
- Lamb, H. (1979). The new asylums in the community. Archives of General Psychiatry, 36, 129-134.
- Lamb, H. (1981). What did we really expect from deinstitutionalization? Hospital and Community Psychiatry, 32, 105-109.
- Langner, T. (1962). A twenty-two item screening score of psychiatric symptoms indicating impairment. Journal of Health and Human Behavior, 3, 269-276.
- Lehman, A. (1983a). The effects of psychiatric symptoms on quality of life assessments among the chronically mentally ill. Evaluation and Program Planning, 6, 143-151.
- Lehman, A. (1983b). The well-being of chronic mental patients: Assessing their quality of life. Archives of General Psychiatry, 40, 369-373.

- Lehman, A., Ward, N., & Linn, L. (1982). Chronic mental patients: The quality of life issue. American Journal of Psychiatry, 139, 1271-1276.
- Lehmann, H., & Hanrahan, G. (1954). Chlorpromazine: New inhibiting agent for psychomotor excitement and manic states. Archives of General Psychiatry, 71, 227-237.
- Linn, M., Klett, J., & Caffey, E. (1980). Foster home characteristics and psychiatric patient outcome. Archives of General Psychiatry, 37, 129-132.
- Luborsky, L., & Bachrach, H. (1974). Factors influencing clinician's judgements of mental health: Eighteen experiences with the health-sickness rating scale. Archives of General Psychiatry, 31, 292-299.
- Marion, W., & Grabski, D. (1979). An assessment of a continuing care program. Hospital and Community Psychiatry, 30, 393 - 395.
- Morrissey, J. (1965). Family-care research: A methodological note. Community Mental Health Journal, 1, 181-183.
- Moos, R.H., & Moos, B.H. (1976). A typology of family social environments. Family Process, 15, 357-371.
- Murphy, B., Engelsmann, F., & Tchong-Laroche, F. (1976). The influence of foster home care on psychiatric patients. Archives of General Psychiatry, 33, 179-183.
- Murphy, H., Pennee, B., & Luchins, D. (1972). Foster homes: The new back wards? Canadian Mental Health Supplement, 71, 1-17.

- Nickels, J., Harvey, D., & Ledger, J. (Eds.). (1976). An interdisciplinary approach to scientific research on quality of life in the Canadian north. Winnipeg, Manitoba: University of Manitoba.
- Overall, J. & Gorham, D. (1962). The brief psychiatric rating scale. Psychological Reports, 10, 799-812.
- Perry, J., (Ed.). (1980). Quality of life: Evaluating the community support program. New York State Office of Mental Health.
- Pryce, I. (1977). The effects of social changes in chronic schizophrenia: A study of forty patients transferred from hospital to residential home. Psychological Medicine, 7, 127-129.
- Ransohoff, P., Zachary, R., Gaynor, J., & Hargreaves, W. (1982). Measuring restrictiveness of psychiatric care. Hospital and Community Psychiatry, 33, 361-366.
- Rauch, H., & Rauch, C. (1968). The halfway house movement: A search for sanity. New York: Appleton Century Crofts.
- Reich, R. E., & Siegel, L. (1973). Psychiatry under siege: The chronically mentally ill shuffle to oblivion. Psychiatric Annals, 3, 35-55.
- Rothman, D. (1971). The discovery of the asylums. Toronto: Little, Brown and Company.
- Scherl, D., & Macht, L. (1979). Deinstitutionalization in absence of consensus. Hospital and Community Psychiatry, 30, 599-604.

- Schneider, M. (1976). The quality of life and social indicators research. Public Administration Review, 36, 297-305.
- Scull, A. (1977). Decarceration: Community treatment and the deviant: A radical view. New Jersey: Prentice Hall Inc.
- Segal, S., & Aviram, U. (1978). The mentally-ill in community-based sheltered care: A study of community care and social integration. New York: John Wiley & Sons.
- Segal, S., Baumohl, J., & Moyles, E. (1980). Neighbourhood types and community reaction to the mentally ill: A paradox of intensity. Journal of Health and Social Behavior, 21, 345-359.
- Soloman, H. (1958). The American Psychiatric Association in relation to American psychiatry. The American Journal of Psychiatry, 115, 1-9.
- Stewart, A., Lafave, F., Grunberg, F., & Herjanic, M. (1968). Problems in phasing out a large psychiatric hospital. American Journal of Psychiatry, 125, 82-88.
- Strahan, R., & Gerbasi, K. (1972). Short, homogeneous versions of the Marlow-Crowne social desirabil desirability scale. Journal of Clinical Psychology, 28, 191-193.
- Tabachnick, B., & Fidell, L. (1983). Using multivariate statistics. New York: Harper and Row Publishing Company.
- Talbott, J. (1979). Deinstitutionalization: Avoiding the disasters of the past. Hospital and Community Psychiatry, 30, 621-624.

- Tessler, R., & Goldman, J. (1982). The chronically mentally ill: Assessing community support programs. Massachusetts: Ballinger Publishing Company.
- Trute, B. (1986). Sheltered housing for the chronic patient: The influence of operators of board and care facilities on community participation of their residents. Canadian Journal of Community Mental Health, 5, 31-38.
- Van Putten, T., & Spar, J. (1979). The board-and-care home: Does it deserve a bad press. Hospital and Community Psychiatry, 30, 461-464.
- Wicker, A. (1969). Attitudes versus actions: The relationships of verbal and overt behavioral responses to attitude objects. Journal of Social Issues, 25, 41-78.
- Wilder, J., Kessel, M., & Caulfield, S. (1968). Follow-up of a high-expectations halfway house. American Journal of Psychiatry, 124, 103-109.
- Wing, J., & Brown, G. (1970). Institutionalization and schizophrenia. London: Cambridge University Press.
- Wilder, J., Kessel, M., & Caulfield, S. (1971). How many psychiatric beds? Psychological Medicine, 1, 188-190.
- Zautra, A., & Goodhart, D. (1979). Quality of life indicators: A review of the literature. Community Mental Health Review, 4, 2-10.

- Zautra, A., & Goodhart, D., & Simons, L. (1979). Some effects of positive life events on community mental health. American Journal of Community Psychology, 7, 441-453.
- Zautra, A., & Reich, J. (1983). Life events and perceptions of life quality: Developments in a two-factor approach. Journal of Community Psychology, 11, 121-132.
- Zautra, A., & Simmons, L. (1978). An assessment of a community's mental health needs. American Journal of Community Psychology, 6, 351-362.

Appendix A

LETTERS

Letter to Workers, Supervisors and Resource Coordinators

Name and Address

Dear:

Hello. Some of you may remember me by my former name, Linda MacRae. I am conducting a research project as part of my M.A. program at the University of Manitoba. The project has been approved by the Human Ethics Research Committee of the Department of Psychology and my thesis advisory committee, which is chaired by Dr. Bruce Tefft. As well, the Mental Health Directorate has fully endorsed this study.

The project is intended to clarify the aspects of community homes/facilities and their sponsors or operators that may influence the quality of life of residents, particularly in the areas of their well-being and integration within and outside the home.

I will be calling you within the next few days to discuss residents and sponsors or operators who could be included in this project. Full and informed consent will be sought from all participants. Confidentiality will be maintained and feedback on the project findings will be provided.

I look forward to meeting with you.

Yours sincerely,

Letter to Operators

Name and address

Dear:

Some of you may remember me from my former name, Linda MacRae when I worked as a mental health worker. At the present time, as a graduate student at the University of Manitoba, I am conducting a research project as part of my program of studies. Enclosed, is a letter from the Director of the Mental Health Program, who approved this study. The project, in part, is looking at the experiences of operators in providing care for residents. It would be helpful to know, for example, if the rules that you have developed are helpful for the residents. It may be that what you have developed may be of use to other facilities. In addition, I will be asking residents about their experiences living in community residences. This information, in a general way, may help you, as operators, in providing care for the mentally ill residents in the future.

Your answers will be kept strictly confidential. Anyone reading the final study will not be able to identify individual answers. Please remember that these interviews are for a school project and have nothing to do with licensing.

I will call you in the next couple of days to arrange a convenient time when I may come out to do the interview. I expect that we will need approximately 60 minutes.

I look forward to meeting you.

Appendix B
RESIDENT MEASURES

Content of Initial Contact With Residents

The project was explained using the content of the following outline:

Hello -- My name is Linda Cantelon. I used to be employed as a mental health worker. As a graduate student at the University of Manitoba, I am presently conducting a research project as part of my program of studies. The project is investigating what it is like to live in a residential home. It would be helpful to find out more about the kinds of community residential homes that you, as residents find satisfying. This information may help planners improve and further develop residential homes that will better suit your needs. As a consumer, your opinions are important.

I would like to arrange an appointment time at your convenience to answer any of your questions about the study and to ask you a series of short questions. Your answers will be kept strictly confidential. Anyone reading the final report will not be able to identify your answers. I expect that we will need approximately 60 minutes.

Do you have any questions about what I have told you? Okay Do you think that you can take approximately 60 minutes to participate in my study? Let's arrange a time for next week.

Content of Initial Part of Interview

Your participation in this project is completely voluntary. Your refusal to participate will in no way affect the care you receive in this home. Your name is not on the project forms. Your answers will not be given to your operator, worker, or anyone else without your consent. You will receive a written summary of the project unless you indicate no on the consent form.

Resident Data and Inclusion Criteria

Name of Resident _____ Date of Birth _____

Type of Facility: Approved / Licensed

Gender of Resident: Circle one: M / F

Number of Years at Present Facility _____

Programs or Activities resident is currently in: _____

Last Diagnosis _____

Highest level of education that resident completed (circle one):

1. no schooling
2. elementary school, incomplete (grades 1-5)
3. elementary school, complete (grade 6)
4. junior high school, incomplete (grades 7-8)
5. junior high school, complete (grade 9)
6. high school incomplete (grade 10-11)
7. high school complete (grade 12)
8. non-university, incomplete (e.g., vocational, technical school)
9. non-university, complete (e.g. vocational, technical school)
10. university incomplete
11. university (diploma, certificate)

Marital status of resident (circle one) single / married / separated
divorced / widowed /

Hospitalizations or institutionalizations in past 5 years. List
(include duration of stay and give brief reason):

Length of time in CMH program: _____

Length of time at present residential placement: _____

Currently employed? Circle Yes / No

Indicate if attending any of the following programs:

Work rehabilitation program (e.g. Doray) _____

Psychiatric daycare (e.g. 189 Evanson program or hospital program) _____

Other programs _____

Resident Functioning: Degree to which the residents psychiatric difficulties interfere with each of the following areas of functioning:

Estimated Difficulty

Areas of Functioning	Not at all	Slightly	Moderately	Severely	Very Severely
Personal hygiene or self care	1	2	3	4	5
Social transactions	1	2	3	4	5
Interpersonal relations	1	2	3	4	5
Economic Self-sufficiency	1	2	3	4	5
Learning	1	2	3	4	5
Recreation	1	2	3	4	5

Consent to Participate

I, _____ understand that I have been asked to participate in a research project conducted by Linda Cantelon and approved by the Community Mental Health Program at the Department of Health. The project has been fully explained to me and my signature below indicates my informed consent to participate. I understand that my answers will be kept completely confidential and will not be released to any one outside the study without my written consent.

Participant: _____

Witness: _____

Date: _____

I do/do not (circle one) wish to receive a summary of project findings.

Address: _____

Consent to Release Information

I, _____ give permission to my worker and the residential operator _____ to release information to Linda Cantelon for the purposes of a research project. I understand that the information will be used for the research project only.

Participant: _____

Witness: _____

Date: _____

Resident Perception of Restrictiveness

We are interested in finding out your feelings about how controlled or restricted you feel your residence to be. For each question, please circle the number that best describes your feelings. For example, if your facility has curfew rules but they do not limit your freedom to come and go, circle number 1 "not at all". If they limit your freedom "sometimes" then circle 2 and if they limit your freedom, "a great deal", circle 3.

1. To what extent does the facility being locked limit your freedom to come and go.

not at all/ no rule	sometimes	a great deal
1	2	3

2. To what extent does the facility's curfew rules limit your freedom to come and go?

not at all/ no rule	sometimes	a great deal
1	2	3

3. To what extent does the facility's rule about having to ask permission to leave limit your freedom to come and go?

not at all/ no rule	sometimes	a great deal
1	2	3

4. To what extent do the bedtime rules such as "lights out at 10:00 p.m.," limit your freedom to go to bed when you want to?

not at all/ no rule	sometimes	a great deal
1	2	3

5. To what extent do the rules about smoking, such as "where you can smoke", limit your freedom to smoke?

not at all/ no rule	sometimes	a great deal
1	2	3

6. To what extent do the rules about laundry, such as when the laundry can be done, limit your freedom to do your laundry?

not at all/ no rule	sometimes	a great deal
1	2	3

7. To what extent do the rules about mealtime, such as where and when you can eat, limit your freedom concerning meals.

not at all/ no rule	sometimes	a great deal
1	2	3

8. To what extent do the rules about when your friends and relatives can visit limit your freedom to see them here.

not at all/ no rule	sometimes	a great deal
1	2	3

9. To what extent do the rules about playing music or your radio limit your freedom to play your music any time you want to?

not at all/ no rule	sometimes	a great deal
1	2	3

10. To what extent do the rules about watching T.V. limit your freedom to watch T.V. any time you want to?

not at all/ no rule	sometimes	a great deal
1	2	3

Resident Knowledge of Expectations

We are interested in finding out what is expected of you in your home. Please circle the answer that best matches what you think the operator expects you to do. For example, if the operator expects you to perform household chores regularly, circle 3. If he/she expects you to do household chores only occasionally, circle 2. If he/she does not expect you to do household chores, circle 1, not at all.

TO WHAT EXTENT DOES THE	NOT AT	OCCASIONALLY	A GREAT DEAL/
THE OPERATOR EXPECT	ALL		REGULARLY
YOU TO:			

- | | | | |
|--|---|---|---|
| 1. Perform household
chores | 1 | 2 | 3 |
| 2. Visit with friends
and relatives | 1 | 2 | 3 |
| 3. Wash and dress self | 1 | 2 | 3 |
| 4. Manage your own money | 1 | 2 | 3 |
| 5. Remember to do things
on time | 1 | 2 | 3 |
| 6. Get along with other
residents | 1 | 2 | 3 |

TO WHAT EXTENT DOES THE NOT AT OCCASIONALLY A GREAT DEAL/
 THE OPERATOR EXPECT ALL REGULARLY
 YOU TO:

- | | | | |
|---|---|---|---|
| 7. Go to parties and
other social activities | 1 | 2 | 3 |
| 8. Get along with
neighbours | 1 | 2 | 3 |
| 9. Help with shopping | 1 | 2 | 3 |
| 10. Go to church | 1 | 2 | 3 |
| 11. Do hobbies | 1 | 2 | 3 |
| 12. Work outside the
home | 1 | 2 | 3 |

Resident Perception of Expectations

Now I'd like to find out if you feel your operator's expectations of you are too high, about right, or too low. For example, is his/her expectation regarding household chores (1) too low (2) about right, or (3) too high. For each item, please circle the number that best describes your feelings.

DO YOU FEEL THE OPERATOR'S	TOO LOW	ABOUT RIGHT	TOO HIGH
EXPECTATIONS OF YOU IN	(COULD		(CANNOT
EACH OF THE FOLLOWING AREAS	DO MORE)		HANDLE THEM)
IS TOO HIGH, ABOUT RIGHT			
OR TOO LOW:			

- | | | | |
|---|---|---|---|
| 1. Household chores | 1 | 2 | 3 |
| 2. Visiting with friends
and relatives | 1 | 2 | 3 |
| 3. Dressing and taking
care of self | 1 | 2 | 3 |
| 4. Managing own money | 1 | 2 | 3 |
| 5. Remembering to do things
on time | 1 | 2 | 3 |
| 6. Getting along with other
residents | 1 | 2 | 3 |

DO YOU FEEL THE OPERATOR'S TOO LOW ABOUT RIGHT TOO HIGH
 EXPECTATIONS OF YOU IN (COULD (CANNOT
 EACH OF THE FOLLOWING AREAS DO MORE) HANDLE THEM)
 IS TOO HIGH, ABOUT RIGHT
 OR TOO LOW:

7. Going out to parties
 and other social
 activities

1 2 3

8. Getting along with
 neighbours

1 2 3

9. Helping with shopping

1 2 3

10. Going to church

1 2 3

11. Doing hobbies

1 2 3

12. Working

1 2 3

Residents Family-Like Environment Scale

I would like to get some information of how you see yourself in relation to the operator. Please circle the number that best represents your situation.

1. How frequently does the operator have his/her own family at the facility?

all the time	frequently	occasionally	seldom	rarely
(everyday)	(2-3 times	(2-3 times)	(2-3 times	(once a
	a week)	a month)	a year)	year or
				less)
5	4	3	2	1

2. How frequently do you eat with the operator?

all the time	frequently	occasionally	seldom	rarely
(everyday)	(2-3 times	(2-3 times)	(2-3 times	(once a
	a week)	a month)	a year)	year or
				less)
5	4	3	2	1

3. How frequently does the operator go for walks with with you?

all the time	frequently	occasionally	seldom	rarely
(everyday)	(2-3 times	(2-3 times)	(2-3 times	(once a
	a week)	a month)	a year)	year or
				less)
5	4	3	2	1

Please circle the number that best represents your situation.

4. How frequently does the operator play cards with you?

all the time	frequently	occasionally	seldom	rarely
(everyday)	(2-3 times	(2-3 times)	(2-3 times	(once a
	a week)	a month)	a year)	year or
				less)

5	4	3	2	1
---	---	---	---	---

5. How frequently does the operator watch T.V. with you?

all the time	frequently	occasionally	seldom	rarely
(everyday)	(2-3 times	(2-3 times)	(2-3 times	(once a
	a week)	a month)	a year)	year or
				less)

5	4	3	2	1
---	---	---	---	---

6. To what extent do you regard yourself as part of the operator's family?

completely	mostly	somewhat	rarely	not at all
------------	--------	----------	--------	------------

5	4	3	2	1
---	---	---	---	---

QUALITY OF LIFE SCALE.

Section A

How do you feel about life as a whole?

1

terrible

2

unhappy

3

mostly
dissatisfied

4

mixed
(equally
satisfied
or dissatisfied

5

mostly
satisfied

6

pleased

7

delighted

Has anything happened in the past month that has influenced how you feel about your life?

Where on the following scale would you put your life in the past month?

1

Worst life I
could expect
to have

2

3

4

5

6

7

Best life
I could
expect to
have

Now, think about your life a year ago. Where on the scale would you put your life a year ago?

1

Worst life I
could expect
to have

2

3

4

5

6

7

Best life
I could
expect to
have

Now, think about the future. Where on the scale do you think your life will be a year from now?

1

2

3

4

5

6

7

Worst life I
would expect
to have

Best life I
would expect
to have

Section B

Which of the following most accurately describes your living situation?

_____ approved home (three or fewer residents other than family)

_____ licensed facility (three or greater residents other than family)

In this accommodation, do you share a room? _____ yes _____ no

If so, with whom, (e.g., spouse, friend, children)? _____

How do you feel about your living arrangements?

1

2

3

4

5

6

7

terrible

unhappy

mostly
dissatisfied

mixed
(equally
satisfied and
dissatisfied

mostly
satisfied

pleased

delighted

How do you feel about the food here?

1	2	3	4	5	6	7
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied	mostly satisfied	pleased	delighted

How do you feel about the amount of time you spend here?

1	2	3	4	5	6	7
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied	mostly satisfied	pleased	delighted

How do you feel about the rules here?

1	2	3	4	5	6	7
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied	mostly satisfied	pleased	delighted

How do you feel about the amount of influence you have in what goes on here?

1

terrible

2

unhappy

3

mostly
dissatisfied

4

mixed
(equally
satisfied and
dissatisfied)

5

mostly
satisfied

6

pleased

7

delighted

How do you feel about the staff here?

1

terrible

2

unhappy

3

mostly
dissatisfied

4

mixed
(equally
satisfied and
dissatisfied)

5

mostly
satisfied

6

pleased

7

delighted

How do you feel about the other people who live here?

1

terrible

2

unhappy

3

mostly
dissatisfied

4

mixed
(equally
satisfied and
dissatisfied)

5

mostly
satisfied

6

pleased

7

delighted

How do you feel about the privacy you have here?

1	2	3	4	5	6	7
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

How do you feel about the amount of freedom you have here?

1	2	3	4	5	6	7
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

How do you feel about the prospect of staying here for a long period of time?

1	2	3	4	5	6	7
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

Section C

How do you feel about your life as a whole?

<div>1</div>	<div>2</div>	<div>3</div>	<div>4</div>	<div>5</div>	<div>6</div>	<div>7</div>
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

Which box for each pair of words best describes what you think about your life in general

	<div>1</div>	<div>2</div>	<div>3</div>	<div>4</div>	<div>5</div>	<div>6</div>	<div>7</div>	
boring	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	interesting
enjoyable	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	miserable
useless	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	worthwhile
full	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	empty
discouraging	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	hopeful
disappointing	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	rewarding
brings out the best in me	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	doesn't give me much chance

Social Integration Scale

External Integration. We would like to ask you some questions about the things you do from day to day. Please circle the response that best fits your situation. For example, on a typical day, if you go to a coffee shop or restaurant very often, circle 5.

I. Attending to Oneself Subscale

	<hr/>				
	Very Often	Often	Some- times	Rarely	Never
	<hr/>				
1. On a typical day do you go to a coffee shop or restaurant?	5	4	3	2	1
2. On a typical day do you go to the shopping center or local shopping areas?	5	4	3	2	1
3. How often in a typical week do you order food from outside or eat out at a local restaurant?	5	4	3	2	1
4. How often in a typical week do you make a purchase at a local store?	5	4	3	2	1

Please circle the response that best fits your situation.

A

None Little Half Most All

5. On a typical day how
much of your time
between 8:00 a.m. and
5:00 p.m. is spent at
the house?

5 4 3 2 1

6. On a typical day how
much of your time
between 5:00 p.m. and
11:00 p.m. do you spend
at home?

5 4 3 2 1

II. Access to Community Resource Subscale

If you have to arrange your own transportation, without the aid of (operator's name), or walk how easy would it be to:

	Very Easy	Easy	Not Much Trouble	Difficult	Very Difficult
1. Go to a shopping centre or a large shopping area	5	4	3	2	1
2. Go to a park	5	4	3	2	1
3. Go to a library	5	4	3	2	1
4. Go to a movie	5	4	3	2	1
5. Go to a community centre	5	4	3	2	1
6. Go to a restaurant or coffee shop	5	4	3	2	1
7. Go to a bar	5	4	3	2	1
8. Go to a public transportation	5	4	3	2	1

If you have to arrange your own transportation, without the aid of
(operator's name), or walk how easy would it be to:

	Very Easy	Easy	Not Much Trouble	Difficult	Very Difficult
9. Go to the place of worship you prefer	5	4	3	2	1
10. Go to an organization that offers individuals an opportunity to do volunteer work	5	4	3	2	1
11. Go to a barber shop or beauty parlor	5	4	3	2	1
12. Take a walk in a pleasant area	5	4	3	2	1

III. Access to Basic or Personal-Resources Subscale

If you wanted, how easy would it be to obtain, outside this house, or without the aid of (operator's name) the following things:

	Very Easy	Easy	Not Much Trouble	Difficult	Very Difficult
1. Meals	5	4	3	2	1
2. Medical care	5	4	3	2	1
3. Laundry Services	5	4	3	2	1
4. Clothing	5	4	3	2	1
5. Toilet supplies and incidentals	5	4	3	2	1
6. A telephone	5	4	3	2	1

IV. Familial-Access and Participation Subscale

How easy would it be, if you want to:

	Very Easy	Easy	Not Much Trouble	Difficult	Very Difficult
1. Telephone and just talk to a close member of your immediate family	5	4	3	2	1
2. Telephone and just talk to a more distant relative	5	4	3	2	1
3. Get together with a close member of your immediate family	5	4	3	2	1
4. Get together with a more distant relative	5	4	3	2	1

On a typical day, how often do you visit with:

	<hr/>				
	Very Often	Often	Sometimes	Rarely	Never
<hr/>					
5. Visit with members of your immediate family	5	4	3	2	1
6. more distant relatives	5	4	3	2	1

V. Friendship-Access and Participation Subscale

How easy would it be, if you wanted to:

	Very Easy	Easy	Not Much Trouble	Difficult	Very Difficult
1. Telephone and just talk to a close friend outside this house	5	4	3	2	1
2. Telephone and just talk to an acquaintance outside this house	5	4	3	2	1
3. Get together with a close friend not in this facility or another like it	5	4	3	2	1
4. Get together with an acquaintance not in this facility or another like it	5	4	3	2	1

On a typical day, how often do you:

Very

Often Often Sometimes Rarely Never

5. Visit with close friends

not in this house	5	4	3	2	1
-------------------	---	---	---	---	---

6. Visit with acquaintances

not in this house	5	4	3	2	1
-------------------	---	---	---	---	---

VI. Social Integration Through Community Groups Subscale

On a typical day, how often do you:

	Very Often	Often	Sometimes	Rarely	Never
1. Visit with close friends not in this house	5	4	3	2	1
2. Visit with acquaintances not in this house	5	4	3	2	1
3. Do volunteer work	5	4	3	2	1
4. Join in the activities of social or political groups outside the house for people who are not considered former patients	5	4	3	2	1

VII. Use of Community Facilities Subscale

On a typical day how often do you:

	Very Often	Often	Sometimes	Rarely	Never
1. Go to a park	5	4	3	2	1
2. Go to the library	5	4	3	2	1
3. Participate in some outside sports activity	5	4	3	2	1
4. Go to a special sports or entertainment events	5	4	3	2	1

Internal-Integration Scale.

I. Operator Will Transport Residents To Community

Resources Subscale

How easy would it be for you to get the operator, a staff member, or a member of the operator's family to take you to a:

	Very Easy	Easy	Not Much Trouble	Difficult	Very Difficult
1. Supermarket or large shopping center	5	4	3	2	1
2. Park	5	4	3	2	1
3. Library	5	4	3	2	1
4. Movie theatre	5	4	3	2	1
5. Community Centre	5	4	3	2	1
6. Public school, high school, or college providing adult education	5	4	3	2	1
7. Restaurant or coffee shop	5	4	3	2	1

How easy would it be for you to get the operator, a staff member, or a member of the operator's family to take you to a:

	Very Easy	Easy	Not Much Trouble	Difficult	Very Difficult
8. Public transportation	5	4	3	2	1
9. The place of worship you prefer	5	4	3	2	1
10. Organization that offers an individual an opportunity to do volunteer work	5	4	3	2	1
11. Barber shop or beauty parlor	5	4	3	2	1

II. Operator Facilitates Activity Through the Facility Subscale

How easy would it be for you to arrange the following:

	Very Easy	Easy	Not Much Trouble	Difficult	Very Difficult
1. Trips to sports events with other house residents	5	4	3	2	1
2. Social activities at the house	5	4	3	2	1
3. Vocational training at the house	5	4	3	2	1
4. Religious services at the house	5	4	3	2	1
5. Individual or group therapy at the house	5	4	3	2	1

III. Operator Provides Basic Necessities Subscale

How easy is it for you to get or arrange the following:

	Very Easy	Easy	Not Much Trouble	Difficult	Very Difficult
1. Laundry service at the home	5	4	3	2	1
2. Help from (operator's name) in getting clothing	5	4	3	2	1
3. Toilet supplies and incidentals from (operator's name) or in a vending machine here	5	4	3	2	1
4. Use of the telephone in the house	5	4	3	2	1

IV. Socializing with Other Residents and the Operator Subscale

On a typical day, do you:

	Very Often	Often	Sometimes	Rarely	Never
1. Join with other residents in the house to play cards, games, or some other activity	5	4	3	2	1
2. Try to make friends with other residents in the house	5	4	3	2	1
3. Sit and talk with other residents in the house	5	4	3	2	1
4. Talk to (operator's name) other other house visitors (and staff)	5	4	3	2	1

V. Supplies Purchased by the House Subscale

How often do you purchase the following things at the house from the operator of the house:

	Very Often	Often	Sometimes	Rarely	Never
1. Laundry services	5	4	3	2	1
2. Clothing	5	4	3	2	1
3. Toilet items or other incidentals	5	4	3	2	1
4. Grooming services -- for example, prepaid beauty shop or barber shop appointments	5	4	3	2	1

7. I have periods of such great Yes No DK
restlessness that I cannot sit long
in a chair (cannot sit still very
long).
8. Are you the worrying type (a Yes No DK
worrier)?
9. Have you ever been bothered by Often Some Never DK
shortness of breath when you were times
NOT exercising or working hard?
Would you say: often, sometimes, or
never?
10. Are you bothered by nervousness Often Some Never DK
(irritable, fidgety, tense)? Would times
you say: often, sometimes or never?
11. Have you ever had any fainting Never A few More DK
spells (lost consciousness)? Would times than
you say: never, a few times, or a few
more than a few times? times
12. Do you ever have any trouble in Often Some Never DK
getting to sleep or staying asleep? times
Would you say: often, sometimes, or
never?
13. I am bothered by acid (sour) Yes No DK
stomach several times a week.

14. My memory seems to be all right Yes No DK
(good).
15. Have you ever been bothered by Often Some Never DK
"cold sweats"? Would you say: times
often, sometimes or never?
16. Do your hands ever tremble enough Often Some Never DK
to bother you? Would you say: times
often, sometimes, or never?
- 17 There seems to be a fullness Yes No DK
(clogging) in my head or nose much
of the time.
18. I have personal worries that get me Yes No DK
down physically (make me physically
ill).
19. Do you feel somewhat apart even Yes No DK
among friends (apart, isolated,
alone)?
20. Nothing ever turns out for me the Yes No DK
way I want it to (turns out,
happens, comes about, i.e., my
wishes aren't fulfilled).
21. Are you ever troubled with Often Some Never DK
headaches or pains in the head? times
Would you say: often, sometimes, or
never?

22. You sometimes can't help wondering Yes No DK
if anything is worthwhile anymore.

Brief Psychiatric Rating Scale

Directions. Draw a circle around the term under each symptom which best describes the patients present condition.

0 = Not Present

1 = Very Mild

2 = Mild

3 = Moderate

4 = Moderately Severe

5 = Severe

6 = Extremely Severe

- | | |
|--|---------------------------|
| 1. TENSION - Physical and motor manifestations of tension, "Nervousness", and heightened activation level. Tension should be rated solely on the basis of physical signs and motor behavior and not on the basis of subjective experiences of tension reported by the patient. | 0 1 2 3 4 5 6 |
| 2. EMOTIONAL WITHDRAWAL - Deficiency in relating to the interviewer and the interview situation. Rate only degree to which the patient gives the impression of failing to be in emotional contact with other people in the interview situation. | 0 1 2 3 4 5 6 |
| 3. MANNERISMS AND POSTURING - Unusual and unnatural motor behavior, the type of motor behavior which causes certain mental patients to stand out in a crowd of normal people. Rate only abnormality of movements; do not rate simple heightened motor activity here. | 0 1 2 3 4 5 6 |

4. MOTOR RETARDATION - Reduction in energy level evidenced in slow movements and speech, reduced body tone, decreased number of movements. Rate on the basis of observed behavior of the patient only; Do not rate on basis of patient's subjective impression of own energy level. 0 1 2 3 4 5 6
5. UNCOOPERATIVENESS - Evidences of resistance, unfriendliness, resentment, and lack of readiness to cooperate with the interviewer. Rate only on the basis of the patient's attitude and responses to the interviewer and the interview situation; Do not rate on basis of reported resentment or uncooperativeness outside the interview situation. 0 1 2 3 4 5 6
6. SOMATIC CONCERN - Degree of concern over present bodily health. Rate the degree to which physical health is perceived as a problem by the patient, whether complaints have realistic basis or not. 0 1 2 3 4 5 6
7. ANXIETY - Worry, fear, over-concern for present or future. Rate solely on the basis of verbal report of patient's own subjective experiences. Do not infer anxiety from physical signs or from neurotic defense mechanisms. 0 1 2 3 4 5 6
8. CONCEPTUAL DISORGANIZATION - Degree to which the thought processes are confused, disconnected or disorganized. Rate on the basis of integration of the verbal products of the the patient; Do not rate on the basis of the patient's subjective impression of his/her own level of functioning. 0 1 2 3 4 5 6
9. GUILT FEELINGS - Over-concern or remorse for past behavior. Rate on the basis of the patient's subjective experiences of guilt as evidenced by verbal report with appropriate affect; Do not infer guilt feelings from depression, anxiety, or neurotic defenses. 0 1 2 3 4 5 6

10. GRANDIOSITY - Exaggerated self-opinion, conviction of unusual ability or powers. Rate only on the basis of patients statements about himself or self in-relation-to-others, not on the basis of his/her demeanor in the interview situation. 0 1 2 3 4 5 6
11. DEPRESSIVE MOOD - Despondency in mood, sadness. Rate only degree of despondency; Do not rate on the basis of inferences concerning depression based upon general retardation and somatic complaints. 0 1 2 3 4 5 6
12. HOSTILITY - Animosity, contempt, belligerence, disdain for other people outside the interview situation. Rate solely on the basis of the verbal report of feelings and actions if the patient toward others; Do not infer hostility from neurotic defenses, anxiety nor somatic complaints. (Rate attitude toward interviewer under "UNCOOPERATIVENESS".) 0 1 2 3 4 5 6
13. SUSPICIOUSNESS - Belief (Delusional or otherwise) that others have now, or have had in the past, malicious or discriminatory intent toward the patient. On the basis of verbal report, rate only those suspicions which are currently held whether they concern past or present circumstances. 0 1 2 3 4 5 6
14. HALLUCINATORY BEHAVIOR - Perceptions without normal external stimulus correspondence. Rate only those experiences which are reported to have occurred within the last week and which are described as distinctly different from the thought and imagery process of normal people. 0 1 2 3 4 5 6
15. UNUSUAL THOUGHT CONTENT - Unusual, odd, strange, or bizarre thought content. Rate here the degree of unusualness, not the degree of disorganization of thought processes. 0 1 2 3 4 5 6

16. BLUNTED AFFECT - Reduced emotional tone, 0 1 2 3 4 5 6
apparent lack of normal feeling or
involvement.

Social Desirability Scale

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

	True	False
I'm always willing to admit it when I make a mistake.	_____	_____
I always try to practice what I preach.	_____	_____
I never resent being asked to return a favour.	_____	_____
I have never been irked when people expressed ideas very different from my own.	_____	_____
I have never deliberately said something that hurt someone's feelings.	_____	_____
I like to gossip at times.	_____	_____
There have been occasions when I took advantage of someone.	_____	_____
I sometimes try to get even rather than forgive and forget.	_____	_____
At times I have really insisted on having things my own way.	_____	_____
There have been occasions when I felt like smashing things.	_____	_____

Appendix C

OPERATOR MEASURES

Content of Initial Contact With Operators

Hello -- My name is Linda Cantelon. I used to be employed as a mental health worker. As a graduate student at the University of Manitoba, I am conducting a research project as part of my program of studies. The project is investigating the qualities of residential homes, and the experiences of operators in providing care for residents. It would be helpful to know, for example, if the rules that you have developed are helpful for the residents. It may be that what you have developed may be of use to other facilities. In addition, I will also be asking residents about their experiences living in community residences. This information, in a general way, may help government planners and you, as operators, in providing care for the mentally ill residents in the future. Your answers will be kept strictly confidential. Anyone reading the final report will not be able to identify individual answers.

I expect the interview will take approximately 45 minutes. Do you have any questions about what I have told you? Okay. Do you think that you could spare approximately 45 minutes to participate in my study? Okay. Let's arrange an appointment time at your convenience to answer any of your questions about the study and then to begin the interview. Do you have some time in the next couple of weeks when I could meet with you in your home/facility?

Content of Subsequent Contact With Operators

Your participation in this project is completely voluntary. Your answers will only be used for this project. They will not be given to anyone without your consent. You will receive a written summary of the project findings unless you indicate "no" on the consent form.

Operator Data

Operator Name _____ Date of Birth _____

_____ Gender (Circle one): M / F Address _____

_____ Phone _____

Consent to Participate

I, _____ understand that I have been asked to participate in a research project conducted by Linda Cantelon and approved by the Community Mental Health Program at the Department of Health. The project has been fully explained to me and my signature below indicates my informed consent to participate. I understand that my answers will be kept completely confidential and will not be released to any one outside the study without my written consent.

participant: _____

Witness: _____

Date: _____

I do/do not (circle one) wish to receive a summary of project findings.

Address: _____

Operator Restrictiveness Scale

We are interested in the rules of your home or facility. Please answer each part of the questions, as indicated.

1. Do you have a rule about locking the facility? (Circle one):

Yes / No

If yes, briefly describe the rule _____

What proportion of the time is your home/facility locked?

not at all sometimes (e.g. after most of the time

10:00 pm on weekdays)

1

2

3

2. Do you have curfew rules for your residents? (Circle one):

Yes / No

If yes, briefly describe the curfew rules _____

To what extent have you defined curfew rules for your residents?

not at all to moderate extent to great extent

(e.g. no (e.g. be home by 9:00 (e.g. be in by 9:00

rule) p.m. weekdays) p.m. everyday)

1

2

3

3. Do residents have to ask permission to leave the home/facility?

(Circle one):

Yes / No

If yes, briefly describe your rules and under what conditions they are applied _____

To what extent have you defined rules about asking permission to leave your facility/home?

not at all	to moderate extent	to a great extent
(e.g. no rule)	(e.g. must ask permission to leave after supper)	(e.g. residents must always ask permission to leave the home)
1	2	3

4. Do you have a rule about bedtime, such as, "lights out by 10:00 pm or no music after 10:00 pm? (Circle one):

Yes / No

If yes, briefly describe the rules _____

To what extent do you have rules about bedtime?

not at all	to some extent	to a great extent
(e.g. no rule)	(e.g. only on weekdays weekdays)	(e.g. weekdays and weekends)

1

2

3

5. Do you have rules about smoking, such as where, when, and how much the resident may smoke? (Circle one):

Yes / No

If yes, briefly describe your rules _____

To what extent have you defined rules about smoking?

not at all	to some extent	to a great extent
(e.g. no rules)	(e.g. only 5 per day and restricted to certain times and rooms)	(e.g. no smoking except outside the building)

1

2

3

6. Do you have rules about laundry for the resident? (Circle one):

Yes / No

If yes, briefly describe your rules _____

To what extent do you have rules about laundry?

not at all

to some extent

to a great extent

(e.g. no

(e.g. residents have

(e.g. each resident

rules)

flexible schedules)

given specific time)

1

2

3

7. Do you have rules about where and when the residents can eat?

(Circle one):

Yes / No

If yes, briefly describe your rules _____

To what extent do you have rules about where and when the residents can eat.

not at all

to some extent

to a great extent

(e.g. may prepare

(e.g. may prepare a

(e.g. may not prepare

a snack anytime)

snack only if ask

a snack anytime)

permission)

1

2

3

8. Do you have rules about friends and relatives visiting the home facility? (Circle one):

Yes / No

If yes, briefly describe your rules _____

To what extent do you have rules about friends and relatives visiting the home/facility?

not at all	to some extent	to a great extent
(e.g. guests may visit anytime)	(e.g. guests must leave by 900 p.m.)	(e.g. may not have guests except Sunday afternoon)
1	2	3

9. Do you have rules about when the guests play their music?

(Circle one):

Yes / No

If yes, briefly describe your rules _____

To what extent do you have rules about when the residents may play their music?

not at all	to some extent	to a great extent
(e.g. anytime)	(e.g. anytime except except 9:00 pm on weekdays)	(e.g. no playing for several hours on weekends)
1	2	3

10. Do you have rules for the residents about watching T.V.?

(Circle one):

Yes / No

If yes, briefly describe your rules _____

What is the extent of your rules about watching T.V.?

not at all	to some extent	to a great extent
(e.g. may watch	(e.g. rules such as	(e.g. many rules such
at anytime)	T.V. off at 9:00 pm)	as must ask permission
		to watch T.V.)

1

2

3

11. Do you have any other rules for your residents that you consider important in running your home/facility? Please list them.

Operator Expectation Scale

Operators differ in what they think their residents should be able to do. Please rate for each of the following activities what you expect (name of resident) _____ to do. For example, if you expect him/her to be regularly helping with household chores circle 3. If you don't expect him/her to be doing any household chores, circle 1.

	DO NOT EXPECT HIM TO BE DOING	EXPECTED HIM TO BE DOING SOME	EXPECTED TO BE DOING REGULARLY
1. Helps with household chores	1	2	3
2. Visits his friends and relatives	1	2	3
3. Dresses and takes care of self	1	2	3
4. Takes care of his own finances	1	2	3
5. Remembers to do important things on time	1	2	3
6. Gets along with other residents	1	2	3

7. Goes to parties and other social activities	1	2	3
8. Gets along with neighbours	1	2	3
9. Helps with family shopping	1	2	3
10. Goes to church	1	2	3
11. Takes up hobbies	1	2	3
12. Works (include sheltered : workshop)	1	2	3

Beliefs About Mental Illness

Next I am interested in finding out your beliefs or opinions about the mentally ill. Please indicate whether you agree or disagree with each of the following statements regarding the mentally ill. In cases where you don't completely agree or completely disagree, please give the answer that most reflects your feelings.

	Agree	Disagree
As soon as a person shows signs of mental illness, he should be hospitalized. Do you agree or disagree?	_____	_____
More tax money should be spent on the care and treatment of the mentally ill.	_____	_____
There is something about the mentally ill that makes it easy to tell them from normal people.	_____	_____
It is best to avoid anyone who has mental problems.	_____	_____
Mental patients need the same kind of control and discipline as a young child.	_____	_____
Increased spending on mental health services is a waste of tax dollars.	_____	_____

One of the main causes of mental illness is a
lack of self-discipline and will power.

We need to adopt a far more tolerant attitude
toward the mentally ill in our society

Family-Like Environment Scale

I would like to get some understanding of how you see your role with the residents. For each question, please circle the number that best represents your your situation.

1. How frequently do you have your own family with you at the facility?

all the time	frequently	occasionally	seldom	rarely
(everyday)	(2-3 times	(2-3 times/	(2-3 times	(once a
	/week)	month)	/year)	year or less)
5	4	3	2	1

2. How frequently do you eat with the residents?

all the time	frequently	occasionally	seldom	rarely
(everyday)	(2-3 times	(2-3 times/	(2-3 times	(once a
	/week)	month)	/year)	year or less)
5	4	3	2	1

3. How frequently do you go for walks with the residents?

all the time	frequently	occasionally	seldom	rarely
(everyday)	(2-3 times	(2-3 times/	(2-3 times	(once a
	/week)	month)	/year)	year or less)
5	4	3	2	1

4. How frequently do you spend leisure time playing cards with residents?

all the time	frequently	occasionally	seldom	rarely
(everyday)	(2-3 times /week)	(2-3 times/ month)	(2-3 times /year)	(once a year or less)
5	4	3	2	1

5. How frequently do you spend leisure time watching TV with residents?

all the time	frequently	occasionally	seldom	rarely
(everyday)	(2-3 times /week)	(2-3 times/ month)	(2-3 times /year)	(once a year or less)
5	4	3	2	1

6. To what extent do you regard the residents as part of your family?

completely	mostly	somewhat	rarely	not at all
5	4	3	2	1

Social Desirability Scale

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

	True	False
I'm always willing to admit it when I make a mistake .	_____	_____
I always try to practice what I preach.	_____	_____
I never resent being asked to return a favour.	_____	_____
I have never been irked when people expressed ideas very different from my own.	_____	_____
I have never deliberately said something that hurt someone's feelings.	_____	_____
I like to gossip at times.	_____	_____
There have been occasions when I took advantage of someone.	_____	_____
I sometimes try to get even rather than forgive and forget.	_____	_____
At times I have really insisted on having things my own way.	_____	_____
There have been occasions when I felt like smashing things.	_____	_____

Appendix D
ADDITIONAL ANALYSES

Confounding Variables

The relationships between predictor and confounding variables were examined using Pearson product-moment correlations. As shown in Table 40, resident gender is significantly related with authoritarian beliefs, ($t = 2.02, p \leq .05$). Specifically, male residents are more likely, than female residents, to have operators with authoritarian beliefs. Resident gender is also significantly related to benevolent beliefs ($t = -2.06, p \leq .05$). Specifically, female residents are more likely, than male residents, to have operators with benevolent beliefs. Rated psychopathology is correlated with operator expectations, ($r = -.32, p \leq .01$). Lower levels of rated psychopathology are more likely with higher operator expectations. Level of care is correlated with operator expectations, ($r = -.33, p \leq .01$). Lower levels of care are found with higher operator expectations. Operator age correlates negatively with operator perceptions of restrictiveness ($r = -.26, p \leq .05$). Younger operators report higher levels of restrictiveness. Operator reports of social desirability correlate positively with authoritarian beliefs ($r = .39, p \leq .01$). As such, the greater the tendency of operators to respond in a socially desirable manner, the higher the authoritarian beliefs. Order of interview correlates positively with operator perceptions of

Table 40

Correlations of Confounding Variables With Operator Predictor Variables

Confounding Variables	Operator Predictor Variables ¹				
	Rest	Expect	Author	Benev	Family
Resident					
Age	-.04	-.20	.04	.04	-.11
Educ	-.10	.08	.00	.20	.17
Gender ²	.09	1.62	2.02*	-2.26*	-1.72
Reported Psychopathology	.05	-.15	-.02	-.07	.01
Rated Psychopathology	-.03	-.32*	-.17	-.01	-.04
Level of Care	-.05	-.33*	-.04	-.06	.12
Social Desirability	-.23	-.15	.00	.03	.12
Operator					
Gender ²	4.74	-.22	-.18	1.36	.80
Age	-.26*	-.21	.19	.29	.10
Social Desirability	-.17	-.06	.39**	-.13	.04
Order of Interview	.10	-.18	.03	-.09	.36**

Note.¹ Rest = Restrictiveness, Expect = Expectations, Author = Authoritarian, Bevev = Benevolent, Family = Family-Like Environment.

²The statistics for resident and operator gender are t-tests.

*p ≤ .05, **p ≤ .01.

family-like environment ($r = .36$, $p \leq .01$). Where operators were interviewed after the resident, operators were more likely to have high perceptions of family-like environment.

As shown in Table 41, resident age is negatively correlated with with resident perception of family-like environment, ($r = -.43$, $p \leq .01$). As such, younger residents are more likely to report a higher family-like environment than older residents. Reported psychopathology is positively correlated with resident perception of restrictiveness, ($r = .27$, $p \leq .05$). The higher the levels of reported psychopathology, the higher the perception of restrictiveness. Resident social desirability ratings are negatively correlated with resident perception of restrictiveness, ($r = -.26$, $p \leq .05$). As such, when residents do not respond in a socially desirable manner, they are more likely to also report restrictive environments. Operator gender is significantly related to resident perceptions of expectations, ($t = 2.64$, $p \leq .05$). Specifically, male operators are more likely, than female operators, to have residents who perceived the expectations of themselves by operators to be too high. Operator gender is also significantly related to resident perception of family-like environment, ($t = 4.12$, $p \leq .01$). Specifically, male operators are more likely, than female operators, to have residents who perceive a greater degree of family-like environment. Operator ratings of social desirability correlate with resident perceptions of restrictiveness, ($r = .27$, $p \leq .05$) As operators respond in a socially desirable manner, residents are more likely to report a restrictive environment. Order of interview is correlated with resident

Table 41

Correlations of Confounding Variables With Resident Predictor Variables.

Confounding Variables	Resident Predictor Variables		
	Restrictiveness	Expectations (Perceptions)	Family-Like
Resident			
Age	-.24	-.22	-.43**
Educ	-.05	.00	.03
Gender ¹	-1.21	-.19	1.75
Reported Psychopathology	.27*	.22	.03
Rated Psychopathology	.17	.25	.03
Level of Care	.14	-.05	-.05
Social Desirability	-.26*	-.11	-.11
Operator			
Gender ¹	.73	2.64*	4.12**
Age	-.09	-.24	-.05
Social Desirability	.27*	-.25	.04
Order of Interview	-.08	-.01	.41***

Note.¹ Resident and operator gender statistics are t-tests.

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

perception of family-like environment, ($r = .41, p \leq .001$). Where residents were interviewed first, they were more likely to have high perceptions of family-like environment.

The relationships between dependent variables and confounding variables were also examined. As indicated in Table 42, level of care correlates significantly with external integration ($r = .28, p \leq .05$), reported psychopathology ($r = .37, p \leq .01$), and rated psychopathology ($r = .49, p \leq .001$). As such, external integration is more likely with residents who have lower levels of care. Higher levels of care are more likely with residents who have high psychopathology. Resident reports of social desirability correlate significantly with quality of living arrangements ($r = .38, p \leq .01$), reported psychopathology ($r = -.41, p \leq .001$), and rated psychopathology, ($r = -.40, p \leq .001$). This suggests that residents are more likely to respond in a socially desirable way when reporting satisfaction with living arrangements and psychopathology. Where reported psychopathology is used as a confounding variable, it correlates with global quality of life ($r = -.48, p \leq .001$), quality of living arrangements ($r = -.34, p \leq .01$), and external integration ($r = -.36, p \leq .01$). Similarly, where rated psychopathology is used as a confounding variable, it correlates with global quality of life ($r = -.64, p \leq .001$), quality of living arrangements ($r = -.46, p \leq .001$), and external integration ($r = -.28, p \leq .05$). This suggests that psychopathology is an extremely significant confounding variable. Operator reports of social desirability correlate with quality of living arrangements, ($r = .31, p \leq .05$) and reported psychopathology, ($r = -.29, p \leq .05$).

Table 42

Correlations of Confounding Variables With Dependent Variables

Confounding Variables	Dependent Variables					
	Global Quality of Life	Quality of Living Arrangements	External Integration	Internal Integration	Reported Psychopathology	Rated Psychopathology
Resident Age	.10	.12	-.19	-.07	-.17	-.17
Educ	.16	-.08	.09	-.04	.12	-.03
Gender ¹	.36	.61	.58	-.79	-.93	-.58
Level of Care	-.22	-.20	-.28*	.12	.37**	.49***
Social Desirability	.12	.38**	.00	.14	-.41	-.40***
Rated Psycho-pathology	-.48***	-.34**	-.36**	-.12	--	--
Reported Psycho-pathology	-.64***	-.46***	-.28*	-.04	--	--
Operator Gender ¹	-.61	-.84	1.61	1.75	2.17	1.21
Age	.20	.18	-.09	-.19	-.07	-.15
Social Desirability	.20	.31*	.03	-.24	-.29*	-.17
Order of Interview	-.04	.08	.07	.00	.01	.21

Note. ¹ Gender statistics are t-tests.

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

Principal Component Analysis

A principal component analysis was performed on the six dependent variables. Three factors were extracted. As demonstrated in Table 43, factor one accounts for 47.3% of the variance, factor two accounts for 16.9% of the variance, and factor three accounts for 15.1% of the variance. Altogether, the three factors account for 79.2% of the variance.

Factor loadings show that factor one is a composite of global quality of life (.83), quality of living arrangements (.82), reported psychopathology (-.79), and rated psychopathology (-.60). Factor two appears to consist mainly of external integration (.89). Factor three appears to consist mainly of internal integration (.48).

Table 43

Principal Component Analysis of Dependent Variables

	Factors ¹		
	One	Two	Three
Eigenvalue	2.84	1.01	.90
Percent of Variance ²	47.3	16.9	15.1
Factor Loadings			
Reported Psychopathology	-.79	-.38	.17
Rated Psychopathology	-.60	-.57	.12
Quality of Living Arrangements	.82	-.09	.18
Internal Integration	.07	.71	.48
External Integration	.06	.89	.17
Global Quality of Life	.83	.19	.21

¹ Results from varimax rotated factor matrix. ² Accumulated variance is 79.2%.