THE QUALITY OF LIFE OF THE CHRONICALLY MENTALLY ILL LIVING IN COMMUNITY: AN INVESTIGATION OF THE OREGON QUALITY OF LIFE THEORY

BY

MARK A. DIMIRSKY

A Thesis Submitted to the Faculty of Graduate Studies
in Partial Fulfilment of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY

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Winnipeg, Manitoba

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ISBN 0-315-77903-9

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ABSTRACT

Programs targeted to their specific needs have enabled many chronically mentally ill persons to be discharged from institutions to community placements assumed to offer improved quality of life. Quality of life (QOL) generally refers to the long-term sense of well-being and satisfaction (contrasted with short-term moods) experienced by people under their current life conditions. QOL can be viewed as an important indicator of the effectiveness of an individual's treatment and, aggregated across patients as a group, of the mental health system.

The intuitive appeal of QOL as a concept has not been matched by definitional and measurement rigor. The Oregon QOL theory was suggested as a means of improving the usefulness of the concept by specifying the variables thought to determine QOL for those with chronic psychiatric illness. The variables predicted by the theory to determine QOL are needs satisfaction, perceived opportunities to satisfy needs, the individual's abilities to meet their needs, their satisfaction with their performances that were intended to meet needs, and the performance requirements associated with roles the patients must fill in order for needs to be met.

Seven hypotheses testing the Oregon theory were examined. Methodological issues such as differences between various QOL measures and the effects of psychopathology and/or environmental conditions were also explored. Data was collected primarily from patients and their caregivers.

Strong support was observed for a relationship between greater needs satisfaction and the presence of opportunities to meet needs with higher QOL. There was a weaker but still significant relationship between both satisfaction with performances intended to meet needs, and greater patient abilities to deal with stress and concentration problems and higher QOL. A greater degree of positive affect (but not negative affect) was significantly correlated with higher QOL.

Several relationships predicted by the Oregon theory were not observed or only partly supported. Differences in perception of needs between caregivers and patients did not impact significantly on QOL except in matters of health and external social integration. The effort required to satisfy their needs was not related to patient's QOL and a predicted interaction between patient abilities and perceived degree of effort required to meet needs was not found.

These results suggest the Oregon theory is useful in its emphasis on needs satisfaction and the importance of performance satisfaction, but that modifications are necessary. Patient's abilities in dealing with stress and concentration difficulties are correlated with QOL only in specific life domains, and patient's perceptions of their degree of effort (to meet needs) does not seem to be correlated with their satisfaction with their performances or their QOL. Thus it appears the theory requires modification so as to make it more similar to adaptation theories of QOL and to incorporate a more psychological (rather than sociological) perspective of the determinants of QOL.

Several issues that require further study are described and recommendations made for future research. Suggestions are also offered for changes to the current service delivery system in view of the findings of this research.

ACKNOWLEDGEMENTS

This thesis took over seven years for completion. The reasons are many and are my responsibility exclusively. Whether the efforts were warranted is a matter left to the future and judgements still incomplete or yet to be made.

There is no lack of certainty, however, in my knowledge that this thesis could not have happened without the generous support of many who have shared their time, energy, resources and knowledge. It is my honor and pleasure to gratefully acknowledge their invaluable assistance.

My wife, Lenora Deisman, offered support that was as varied as it was essential. There were many times the family suffered due to my repeated absences. She "covered" for me and attempted to be both mother and father for our children, and she, along with the children, suffered the pains of dissertation widowhood. She offered "motivational assistance" that brought me back (often reluctantly) to the process that eventually culminated in this thesis. By providing love and a sense of security she made it easier for me to be away from home for those long, long hours. Her efforts also made it possible for me to believe that I was doing this because I wanted (as opposed to having) to, and that it was my decision as to whether I wished to continue.

This research could not have been conducted without the generous support of many mental health professionals (service providers and volunteers) in organizations such as

Alberta Mental Health Services, the Calgary General Hospital, Langevin Employment Services (Calgary), the Alberta Division of the Canadian Mental Health Association, and the Manitoba Mental Health Foundation. The individuals involved are too numerous to mention, but I fondly remember their willingness to offer support in the form of access to patients and/or resources that made this thesis possible.

I owe a great debt to those who participated in the project. The patients interviewed were people who had as a common characteristic a disability demonstrating itself in emotional, behavioral and/or cognitive difficulties in coping with life. These difficulties did not make them "less" as people, and I came to appreciate the kindness of many of them as they sought re-assurances they had performed well enough and had not "messed up" my research. Many were "characters" who have come to be part of my treasury of recollections.

I also owe a debt to the caregivers who participated in the study. Their assistance was both invaluable and necessary in order for the data to be collected. I recognize it is an act of generosity to "open up" one's caseload to "outside" scrutiny and cause extra work that appears to have little direct and immediate relevance.

Word processing is both a blessing and curse to tasks such as this one (at least for me). The fact that text could be easily changed and moved from place to place resulted in considerable confusion when it was too often changed. Much of the suffering caused by this confusion was justifiably my own but I also received the support of my secretary Regina McNeil - and she deserved better. Her patience and good spirits (at most times) with the deluge of names, table formatting, and text changes were as admirable as they were essential.

Dr. Bruce Tefft demonstrated incredible patience and nurturance. He spent countless hours discussing, revising and even assisting with the physical preparation of this document. His performance certainly represented the spirit of endurance and faith in the academic process, if not at times in me. I know he was relieved at the completion of this thesis and hope he can some day enjoy a satisfaction from its completion that is more than relief of tension.

My committee made many valuable comments that improved the thesis considerably by assisting me to be more thorough in my exploration of both the literature and data. Dr. Schallow spent many hours in closely reviewing prior drafts and offered suggestions regarding organization as well as additional or alternative data analyses and interpretation. Dr. Trute offered astute comments regarding the role of housing on quality of life. Dr. Tait offered suggestions regarding potential methodological issues while Dr. Fuchs offered perspectives regarding the generalizability of the results and potential implications for service practice.

Through Dr. Diener's comments as my external examiner I had the perspective of someone who has been an active researcher in this area for several years and was therefore able to alert me to issues germane to the entire field.

Thanks to all of my committee members who were cooperative and forthcoming with opinions and comments that allowed me to address issues I had not previously or perhaps sufficiently considered.

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INTRODUCTION

The term "quality of life" was popularized by U.S. President Lyndon Johnson's use of the term in 1964 and has since been employed as a goal for provision of mental health services (Baker & Douglas, 1990; Bigelow, McFarland & Olson, 1991; Franklin, Simmons, Solovitz, Clemons, & Miller, 1986; Goldman, Lehman, Morrissey, Newman, Frank & Steinwachs, 1990; Lehman, 1983a; Lehman, 1983b: Lehman, Ward, & Linn, 1982; Meltzer, Burnett, Bastani & Ramirez, 1990; New York State Office of Mental Health, 1980; Simpson, Hyde & Faragher, 1989; Tantam, 1988; Thapa & Rowland, 1989). Unfortunately, there has not been agreement about the definition and measurement of quality of life (Diener, 1984; Franklin et al., 1986; Fabian, 1990; Lehman, 1988; New York State Office of Mental Health, 1980).

Fabian (1990) describes quality of life as a multidimensional measure of client change that has the advantage of being holistic, and the disadvantages of complexity and ambiguity with consequent measurement difficulty. Perhaps these disadvantages have contributed to the observation by Najman and Levine (1981), after reviewing the research used to assess improvement in quality of life as a result of medical intervention, that only lip service has been given to demonstrating that quality of life is improved as a result of a specific medical intervention.

These difficulties in operationalization have not deterred others' beliefs about the need to use quality of life as an outcome measure. The National Institute of Mental Health (NIMH) has addressed the difficulties usually found in treating the chronically mentally ill and has established guidelines for their model Community Support Program. These NIMH guidelines suggest that quality of life should be used as <u>the</u> critical outcome indicator for the evaluation of the effectiveness of program interventions with this population (Tessler & Goldman, 1982).

Considerable detail regarding definition will be provided as the varying definitions applied to the term are considered a barrier to its effective operationalization. Briefly stated, however, the present research assessed quality of life as the individual's subjective estimation of well-being measured both globally and by means of estimations of satisfaction in ten life domains.

How can the validity of a person's subjective report about their satisfaction with their life be disputed? The issues that can be addressed include whether the chronically mentally ill reliably report their quality of life and whether differences between their reports and other group's reports are such that it can be concluded that their reports are likely biased by their psychiatric condition. If such differences exist, what are they and what is their impact?

The particular model tested in this research states that quality of life is predictable based upon our knowledge of certain key classes of variables. The Oregon quality of life theory (named after the state in which most of the research on it has occurred) suggests that quality of life results from the interaction of two sets of factors: the <u>satisfaction of needs</u> through <u>opportunities presented by the social environment</u> (Bigelow et al., 1991). Quality of life is based upon the meeting of the individual's needs through mechanisms (for the meeting of those needs) made available by a society that demands the performance of certain tasks. The theory predicts, dependent upon exposure to classes of variables, the quality of life experienced by the chronically mentally ill living in community.

One measure of the usefulness of a quality of life theory is its ability to predict quality of life given knowledge of certain variables (Lehman, 1983a). In order to test the predictive validity of the Oregon theory, data were collected to test seven hypotheses (drawn from the theory) predicting higher or lower quality of life dependent upon the presence or absence of specified conditions.

The literature review addresses the quality of life issue from several perspectives: definition and exploration of the construct and, as well, the confusion caused by the use of the term as both an independent and dependent variable. The review also defines the chronically mentally ill population by describing their usual performance deficits. Explanation is then offered as to why the use of quality of life as a dependent variable seems particularly relevant and important for this population. The last section of the review develops the seven hypotheses to be tested by the research by applying the Oregon quality of life theory to the information previously presented about the chronically mentally ill living in community.

Definition of Quality of Life

Although its theoretical and "common sense" appeal is substantial, considerable confusion exists in the use of quality of life as a dependent or outcome variable (Bigelow, Brodsky, Stewart, & Olson, 1982; Diener, 1984; Franklin et al., 1986; Fabian, 1990; Lehman, 1988; Lehman, 1983a; Lehman et al., 1982; New York State Office of Mental Health, 1980). Two factors, primarily, contribute to this confusion.

The first is a lack of consensus regarding the influences and factors that determine quality of life, e.g., whether it is to be thought of as resulting from objective life conditions such as employment status, and/or subjective opinion about happiness or satisfaction, and/or a person-environment "fit". Second, differences in how quality of life is measured further confuse the issue of what it is, e.g., differences in its use as a dependent variable. These factors are not mutually exclusive. For example, the absence of standardized measures causes difficulties in formulating theory intended to clarify the factors causally related to quality of life.

The need to develop a framework for the several types of factors (social, affective, cognitive) that need to be included as potential determinants of quality of life led the NIMH to jointly convene a conference (with the New York State Office of Mental Health) in order to clarify the quality of life concept. The Oregon quality of life theory was selected by the conference participants as a framework to guide and clarify research into quality of life of the chronically mentally ill (New York State Office of Mental Health, 1980).

Theoretical Positions

There has been an evolution of theory attempting to explain quality of life of the chronically mentally ill (Bigelow et al., 1991; Bigelow, Gareau and Young, 1990; Franklin et al., 1986; Lehman, 1988; Lehman, 1983a). First attempts at a theory of quality of life for the chronically mentally ill relied heavily on objective measures, but these did not correlate highly with global subjective perceptions of quality of life (Lehman et al., 1982; Zautra & Goodhart, 1979). Within the past decade, there have been several theoretical positions suggesting the variables thought most likely to account for quality of life. A common theme is their attempt to further define the psychological variables and the relationships between them thought responsible for quality of life.

The literature is dominated at this time by two somewhat different theoretical approaches to the determination of quality of life (Fabian, 1990). Both approaches stress the role of personal characteristics, objective life indicators, and perceptions of satisfaction in specific domains. However, these approaches differ on the emphasis placed on environmental opportunities and the individual's ability to capitalize on those opportunities.

Lehman's Quality of Life Theory

Lehman (1983a) posits that quality of life is a subjective experience comprised of three classes of variables: personal characteristics, objective indicators in life domains, and subjective indicators in life domains. The heart of Lehman's position is that quality of life occurs as a function of the individual's comparison of objective conditions with an internal standard which forms the basis for consequent evaluation (Lehman, 1983a). Thus quality of life is a composite of individually defined and determined personal characteristics, the conditions or situations the person faces, and, his or her subjective evaluation of these conditions. Figure 1 illustrates

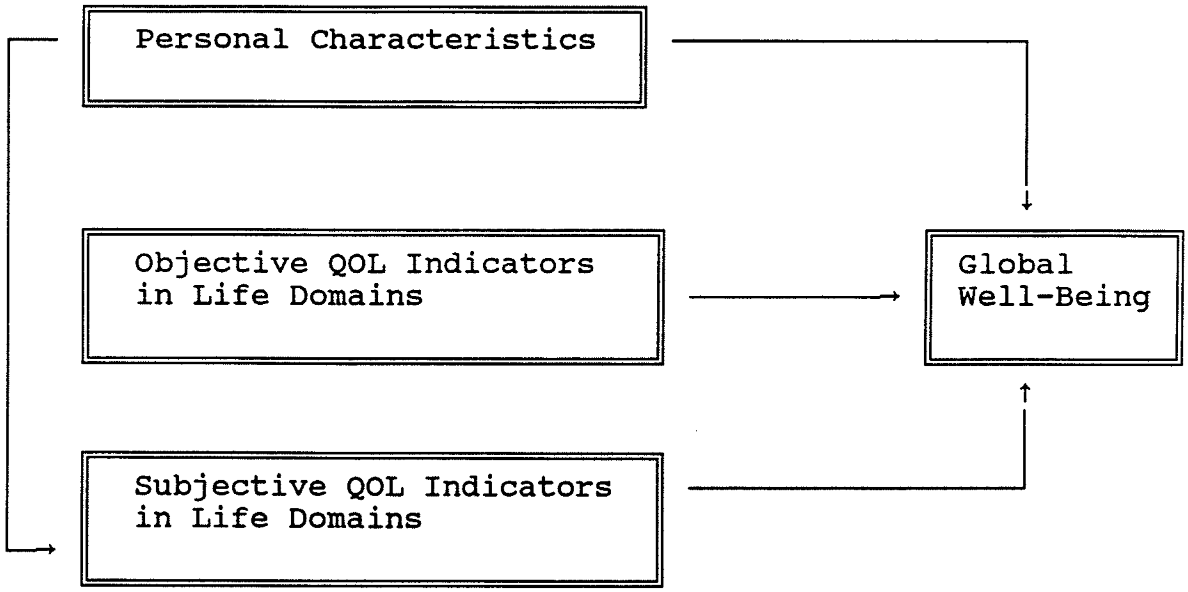

Figure 1. A. F. Lehman's Quality of Life Model.

Lehman's theoretical position.

There is a role for environmental "fit" between the person and the environment but it is a fairly static model that suggests the person's characteristics are most likely to play the predominant role in their determination of the degree of satisfaction they feel in their lives. This contrasts with a more interactive model as expressed in the work of Franklin and his colleagues (1986), and, as well, the Oregon quality of life theory position.

Fabian (1990) assesses the theoretical position taken by Lehman (1983a) and characterizes its research focus as "gap discrepancy" in nature. That is, those conducting this type of quality of life research seem most interested in finding out if there are specific differences associated with certain populations (in this case, the chronically mentally ill) that make their assessment of quality of life different than other groups' assessments and/or what would be expected by common sense analysis.

Details of Lehman's work are extensively reported in the literature review that follows. Fabian's (1990) labelling of it as "gap discrepancy" in focus, however, indicates she believes Lehman has been impressive in detailing the objective and subjective factors that impact upon quality of life but he has not extensively detailed the personal characteristics of the chronically mentally ill individual, other than psychopathology, that influence quality of life. Other theorists have concentrated more (than Lehman has) on personal characteristics such as abilities to perform role-required tasks (Bigelow et al., 1991), or adaptability to the environment (Franklin et al., 1986).

Three bodies of literature have been relied upon to explain these "gap-discrepancy" observations (Fabian, 1990).

1. Adaptation theory describes the process by which an individual's internal standard of evaluation will move up or down in response to changes in conditions or environments. This view suggests that for the chronically mentally ill the adaptation process involves a lowering of the person's standards so that aspirations, expectation, and values are evaluated and modified in order to be in congruence with what is judged possible given the person's limitations.
2. A "person-environment fit" model suggests that life satisfaction relies on the goodness of fit between the characteristics of the person and the properties of the environment. While people live in an objectively defined environment they perceive a subjectively defined environment and it is to the psychological life space they respond.
3. A third group of theories proposed to explain the gap

between actual and perceived conditions are social judgement theories which feature an external rather than an internal frame of comparison. This position is felt by Fabian to likely explain the relatively high levels of satisfaction expressed by the chronically mentally ill that participate in community rehabilitation programs, despite their relative poverty, problems with health, difficulties with family, lack of support systems, and other ills.

In conclusion, Lehman's position represents an approach that has focused extensively on the impact on quality of life of objective indicators in domains (such as poverty) and the subjective impressions of well-being of patients regarding those domains. The exploration of patient personal characteristics that may impact quality of life have primarily focused on the effects of psychopathology.

Franklin's Model of Quality of Life

The model suggested by Franklin et al. (1986) has quality of life comprised of objective indicators of life circumstances, satisfaction with these circumstances, and the individual's adaptation to them. Adaptation results from a process of perception and evaluation of the individual's fit with his/her environment. It also involves his/her evaluation of those circumstances against his/her expectations (Baker & Intagliata, 1982; Franklin et al., 1986). Adaptation is operationalized in terms of performance of activities of daily living, self-esteem, and affect. Franklin et al. suggest adaptation is likely to lag behind perception of satisfaction regarding specific issues (as might be determined from domain-specific quality of life ratings) and this would lead to a highly correlated but temporally caused gap in the relationship between the two ratings (adaptation and domain-specific) of quality of life.

Franklin et al. (1986) report strong correlations between satisfaction and adaptation. However, one quarter of their sample could not be correctly classified as regards their adaptation scores when their satisfaction scores were known. They suggest a lag between adaptation and satisfaction with satisfaction being more temporally in tune with current circumstances. There has not, however, to my knowledge, been a test of this position.

Oregon Quality of Life Theory

Bigelow has over the past 15 years developed a theoretical position as regards quality of life - the Oregon quality of life theory - and a questionnaire intended to measure quality of life (Bigelow, McFarland, Garreau & Young, 1991; Bigelow et al., 1990; Bigelow et al., 1982).

The Oregon theory is based largely on need satisfaction and role performance.

Quality of life, as we view it, comes out of a social

> contract - fulfilment of needs in exchange for meeting of demands which society places upon its members. Needs are fulfilled through opportunities presented by the social environment. Demands are met through the exercise of basic psychological abilities - cognition, affect, perception, and motor. For example, a work role demands concentration and stress tolerance while it provides opportunities for meeting self-esteem, social affiliation, and basic needs. Abilities compromised by mental illness deprive a person of the satisfaction of his or her needs due to impairment of the person's participation in the normal opportunity structure. Mental health services address that deprivation by moderating social demands (advocacy), supplementing opportunities (brokerage and sheltered work) and restoring abilities (rehabilitation and medication) (Bigelow et al., pp. 44-45).

Figure 2 depicts the theorized determinants of quality of life, namely (a) an individual's perceptions of his or her needs, (b) the opportunities through which these needs can be satisfied, (c) the performance requirements associated with opportunities for needs satisfaction, and (d) the abilities of an individual to successfully perform the behaviours expected of him or her.

According to the committee advocating the theory, needs

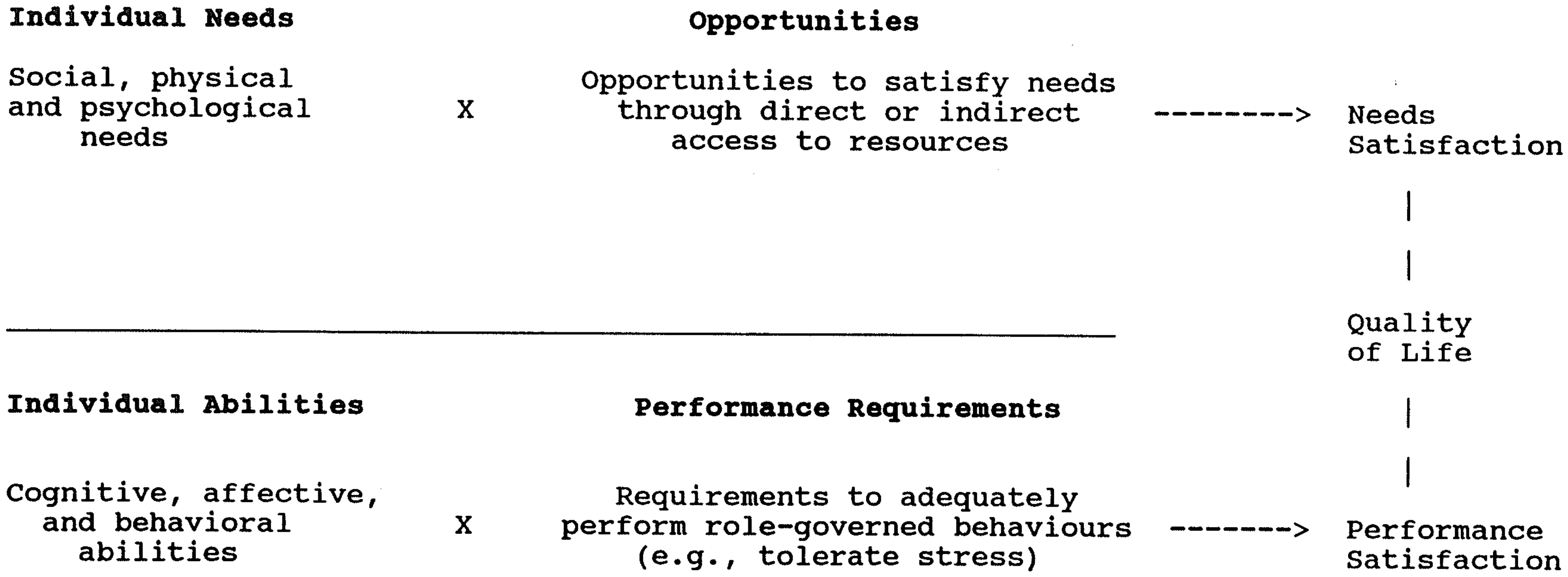

Figure 2. The Elements of the Oregon Quality of Life Theory.

can be defined in several ways (New York State Office of Mental Health, 1980). These include (a) Maslow's (1954) well-known hierarchy, (b) other researchers' formulations, and (c) a dictionary definition of need as the lack of something requisite, desirable, or useful (Webster, 1971). However, according to the committee, the definition employed is of less consequence than is anchoring quality of life to individually-perceived needs. Thus, the theory argues that quality of life is based primarily on subjective estimations of need.

The theory states that quality of life is affected both by the adequacy or success of an individual's performance in pursuit of needs satisfaction and by the degree of needs satisfaction that results from this pursuit. An exchange process (with the environment that contains needed resources) occurs in which each individual performs certain behaviours, according to his or her abilities, in order to take advantage of opportunities for needs satisfaction. These opportunities are present in the environment and are, to varying degrees, idiosyncratic to the situation. "To the extent that adequate satisfaction (of needs) and (adequate) performance are achieved, the individual is adjusted to his environment and enjoys a good quality of life" (New York State Office of Mental Health, 1980, p. 25).

According to the theory, the behaviours required in order for needs to be satisfied form a continuum. One end of this continuum is anchored by direct access to resources necessary for needs satisfaction, while the other end is anchored by indirect access to resources. Direct access refers to situations in which the need for adequate performance by an individual of role-governed behaviours is minimal (but not absent). For example, receiving social assistance and using some of this money to purchase groceries does not require adequate performance of complex, role-governed behaviours. On the other hand, indirect access requires adequate performance by the individual of role-governed behaviours as a precondition to gaining resources. For example, earning money for groceries through competitive employment requires adequate performance of fairly complex, role-governed behaviours. The theory argues that the degree of adequacy of an individual's performance will be judged by the individual and/or significant others who control access to resources.

The theory also suggests that, beyond needs satisfaction as an outcome, the process by which needs are satisfied influences an individual's subjective quality of life. The greater the extent to which needs are met contingent upon successful performance of role-governed behaviours, the higher will be an individual's quality of life. Conversely, noncontingent needs satisfaction (i.e., as a result of the independent efforts of others) is less conducive to high quality of life.

The theory distinguishes two factors that interact to determine the adequacy of an individual's performance (i.e., his or her competency). The first factor consists of cognitive, emotional, and behavioral abilities (e.g., psychopathology, degrees of positive and negative affect, ability to cope with stress, ability to concentrate). The second factor consists of the complexity and/or rigidity of the role requirements which the individual must meet. The more complex and/or rigid the role requirements, the more difficulty an individual will have in attempting to perform adequately. In addition, some behaviours may be required for competent role performance, others may be forbidden, and still others may be irrelevant. Obviously, to perform adequately, an individual must correctly understand and obey these distinctions.

In summary, the Oregon quality of life theory holds that, by successfully meeting role-governed performance requirements, an individual gains access to resources, which can then be used to meet needs and that, through this process, achieve a higher quality of life. The theory is potentially more precise than other explanations of quality of life of the chronically mentally ill in that it predicts the kinds of personal characteristics and environmental demands that impact members of the group's quality of life.

Other Approaches

It is beyond the scope of this review to comprehensively review the approach taken to quality of life by those interested in the aging process. However, a brief glimpse into this research may be instructive as it demonstrates the complexity of the construct and provides an overview of an important quality of life research area.

Liang (1985) indicates that subjective or psychological well-being is affectively determined but also includes a cognitive assessment by the individual. His review of the research describes the perspective of those primarily interested in the effects of the aging process as regards life satisfaction.

Researchers dealing with issues of gerontology describe the components of well-being as consisting of congruence, happiness, negative and positive affect (Liang, 1985). Congruence represents the individual's assessment of present life condition compared to their expectations. Happiness, according to Liang, "... is the long-term positive affective state or a cognitive assessment of positive affect" (P. 552). He describes positive and negative affect states as transitory and non-cognitive with negative affect states consisting of anxiety, depression, worry and other negative emotive states.

This brief description demonstrates the diverse attempts at explaining the factors thought by various researchers to be important as the determinants of quality of life. Theories have become increasingly inclusive of personal characteristics, the objective indicators the person is exposed to, and person-environment interactions. Terms are still often used interchangeably when different meanings may be attached and the research background of the researcher influences the research approach.

Quality of Life as a Dependent Variable

Confusion in understanding the construct is related to its measurement as well as to a lack of theoretical clarity. In order to understand other researcher's results and the rationale for the methodology employed in this study it is necessary to briefly review how quality of life has been assessed and the limitations of these means of assessment. Two measurement approaches have been taken: the objective or social indicators approach, and the subjective assessment of quality of life.

Objective Indicators of Quality of Life

Quality of life was first assessed by measuring "objective" variables (e.g., crime rates, health indices, per capita income) (Zautra & Goodhart, 1979). These variables were taken as indicators of the quality of life of individuals living under specific circumstances (Diener, 1984; Lier, 1976; New York State Office of Mental Health, 1980; Zautra & Reich, 1983). The categories of variables (e.g., income) represent clusters of resources or conditions presumed to directly affect the quality of life of those upon whom they impact (New York State Office of Mental Health, 1980).

Diener (1984) reviewed the large literature dealing with the impact of various social-demographic and environmental circumstances on reported well-being. He concluded that a slight but statistically significant positive relationship exists between income level and subjective well-being and happiness, even when potentially confounding factors (e.g., age, sex, education) are controlled. Data from longitudinal studies suggests that increasing wealth (in absolute terms) does not translate directly into increased happiness. He concluded then that income plays a small but significant role in subjective well-being and quality of life but that "wealth" is primarily dependent upon individual interpretation.

The relationship of age, gender, race, education, marital status, social contact, and frequency of positive and negative life events to quality of life were also reviewed by Diener (1984). He believes the relationships between these variables and quality of life for non-disabled populations are weak and probably depend upon a person's interpretation of the variable (i.e., its subjective meaning).

Consistent with other investigators, Campbell, Converse, and Rodgers (1976) reported that unemployment, marital breakdown, and crime were significant indicators of quality of life for average Americans. However, these variables accounted for only about 15% of the variance. Their data indicate that employment has a particularly important positive relationship with quality of life for both men and women, even across ages and with amount of income controlled.

In conclusion, statistically significant relationships exist between some objective conditions and quality of life, but they do not account for much of the variance in quality of life ratings. Although significant, the correlations obtained are weak in absolute terms (usually not greater than .20 and often much less). As a result, the impact of objective conditions on quality of life is viewed as indirect and less powerful than the impact of subjective conditions.

Subjective Measurement of Quality of Life

The subjective approach to defining and measuring quality of life has become increasingly prominent (Diener, 1984; Gill, 1984; Fabian, 1990). Subjective well-being can be operationally defined in any of a number of ways but the common element for these alternative definitions is that "... they deal with individuals' perceptions of the quality of their lives and they address the phenomenological experience of life under social conditions presumably described by social indicators" (New York State Office of Mental Health, 1980, p. 8).

Happiness and satisfaction are prominent examples of subjective or psychological indicators of quality of life. Three types of measures have been characteristically used to assess the subjective perception of well-being: a global measure of happiness, well-being, or satisfaction; opinion questions regarding satisfaction and happiness addressed to specific life domains (such as family, work, health, and education); and measures of positive and negative affect (Diener, 1984).

Satisfaction with life domains (more specific but still subjective measures) were added to global measures of quality of life. These measures proved to be (a) more stable across time than objective measures, (b) moderately correlated with global subjective measures, and (c) moderately correlated with each other, (Franklin et al., 1986). The domains usually assessed represent those factors thought most salient to the everyday concerns and experiences of their particular sample (Table 1). The multiplicity of categories is a strong point in that

Table 1

Domains Typically Used in Quality of Life Research

Flanagan, 1978	Blau, 1977	Campbell, Converse & Rogers, 1978	Andrews & Withey 1976	Lehman 1982	Baker & Intagliata, 1982
Physical/Material Well-being					
Material well-being/ financial security	Earning	Finances Housing	Housing	Finances Living situation	Residence Food, clothing
Health/personal safety	Eating/ sleeping	Health		Health	Health
Relations With Other People					
Relations with spouse	Loving	Family life	Family life	Family life	Family life
Having/raising children	Parenting				
Relations with other relatives/friends	Social	Friendships		Social relations	Friends Other residents
Social, community and civic activities	Environment	Community organizations	Neighborhood		Neighborhood
Activities related to helping/encouraging others					
Activities related to local & national govt.		Organizations	National government	Access to health care	Current placement vs. hospital

Table 1 (continued)

Flanagan, 1978	Blau, 1977	Campbell, Converse & Rogers, 1978	Andrews & Withey 1976	Lehman 1982	Baker & Intagliata, 1982
Personal Development/Fulfillment					
Intellectual development		Status, novelty			
Personal understanding/ planning	Self-acceptance			Finances situation	Economic
Job	Working	Job	Job	Job	Job
Creativity/personal experience					
Recreation					
Socializing	Social contact	Nonwork activities	Spare time activities	Leisure	Spare time (how)
Passive/observational recreation activities	Leisure				Fun activities
Active/participatory recreational activities		Religious faith			

Note. Adapted from "Quality of life in the evaluation of community support systems" by F. Baker and J. Intagliata, 1982, *Evaluation and Program Planning*, *5*.

questions can be made specific (and hopefully, more relevant) for the group assessed, and a weak point in that standardization and subsequent comparisons are made more difficult.

Diener noted that subjective assessments of satisfaction in specific life domains tend to be highly correlated with global satisfaction. He suggests two possible reasons: the two measures may share method variance, which inflates the correlation because they are both assessing the same but not necessarily the intended construct; or " ... the subjective judgments appear closer in the causal chain to SWB [subjective well-being] because objective conditions will usually be mediated by subjective processes" (1984, p. 552).

The correlations between the two types of measures are high but enough differences exist to warrant a conclusion that something different is being measured by each. Since it cannot be determined that one measure (global or domain-specific) is the more accurate measure of quality of life both need to be used.

Assessment of subjective well-being became intertwined with the determination of positive and negative affect with the work of Bradburn (1969). The hope was that assessment of positive and negative affect would lead to the ability to predict an individual's ratings of happiness.

Diener reviewed the literature regarding the independence of positive and negative affect. He concluded that support for the independence of the two affects is strong, and that the existence of the two affects has been confirmed with measures and methodologies other than those of Bradburn (1969). Diener pointed out that " . . . although the affect scales are virtually uncorrelated with each other, they each showed independent and incremental correlations with a global well-being item" (1984, p. 547). Thus it seems clear that positive and negative affect exist as separate entities and have separate relationships with happiness and satisfaction.

Staats (1987) researched hope as a subjective concept combining cognitive and affective dimensions. She argued that hope can be viewed as a psychological indicator of quality of life that taps cognition in the form of expectation of future events. Moreover, it has an affective component. Staats derived an Expected Balance Scale from Bradburn's (1969) Affect Balance Scale by changing the tense of the directions ("... in the next few weeks to what extent do you expect..."). The Expected Balance Scale was used to assess the sample's expectations while the Affect Balance Scale was used to assess their happiness. Both correlational and factor analyses supported the conclusion that hope and happiness (as measured by the Expected Balance

Scale and the Affect Balance Scale, respectively) share about 20% common variance.

Gutek, Allen, Tyler, Lau and Marchrzak (1983) explored three possible cognitive determinants of quality of life in a non-disabled population. They reported that individual aspirations, degree of internality (i.e., a belief in control of issues causing satisfaction or dissatisfaction), and the results of comparisons with others assisted the prediction of the degree of life satisfaction of 417 participants in their study.

Quality of Life Assessment: Chronic Mental Patients

Lehman (1988) indicates the "Community Support Programs" initiative (by NIMH) stimulated states in the U.S. to improve service recipients' quality of life. Research teams in Oregon (lead by Bigelow) and New York (Baker et al., 1982) worked to operationalize the notion of quality of life within the context of the Community Support Program.

The Oregon Quality of Life Questionnaire focused on role functions and included items on satisfaction and actual performance in four areas: personal adjustment, interpersonal adjustment, adjustment to productivity, and civic adjustment. It is a 263 item questionnaire that assesses satisfaction and performance in 14 domains.

The New York study group developed a Satisfaction with Life Domains Scale to assess CSP clients life satisfaction with various areas of their lives by asking for ratings in 15 domains. Baker and Intagliata (1984) reported on a 21-item Life Satisfaction Profile which dealt with basic needs, advice, special affiliation, autonomy, personal accomplishment, religion and general affiliation.

Lehman's conclusion as regards the validity and reliability of these scales was: "..., no single QOL measure emerged as definitive and the researchers involved in this work urged more extensive research into the development of adequate and relevant measures of QOL" (1988, p. 52). This view undoubtedly led him to devise and use his own questionnaire. His instrument assumes that varied data collection leads to a richness of interpretation not now possible through the use of instruments that attempt to very narrowly focus their data collection.

Lehman's quality of life questionnaire is based on his theoretical model and therefore assesses a great many personal characteristics of the individual (social, demographic, historical), objective QOL indicators in life domains, and subjective QOL indicators in ten life domains. These variables are all assumed to potentially contribute to subjective well-being.

Table 2 summarizes several of the approaches taken to assessment of quality of life as a dependent variable by various researchers.

Table 2

Summary of Types of Measurement of Quality of Life

Type of Measure	Typical Means
1. Objective Indicators	Sampling conditions or circumstances thought likely to influence the respondent's quality of life
2. Objective indicators subjectively perceived	Determining how often family or friends are seen, recreational activities occur, etc.
3. Subjective Measures	Asking the individual's opionion about their state of well-being
A. Globally Assessed	Global well-being questions (e.g., How satisfied are you with your life?) or semantic differential questions (e.g., asking for ratings of life on dimensions of whether life is boring....interesting)
B. Domain Assessment	Satisfaction in various domains or life areas (e.g., family relations, health)

General Conclusions: QOL Assessment

Several conclusions can be drawn from this review of the literature:

1) Although quality of life is intuitively appealing as a outcome criterion in mental health interventions, it is beset by definitional and operational problems. This results in use of a number of ill-defined concepts and in a confusing array of approaches to the measurement of quality of life.

2) Two different measurement strategies are well represented in the quality of life literature, namely social or objective indicators (e.g., unemployment rates) and psychological or subjective indicators (e.g., life satisfaction). The latter approach is further divided into global and domain-specific measures of satisfaction with life, the determination of affect, and various cognitive assessments.

3) Objective or social indicators may point out circumstances that indirectly facilitate or attenuate quality of life, but individual cognition and feelings directly affect satisfaction with life and global perceptions of psychological well-being. Social variables have a statistically significant but, nevertheless, weak effect on self-reported quality of life.

4) While there is considerable overlap between global and domain-specific measures, some differences exist, and thus both measures are necessary in order not to lose information.

5) Several psychological factors have been shown to exert a significant influence on quality of life. At the affective level both positive and negative affect have been demonstrated. While these dimensions tend to be separate, there may be some bidirectional influence. Cognitive determinants of quality of life include aspirations, comparisons with others, and perception of the degree of self-control over the environment.

6) An increasing awareness of environmental demands made on the chronically mentally ill is represented in several theoretical positions that include as variables either the "fit" of the person to his or her environment as a factor influencing quality of life or the "adaptation" of the person to his/her environment.

7) The research on quality of life has been tied to specific populations, e.g., "average" Americans, blacks, unemployed people, the aging. This trend to population specificity is carried forward in the Oregon quality of life theory. This theory has been developed with the needs and limitations of the chronically mentally ill in mind (Bigelow et al., 1991; Franklin et

al., 1986; New York State Office of Mental Health, 1980).

Description: Chronically Mentally Ill Population

Definition

Attempts to define the chronically mentally ill have traditionally followed a medical model and used diagnosis as the primary criterion (Kearns, Taylor & Dear, 1987; Stein & Test, 1977; Tessler & Goldman, 1982; Toews & Barnes, 1982). However, both the validity and reliability of this criterion have been severely criticized (Stein & Test, 1977; Tessler & Goldman, 1982). This view, therefore, has been replaced by a multi-axial identification of the population that recognizes many factors as contributing to long-term psychiatric disability (e.g., signs and symptoms of illness, skill or coping level, inappropriate treatment options, and financial and/or employment disadvantage).

Three basic criteria must be met for chronicity to be established; diagnosis, duration, and disability (Bachrach, 1988; Tessler & Goldman, 1982). This approach is reflected in the definition used by the NIMH:

> The chronically mentally ill encompasses persons who suffer certain mental or emotional disorders (organic brain syndrome, schizophrenia, recurrent depressive and manic-depressive disorders, and paranoid and other psychoses, 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 (Tessler & Goldman, 1982, p. 5).

The comprehensive nature of the NIMH definition is intended to standardize entry criteria for the NIMH Community Support Program and to increase the likelihood of population homogeneity. Research attempting to define factors relevant to the chronically mentally ill should utilize this definition in sample selection to improve the likelihood of generalization of results. Its use would also decrease a bias towards only assessing those individuals with a history of hospitalization (Bachrach, 1988).

Characteristics and Functional Difficulties

A number of descriptive characteristics of the chronically mentally ill are reported by Tessler and Goldman (1982), who surveyed 18 U.S. programs. Their results are consistent with those of other researchers (Goldman, Gattozzi & Taube, 1981; Harding, Brooks, Strauss & Breir, 1987; Lamb, 1976; Lamb & Goertzel, 1977; Stein & Test, 1977) and have the advantage of being based on a large (N = 1471), geographically representative sample. It should be noted, however, their sample represents those individuals served by some of the more intensive and comprehensive programs available. Their data are excerpted and presented in tabular form.

Table 3 summarizes social-demographic, program entry, and clinical data. The percentage reported as employed (25.9%) includes those working in sheltered workshops (the employer of the majority of those listed as employed). This low percentage helps to explain the low median monthly income ($325). Most (68.9%) of those in the sample have a primary diagnosis of schizophrenia, with first psychiatric contact at age 24.

Ninety-two percent of the sample had been hospitalized at least once in a psychiatric hospital, with a mean of 4.3 hospitalizations per patient. Approximately one-quarter of the 1471 patients sampled had hospital stays of more than 10 years. About 32% lived with their families as dependents and 40% lived in their own homes.

Table 3

Characteristics of Chronic Patients Living in Community

Scope of the Sample	
Number of sites participating	18
Number of clients	
Eligible	4288
Sampled	1471
Number of participating case managers	248
Entry Information	
Referrals	
Public hospitals	34.8%
Community mental health centers	13.5%
Outpatient services	12.8%
Other human services	11.4%
Social-demographic Information	
Sex	
Males	47.0%
Females	53.0%
Marital status	
Married	14.6%
Never married	56.0%
Divorced	20.9%
High school graduates	33.0%
Employed	25.9%
Living arrangements	
Private home or apartment	40.4%
Family home or foster care	10.3%
Board and care	12.6%
Median monthly income	$325.00

Table 3 (continued)

Clinical History	
Median age at first psychiatric contact	24.0
Hospitalizations per client	
Mean	4.3
Median	3.1
Hospitalized in past five years	36.0%
Primary diagnoses	
Schizophrenia	68.9%
Depressive and affective disorders	12.1%
Other nonpsychotic disorders	6.6%
Organic brain syndrome	4.6%
Current Functioning	
Somatic difficulties	44.7%
Obesity or undernourishment	27.4%
Medication side effects	21.8%
Impaired motor control	20.4%
Heart/circulatory problems	18.1%
Victimized in violent or property crimes	
Unduplicated count in past month	2.5%
Unduplicated count in past six months	6.2%
Global ratings of functioning by case managers	
Moderate	43.2%
Severe	17.1%

Note. From The Chronically Mentally Ill: Assessing Community Support Programs by R. C. Tessler and H. H. Goldman, 1982, Cambridge, Mass.: Ballinger.

Examination of the data presented in Table 3 suggests that the sample is economically poor and has experienced frequent and/or continual hospitalization due to psychiatric disability.

Supporting the idea that those reported upon by Tessler and Goldman (1982) varied from typical chronically mentally ill patients is the former group's 36% five year re-hospitalization rate. This is approximately one-half of the expected rate (Anthony, Cohen, & Vitalo, 1978). This dramatic difference in re-hospitalization rates may be seen to result from the model program status of many of the facilities that Tessler and Goldman report upon.

Members of the group's current level of instrumental functioning, as assessed by their case managers, is reported in Table 4. Problems were encountered most often in transportation, managing money, medication compliance, preparing/obtaining meals, and securing support services. Many appear to have difficulties with those activities involving changes of routine and social interactions.

The psychiatric difficulties experienced by those sampled most frequently involved passive, withdrawn behaviour rather than active symptomatology. While they were usually controlled, thought and anxiety disorders did exist and required regular professional monitoring. Most patients did not currently have behavioral problems and only

Table 4

Degree to Which Chronically Mentally Ill Clients Independently Perform Basic Daily Living Skills While in Community

Basic Living Skill	Degree of Independence					
	Acts Independently	Needs Minor Assistance	Needs Assistance	Unable to Act Independently	Unwilling to Act Independently	N^a
Maintains personal hygiene	68.6	21.1	7.6	0.7	2.0	4185
Dresses self	89.6	7.8	2.4	0.5	0.2	4199
Is mobile/ambulatory	92.8	4.2	1.8	0.0	0.6	4155
Maintains adequate diet	55.1	25.2	11.1	5.6	3.0	4805
Prepares/obtains own meals	57.8	18.3	10.9	8.9	4.0	4175
Complies medication	45.1	28.0	14.5	6.9	5.5	3688
Performs household chores	58.5	21.9	8.4	5.7	5.5	3452
Goes shopping	60.4	19.8	9.6	7.0	3.2	3838
Uses available transportation						
On familiar routes	69.5	9.2	4.6	12.6	4.0	3905
On unfamiliar routes	47.5	21.0	9.9	15.9	5.9	3649
Manages available funds	48.4	24.0	14.1	11.9	1.6	4015
Is able to verbalize needs	51.4	23.5	19.4	4.2	1.5	4169
Secures necessary support services	37.6	31.5	17.4	9.3	4.1	4054

Note. From *The Chronically Mentally Ill: Assessing Community Support Programs* by R. C. Tessler and H. H. Goldman, 1982, Cambridge, Mass.: Ballinger. Data (except for *N*s) are percentages of clients (as rated by case managers).

[a] Excludes does not apply, don't know, and no answer.

in three categories were more than 20% of the sample rated as experiencing difficulty: causing complaints from the household by engaging in bizarre behaviour, having trouble at work or school, and abuse of alcohol or drugs.

Table 5 summarizes the types and amounts of social activities by patients as reported by Tessler and Goldman (1982). Almost 49% never engaged in recreational activities alone outside their residence, and 26% never engaged in recreational activities with others outside their residence. Sixty-eight percent said they never attend community meetings and 17% reported they do not participate in any scheduled daytime activity.

Hull, Keats, and Thompson (1984) studied a sample of Manitoba's deinstitutionalized population, with results similar to those reported by Tessler and Goldman (1982).

Taken as a whole, these studies confirm the economic dependency, social isolation, deficits in self-maintenance skills, and poor community re-integration abilities that characterize the chronically mentally ill. It seems clear most lead lonely lives with few friends and little work or recreational activity.

Advantages of QOL Measures for Chronically Mentally Ill

There are a number of advantages to employment of quality of life measures with a group as disadvantaged as

Table 5

Frequency of Chronically Mentally Ill Clients Participation in Social Activities in Community

Social Activity	Frequency					N[a]
	Never	Once per Week	2-3 Days/ Week	4-5 Days/ Week	6-7 Days/ Week	
Socializes with family	19.9	45.5	10.2	5.2	18.8	3536
Socializes with friends	11.7	30.2	22.4	12.3	23.5	3590
Engages in any scheduled daytime activity	16.9	23.5	19.5	28.6	11.5	3683
Engages in recreational activities at home other than TV or radio	25.6	37.0	20.1	8.0	9.2	3303
Engages alone outside of home in recreational activity (e.g., movies)	48.7	34.6	10.8	2.6	3.4	3293
Engages with others outside of home in recreational activities	26.1	45.7	20.3	4.9	3.0	3511
Attends clubs, lodges, or other meetings	67.9	21.6	6.7	2.7	1.1	3227
Goes to church or other religious services	54.2	40.6	4.1	0.2	0.9	2806

Note. From *The Chronically Mentally Ill: Assessing Community Support Programs* by R. C. Tessler and H. H. Goldman, 1982, Cambridge, Mass.: Ballinger. Data (except for *N*s) given as percentages of clients participating in various activities.

[a] Excludes does not apply, don't know, and no answer.

the chronically mentally ill. Baker and Intagliata (1982); Franklin et al. (1986); Goldman et al. (1990); Lehman (1988); Lehman (1983a); Lehman and Linn (1984); Lehman, Possidente, and Hawker (1986); Lehman et al. (1982); and Tessler and Goldman (1982) have commented upon the importance of quality of life measures for the chronically mentally ill:

1) Chronic mental patients rarely achieve normal functioning. Instead, they require long-term follow-up to improve their coping and survival skills. Using quality of life measures places less emphasis on a cure and more emphasis on interventions to improve the patient's life.
2) Chronic patients require complex programs to help them stay in the community and achieve some measure of community reintegration. These programs require a multi-dimensional variable such as quality of life to assess not just discrete outcomes (e.g., days of hospitalization), but also the "synergistic interaction of a number of smaller, less powerful outcome variables" (Baker and Intagliata, 1982, p. 70).
3) There appears to be a movement away from a narrow, fragmented definition of health as the absence of illness and toward a more holistic view that is captured by the concept of quality of life.

4) Quality of life can be a relatively objective measure of the individual's adjustment when that adjustment is heavily influenced by the interaction of patient abilities and environmental opportunities. Franklin et al. (1986) have noted that clinicians must discover which factors contribute most to the chronically mentally ill's quality of life. Clinicians must then choose their interventions strategically, given their knowledge of what factors are most amenable to change.

5) Data gathered over the past twenty years has demonstrated the need for a direct measure of the effectiveness of mental health interventions with the chronically mentally ill, who are at high risk of social isolation and exploitation within the community (Lamb & Goertzel, 1971; Test & Stein, 1976; Toews & Barnes, 1982), as well as being at high risk of re-hospitalization (Anthony et al., 1978; Paul & Lentz, 1977; Test & Stein, 1976).

6) Publicly-funded programs have to prove their efficacy both to their funders and to the public. A measure of quality of life applied to the chronically mentally ill living in community could document face-valid improvement and, thereby, justify expensive but needed treatment programs.

Re-hospitalization rates have been a traditional measure of program effectiveness, but are influenced by factors other than those directly associated with a specific intervention: hospital admission and discharge policies, differences in definitions of admission and discharge, availability of alternative resources, and wishes of the patient's family (Anthony et al., 1978; Erickson, 1975). Therefore, a more direct indication of program effectiveness (than re-hospitalization rates alone) is needed. Measurement of the chronic patient's quality of life would be useful in determining whether community-based treatment results in tangible benefits to those exposed to community-based interventions (Bigelow et al., 1991).

Quality of Life Studies: Chronically Mentally Ill

Reflective of Fabian's (1990) comments regarding the approaches taken by investigators, it should be noted that theoretical tests of the various theories are limited at this time to explorations of whether certain variables seem to be related to quality of life. I could find no studies that tested specific theoretical positions as regards the prediction of quality of life of the chronically mentally ill. There are a greater number of studies now appearing that assess quality of life as an outcome measure.

Thapa and Rowland (1989) assessed the quality of life in nine life domains (living arrangements, family and social relations, leisure, work, law and safety, health, finances, religion, sense of hope and purpose) of 31 chronic mental patients living in community placements. Patients were asked to indicate the degree to which each domain contributed to the overall satisfaction and happiness they experienced. Caregivers and patients were asked to indicate the three most and three least important contributors to patient's experience of satisfaction and happiness.

Statistically significant differences (with patient's ratings higher than staff's) between patient's and staff's ratings were found in the areas of leisure, law and safety, and health. Patients emphasized good physical health and the physical living situation as important contributors to quality of life while staff emphasized emotional well-being as crucial to a satisfactory quality of life. For both groups, family and social relations were significant contributors to achieving well-being, and great importance was placed on experiential factors (Thapa & Rowland, 1989).

Several studies have fairly recently used quality of life as an outcome indicator and also explored the impact of psychopathology on the measures of quality of life used. Meltzer et al. (1990) administered clozapine, an antipsychotic medication, to treat "treatment-resistant" schizophrenic patients. Subjective measures of quality of life were obtained in areas regarding intrapsychic functioning; interpersonal relations; instrumental role functioning; and, ability to use common objects and activities. The authors reported that psychopathology had a moderate effect on the quality of life ratings and also found quality of life to have improved significantly six months after beginning of treatment.

Pinkney, Gerber and Lafave (1991) interviewed 55 persons discharged a year earlier from Brockville Psychiatric Hospital. A quality of life scale similar to Lehman's scales was used to assess satisfaction with life. Unlike results of U.S. studies, only three people in their sample were dissatisfied with their housing. Informants reported that all those in the sample had made an excellent or fair adjustment to their place of residence. More help was reported as needed by the clients in the areas of interpersonal skills and employment. Homelessness and crime were not problems in their sample of discharged patients.

Simpson et al. (1989) also used Lehman's scales to assess quality of life (psychopathology was also assessed) of three groups of chronically mentally ill individuals: 11 in an acute ward; 10 residents in a hostel ward; and 13 out of 19 from a group home. They found quality of life to be better in group homes, with higher levels of general well-being, subjective satisfaction with living situation and total social contact, better finances and greater comfort. Psychopathology impacted ratings of subjective health, social relations, as well as social contacts outside of the facility for those who were most ill. Other effects of psychopathology were very limited.

Bigelow et al. (1991) as well as Johnson (1991) have used quality of life measures as a means of addressing the systemic effectiveness of the mental health system in Oregon and Sweden/United States, respectively. Bigelow et al. (1991) compared quality of life ratings for those in an intensive community-based program as opposed to those served by the traditional system. Several domains demonstrated statistically significant differences in favor of the experimental program but in 6 of the 15 domains assessed there were no statistically significant differences.

Several additional studies of quality of life of the chronically mentally ill have: a) sought information as to whether the chronically mentally ill can reliably and validly report their quality of life by means of responding to subjective well-being questions; b) attempted to determine whether objective conditions (levels of education, place of residence, etc.) influence more or less (than with other populations) the ratings of quality of life of members of this population; and, c) whether affective and cognitive factors previously associated with quality of life for normal populations have the same importance for the chronically mentally ill.

Segal and Aviram

This early (1978) study investigated the quality of life, as defined by external and internal (to the facility) social integration, of nearly 500 chronic patients living in community-based sheltered care in California. Sheltered care facilities consisted of family care homes, halfway houses, and board and care facilities. Both patients and facility operators were interviewed in depth. External integration was measured using a 44-item scale assessing the degree to which a chronically mentally ill person: is present in the community; has access to places, services, and social contacts; participates in social activities; engages in income-producing work; and controls his or her consumption of goods and services. Internal integration was measured by a 28-item scale assessing the degree to which the person participates responsibly in the sheltered care facility and is helped to be more independent by the operator.

Segal and Aviram (1978) assessed residents' social-demographic characteristics and psychopathology, community reactions towards residents, and residents' life satisfaction as possible influences on residents' social integration. In turn, social integration was viewed as an important determinant of residents' satisfaction with their living situation. This research then assumed social integration to be both causative of satisfaction with living situation, and as well an index of quality of life.

Segal and Aviram (1978) reported that psychopathology was not a major constraint on the social integration of most residents. It was an overwhelming constraint for only a very small percentage (8%) who were too anxious or agitated to interview. Residents with lesser but still significant pathology had more difficulty with external integration than with internal integration. Higher levels of pathology most adversely affected access to and participation in friendships, but this same result did not occur regarding family relationships.

The relationship between satisfaction with living environment and social integration was also investigated. Segal and Aviram (1978) found that residents' satisfaction with their living environment was positively associated with social integration. The question then addressed was whether psychopathology was associated with resident's assessment of their living environment. This proved to be the case. The higher the level of psychological disturbance and the lower the feelings of obligation to the operator, the more negative the evaluation of the facility. However, the direction of causation is unclear from this research.

Other findings important for the present research emerged from the Segal and Aviram (1978) study:

1) Social integration is complex, with several variables contributing to its ultimate expression (e.g., community receptivity to the resident, attitude of the operator of the facility, and resident characteristics such as psychopathology). Therefore, the use of social integration as a dependent variable to be equated with quality of life is fraught with difficulties.
2) The responses of residents to the issue of whether and why they liked their residences were logical and face valid. This supports a positive conclusion regarding the ability of the chronically mentally ill to provide valid and reliable estimates of their quality of life.
3) Residents' psychopathology varied in its impact in two ways. Some residents were too anxious or agitated to participate in the research program. Those with lesser but still significant amounts of psychopathology were less likely to have friends outside of the residence.

Other Residence Studies

Baker and Douglas (1990) report on the relation of housing characteristics to the functioning level of the chronically mentally ill and their quality of life. This was one aspect of a larger evaluation program examining the relationships between quality and appropriateness of clients' housing and adjustment of severely mentally ill clients living in community (Baker, 1984).

Case managers provided data on two occasions, separated by nine months, regarding some 729 clients. The case managers provided information about housing and their clients' quality of life. The information collected included quality of life ratings in 15 domains (using the "Satisfaction with Life Domains Scale"), maladaptive behaviours, global level of functioning, and degree of participation in a variety of available support services.

Residence information included the type of setting, the people with whom the client shared the residence, and three ratings of the residence environment by the case manager: physical condition, adequacy for basic life activities, and appropriateness for the client's particular needs.

Living in a poor residence was associated with a greater number of unmet service needs. Even when this was controlled, however, poor housing was related to a likely poor outcome as regards maladaptive behaviours. Movement from appropriate to inappropriate housing caused a deterioration in quality of life as well as deterioration in global functioning. Staying in appropriate housing was related to improvement over time in overall functioning but it appeared that physical adequacy of the residence was related specifically to the number of maladaptive behaviours reported by case managers, and not to global functioning, community participation or quality of life.

The appropriateness of the residence for the particular client was significantly related to patients' quality of life as measured by the domain-specific ratings. Post-hoc analyses indicated that clients moving from appropriate to inappropriate residential settings showed significant deterioration in their perceived quality of life.

Lehman's Research

Lehman et al. (1982) investigated the quality of life of 278 chronically mentally ill individuals living in large board and care facilities (over 30 beds) in Los Angeles. They asked members of their sample about matters thought likely to influence their quality of life (e.g., frequency of visits with family or friends, income, family background). They assessed the residents' global (overall) sense of well-being in two ways, and, as well, their quality of life in eight domains: living situation, family relations, social relations, leisure activities, work, finances, personal safety, and health (Table 6).

All of the global satisfaction questions and nearly all of the domain-specific satisfaction questions were rated on a seven-point "delighted-terrible" scale patterned after scales used by Andrews and Withey (1976) with a non-disabled population. The scale takes the form of a ladder on which the respondent places a point representing his or her point of view (see General Information Questionnaire, Appendix A).

Table 6

Correlations of Domain-Specific Measures of Quality of Life with Global Measures

Domain-specific Measures	**Global Measures**		
	Measure 1[a]	Measure 2[b]	Measure 3[c]
Living situation	.45***	.39***	.48***
Family	.37***	.29**	.33***
Social	.58***	.50***	.49***
Leisure	.59***	.55***	.56***
Finances	.40***	.41***	.45***
Law-safety	.42***	.44***	.38***
Work (N=42)	.17	.24	.24
Unemployment (N=231)	.33**	.29*	.27*
Health	.66***	.55***	.43***

Note. From "The well-being of chronic mental patients: Assessing their quality of life" by A. F. Lehman, 1983, *Archives of General Psychiatry*, *41*. Unless otherwise indicated, *N*=278.

[a] A delighted-terrible scale question: "How do you feel about your life in general?"

[b] A scale of positive well-being consisting of items such as "During the past month, how much of the time have you felt that the future looks hopeful and promising?"

[c] Semantic differential responses to such statements as, "I think my life is interesting...... boring."

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

The internal consistency coefficients of the eight domain-specific scales were between .74 and .87, usually considered adequate for group comparisons. Domain-specific quality of life was strongly correlated with global well-being, measured by means of "delighted-terrible" questions, semantic differential statements, and a positive well-being scale. Highly significant ($p<.001$) correlations were found between global well-being and the domains of health, leisure, safety, social relations, finances, and living situation. The only domain-specific ratings that were not significantly correlated with global well-being were those in the work area, which had a small sample size ($n = 42$).

Lehman's position regarding the determinants of quality of life is represented in his early research. Lehman et al. (1982) assessed an array of variables for their impact on quality of life: social-demographic characteristics (age, sex, educational level); psychiatric condition (length and number of hospitalizations, symptomatology, medications); and participation in activities thought likely to be related to domain-specific quality of life (e.g., the number and recency of family contacts as related to satisfaction with family). Thus the relationship between objective measures of resident participation in domain-specific activities and subjective estimates of global quality of life was assessed by correlating activities categorized as representative of a domain (e.g., satisfaction with family correlated with the number of contacts with family members in a certain period of time) with quality of life or satisfaction rating in that particular domain.

A number of objective measures were significantly correlated with global quality of life (Table 7). However, the absolute values were low except in the work domain, which had a small sample size ($\underline{n} = 43$). The indicators most consistently related to greater global satisfaction were lower use of health care services, not having been a victim of crime in the past twelve months, more frequent and intimate social contacts in the home, being employed, and having more privacy in the home (Lehman et al., 1982). Each of these indicators accounted for only one to seven percent of the variance in global well-being, a finding consistent with research concerning the general population.

Lehman et al. (1982) also found that social-demographic variables (e.g., age, sex, and place of residence) were not strongly related to ratings of quality of life. Several correlations were statistically significant but were modest and accounted for only a small proportion of variance. This conclusion then is the same as that reached regarding social-demographic variables influence on the quality of life of other populations - there is some but it is modest.

Table 7

Correlations of Objective QOL Indicators with Three Global Well-Being Measures

Domain	Objective Indicator of QOL	Global Well-Being Measures		
		1[a]	2[b]	3[c]
Living situation	Security	.12*	-.01	.07
	Privacy	.08	.11*	.12*
	Autonomy	.08	-.09	.01
Family	Frequency of contacts	-.09	-.05	-.09
Social relations	Total contacts	.16*	.18*	.13*
	Contacts in home	.14*	.22**	.13*
	Contacts outside home	-.02	-.05	-.04
	Intimacy of contacts	.16*	.16*	.12*
Leisure	Number leisure activities[d]	.05	-.01	-.03
Work	Number of hours weekly	.47***	.30*	.47***
	Weekly pay	.37**	.20	.34**
Law-safety	Criminal activities	-.05	.00	.00
	Victim of crime[e]	-.27***	-.21**	-.18*
	Access to legal services	.18*	.06	.14*
Finances	Monthly spending money	-.09	.01	.02
Health	Number of illnesses[e]	-.11*	-.04	-.08
	Total use of health care	-.21**	-.19**	-.18*
	In psychotherapy	-.18*	-.17*	-.21**
	Use/acute psych. services	-.15*	-.18*	-.08
	Use/general med. services	-.14*	-.11*	-.10
	Access to medical services	.17*	.07	.10

Table 7 (continued)

Note. From "Chronic mental patients: The quality of life issue" by A. F. Lehman, N. C. Ward and L. S. Linn, 1982, American Journal of Psychiatry, 139.

[a] A delighted-terrible quality of life scale. [b] A positive well-being quality of life scale. [c] A semantic differential quality of life scale. [d] Activities during past week. [e] Activities during past year.

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

Another issue relevant to the reliability of chronically mentally ill quality of life ratings is the degree to which psychopathology influences such ratings.

Lehman (1983b) describes the use of three standardized scales of psychopathology to assess anxiety, depression, and self-control (Ware, Johnston, Davies, & Avery, 1979). Lehman's results point to the existence of two overlapping ($\underline{r}$ = .51) but still separate constructs; global quality of life and general mental health. A summed scale score was computed for each construct. The internal consistency of these scales was .85 and .77, respectively, with a difference score reliability of .61. The domain-specific, subjective quality of life indicators were more distinct from psychopathology than were the global quality of life indicators.

The effect of psychopathology on the multivariate prediction of global quality of life was determined by comparing two regression analyses, one with psychopathology removed from the equation and the other with psychopathology included in the equation. A slight decrease in the variance accounted for by the predictor variables after removing psychopathology was not statistically significant for any quality of life variable other than those that were health-related (Lehman, 1983b). Removing psychopathology resulted in a significant diminution of the relationship between general quality of life and both total medical care used in the past year ($p<.05$) and health satisfaction ($p<.01$). In other words, those who were being treated for their psychiatric condition demonstrated increased use of medical care and decreased satisfaction with their health.

Table 8 offers comparisons of ratings of quality of life by the chronically mentally ill with ratings made by average Americans and other subgroupings. The chronically mentally ill are significantly less satisfied than the general population in all areas except leisure activities, job (for those who were employed), and health care. Differences between the chronically mentally ill and disadvantaged subgroups (from the same sample) are less pronounced, however. The chronically mentally ill are less satisfied with their lives in several areas than either Blacks or low socioeconomic status people. However, differences with unmarried parents are minimal (Lehman et al., 1982).

The similarities of results reported by the chronically mentally ill and ratings made by other populations appear to support the contention the chronically mentally ill can reliably rate their quality of life. Factor analysis of domain-specific satisfaction ratings also suggested that the chronically mentally ill reliably differentiate domains (Lehman et al., 1982). These data suggest that reliable

Table 8

Life Satisfaction Ratings of Chronic Mental Patients and a National Sample of Americans

Domain	**Groups Surveyed**				
	Chronic Patients (N=278)	Total (N=1,279)	Low SES People (N=122)	Blacks (N=106)	Unmarried Parent (N=55)
Living situation	4.5	5.3**	—	4.5	4.7
Family relations	4.7	5.8**	5.9**	6.4**	4.3
Social relations	4.8	5.5**	5.5**	5.5**	5.5**
Leisure activities	4.9	4.7	—	—	4.8
Job^{a}	5.3	5.3	5.5	5.4	5.5
Finances	3.9	4.8**	4.4**	4.9**	4.2
Personal safety	4.1	5.2**	—	4.6*	4.8*
Health					
Personal	4.6	5.3**	4.8	4.7	5.1
Health care	5.2	5.1	—	—	—
Life in general	4.4	5.4**	5.1*	4.8	5.0*

Note. From "Chronic mental patients: The quality of life issue" by A. F. Lehman, N. C. Ward and L. S. Linn, 1982, American Journal of Psychiatry, 139. Ratings on a scale from 1 (terrible) to 7 (delighted).

[a] Employed chronic patients only (n=42).

* Different ($p<.05$) from chronic patient mean in that domain. ** Different ($p<.001$) from chronic patient mean in that domain.

quality of life ratings can be obtained from the chronically mentally ill in both global and domain-specific realms.

Lehman et al. (1982) warned their results must be generalized with extreme caution because of their sample's specific characteristics. The residents of large board and care homes may not be representative of other chronically mentally ill persons. This concern decreases, however, as more research is published (Baker & Intagliata, 1982; Bigelow et al., 1991; Franklin et al., 1986) that seems to replicate many of Lehman's findings.

Franklin's Research

Franklin et al. (1986) studied 417 chronic mental patients who were assigned to either an intensive case management condition or a typical service condition. The investigators assessed objective indicators of type of housing, living arrangements, employment status, leisure activities, individual monthly income, and number of friends. Subjective estimators of quality of life were also obtained from each patient for each of six domains. In addition, measures of self-esteem (Rosenberg, 1965) and affect balance (Bradburn, 1969) were collected as indicators of global well-being.

Statistically significant but weak relationships were shown only between objective indicators in the domains of friends and income and the subjective estimations of quality of life in those same domains (Franklin et al., 1986). Additional significant relationships were found only (a) between type of residential situation and number of friends (objective indicators) and self-esteem, and (b) between amount of leisure activity (objective indicator) and positive affect. These results are supportive of Lehman et al.'s (1982) conclusion that objective indicators have a weak effect on subjective perceptions of the quality of life of chronic mental patients.

Two-way analysis of variance was used by Franklin et al. (1986) to determine the relative contribution of subjective and objective factors to patient's adaptation. The adjusted beta weights for the subjective measures were higher than those for the objective measures. In fact, objective indicators were largely unrelated to adaptation. However, discriminant analysis indicated that subjective satisfaction and adaptation were far from perfectly related. Approximately one-quarter of the sample could not be correctly classified in terms of adaptation, based on their satisfaction scores.

Bigelow's Research

Bigelow and his various colleagues have taken a systemic perspective regarding the definition, measurement and utilization of the construct of quality of life as applied to the chronically mentally ill living in community.

Bigelow et al. (1991) report data, collected at 24 mental health agencies over several years, intended to help assess the validity of the Oregon Quality of Life Questionnaire.

Bigelow et al. (1990) describe the development of an alternative to the Oregon Quality of Life Questionnaire. They note difficulties in data collection when using scales such as the Oregon Quality of Life Questionnaire or Lehman's (1983a) quality of life questionnaire because of the choices offered to chronic patients and the patients' difficulties in making those choices.

Bigelow et al. (1990) adopted and simplified a domain-specific approach to the assessment of quality of life. The domains they assessed were housing, self and home maintenance, finances, employment, psychiatric medications, physical health, the meaningful use of time, psychological distress, psychological well-being, and interpersonal functioning. Satisfaction of need and performance were also assessed within each domain. The sample size of six patients was extremely small but they conclude, on the basis of statistical analyses of interrater reliability, that their interview is suitable for evaluation of mental health programs.

Bigelow et al. (1991) used this revised questionnaire with a larger sample of chronically mentally ill patients to determine whether more intensively served former patients (N

= 15) had a better level of satisfaction than former patients (N = 7) served by more traditional (and less intensive) means of after-care service after discharge from hospitals. In addition to quality of life information, data was collected from the patient's caregivers and other collateral sources.

Bigelow et al. (1991) report results indicating subtle as well as more stark differences between the two groups. For example, there were no differences in medication compliance between the two groups but only 3 of 15 patients in the intense treatment program did not realize they needed medications (to function in community) while half of the traditionally served group thought they did not (really) require medications for community tenure.

Bigelow et al. (1991) believe some of the differences between the groups were partly the result of differences between the service systems. Housing, for example, was better for those in the intensive system and these patients reported they were more satisfied with their housing than those in the traditional system. Similarly those in the experimental group had better interpersonal relations but reported no greater amount of comfort in dealing with others. The intensively served group also had significantly more meaningful use of time but this was probably a result of a great deal more structure to their social activities.

They encouragingly conclude: "Clients receiving intensive community services are more stable, take their medications, and are engaged in more activities. Of great importance, those clients have a better sense of being looked after and having someone who cares about them" (Bigelow et al., 1991, p. 132).

Bigelow et al. (1991) also offer encouragement regarding the likely validity and reliability of the quality of life assessment with the chronically mentally ill in community. They report that patients own retrospective reports of improvement due to treatment were correlated with pre-post measures (provided by clinicians) of that improvement and with measures of life satisfaction. Patient satisfaction did not correlate with perceived improvement, so the judgements that patients are making about improvement would seem to be specific to treatment and not the result of a global well-being attitude. They conclude that less expensive means of measuring treatment effectiveness (client retrospective reports) may be expected to yield discriminating results as compared with multiple measures of success.

Conclusions

1) Domain-specific satisfaction ratings are more highly correlated with global ratings of satisfaction than are objective indicators. Both satisfaction measures are

assessing the same subjective opinion but in differing ways.

2) Lehman et al. (1982) showed that participants' subjective estimate of their quality of life concurred with objective indicators in six of the eight areas assessed. Objective measures in several domains (privacy in living arrangements, contacts with family/friends, employment and/or rehabilitative programming intended to lead to employment, personal safety, and availability of medical care) were significantly related to quality of life. However, the correlations were modest at best.

Data reported by Segal and Aviram (1978) as well as Baker and Douglas (1990) suggest housing is a critical factor for the shorter term satisfaction with life reported by the chronically mentally ill.

3) The chronically mentally ill can validly answer quality of life questions that are both domain-specific and global in nature. Moreover, their psychopathology seems to have a major impact on ratings of quality of life primarily in the health domain but does also affect their ability and willingness to interact with non-family members outside of their residence.

4) Baker and Intagliata (1982), as well as Lehman et al., (1982), showed that there is some commonality between

global and domain-specific subjective indicators, but that both ought to be included as indicators of quality of life.

The Oregon Theory as Applied to Chronic Patients

The chronically mentally ill will, by definition, experience psychopathology that incapacitates them as regards competitive employment, their ability to access needed resources (for health care, advocacy, etc.) and impacts on their ability to successfully fulfil expected role functions (parental, spousal, worker). These deficits are compounded by their lack of influence on, or ability to deal with, the bureaucratic organizations that mediate indirect access to resources. Any theory that seeks to organize the variables postulated to determine the quality of life of the chronically mentally ill must take into account these special conditions and limitations. The Oregon theory appears to offer provision for including individual characteristics (type and degree of psychopathology, amount of personal initiative, etc.) within its framework.

The chronically mentally ill tend to directly satisfy their needs less often than non-disabled people and, again, the Oregon theory would seem to make provision for that possible factor within it. They are usually poor, unemployed, and seen by themselves and others as requiring assistance in order to survive in the community. Thus, they are dependent upon their performance within certain roles, as judged by caregivers, to gain access to housing, food, personal spending money, and the like.

For example, protected residential care is provided to the chronically mentally ill contingent upon their participation in organized treatment programs requiring specific behaviours (e.g., participation in a program intended to teach work or leisure skills). Relatively few housing alternatives exist that are safe, non-exploiting, and financially feasible for the chronically mentally ill. Therefore, housing can be problematic for the individual not wishing to participate in the service system and abide by its expectations. Groceries, on the other hand, are more directly accessible than housing, although the chronically mentally ill still must engage in role-governed behaviours in order to acquire the necessary funds. Thus any theory intended to predict the variables influencing quality of life must take into account the variety of opportunities provided to the consumer of the service system.

The special difficulties encountered by the chronically mentally ill in obtaining housing and groceries demonstrate that several factors interact to influence their quality of life. The availability of alternative means for obtaining resources, the abilities and motivation of a patient being asked to meet the service system's expectations, and requirements for successful role performance must all be considered as determinants of the quality of life of the chronically mentally ill.

The Oregon theory predicts that chronically mentally ill individuals who experience stress or concentration difficulties will have problems with performing as expected in specific roles (worker, patient, etc.). Further, to the degree they do not perform adequately, there are likely, according to the theory, to be difficulties in accessing resources required for needs satisfaction, and needs satisfaction is one of the bases, according to the theory, for quality of life.

From a systemic standpoint, a performance requirement likely to cause difficulty involves an assumption by caregivers that the chronically mentally ill share caregivers' perceptions of needs. Thus, due to their dependence on caregivers, chronic patients must be concerned with both self-defined needs and the expectations of mental health professionals. These may not always be congruent. For example, a need to increase social relationships outside of residential facilities was identified in one study as important by caregivers but not by residents (Lehman et al., 1982). Similarly, re-integration into the mainstream of society is often not judged to be a crucial need by patients

(Segal & Aviram, 1978), but is an important goal in community mental health ideology (Borus, 1978).

There may be differences between caregivers' and patients' perspectives about the definition, relevancy, or primacy of needs. Caregivers control resources needed by patients and, thus, determine the access requirements for those resources. Disagreements between caregivers and patients may mean that access to needed resources is blocked or, at least, not facilitated.

The next section presents the hypotheses examined to test the validity of the Oregon quality of life theory.

Hypotheses

The hypotheses listed below are derived from the Oregon quality of life theory.

Hypothesis 1

The greater the satisfaction reported by patients with their opportunities to meet self-identified needs, the higher will be their self-reported quality of life.

Hypothesis 2

The greater the difference between patients and caregivers in perception of patients' needs, the lower will be patients' self-reported quality of life.

Hypothesis 3

The greater the extent to which patients perceive that their needs are met contingent upon their performance, the higher will be patients' self-reported quality of life.

Hypothesis 4

The more positive their self-reported affect balance, the higher will be patients' self-reported satisfaction with their performance.

Hypothesis 5

The greater their ability to meet performance requirements in terms of stress and concentration, the greater will be patients' self-reported satisfaction with their performance.

Hypothesis 6

More positive affect balance and greater ability to meet performance requirements in terms of stress and concentration will interact to produce greater self-reported satisfaction with performance by patients than any of the variables alone.

Hypothesis 7

The higher the self-reported satisfaction with performance by patients, the higher will be their self-reported quality of life.

METHOD

Participants

Two groups of participants were sampled, namely chronically mentally ill patients and their professional mental health caregivers. A list of agencies and professionals working with the chronically mentally ill in Alberta was generated from information received by, or already known to the investigator[1]. A personalized letter (Appendix B) explaining the purposes of the study and the potential usefulness of the results was sent to senior administrators of programs or facilities providing services to the chronically mentally ill. The letter also included information regarding the study's procedures and time requirements, as well as a description of the background of the investigator. This was followed by telephone contact for the purpose of arranging a meeting with the administrator to ask for his or her co-operation. The same procedure was used for communicating with professionals working independently of agencies (i.e., private practitioners).

<u>Caregivers</u>

Caregivers were recruited from eight Alberta Mental

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[1] The investigator had been working within the mental health system on policy development regarding housing for the community-based chronically mentally ill and was, therefore, well acquainted with many of the service providers.

Health Services offices in the cities of Calgary, Edmonton, Red Deer, Camrose and Ponoka. Alberta Mental Health Services is the Government of Alberta service responsible for the community-based care of the chronically mentally ill. Caregivers were also recruited from Calgary General Hospital, which serves a large number of chronically mentally ill individuals in that city. These organizations care for the vast majority (no statistics available) of chronically mentally ill people eligible for inclusion in this study. This is estimated to be the case due to the fact that the chronically mentally ill require specialized services (medications, resources) and that other service organizations are not mandated to provide these services.

To be eligible for the study, a caregiver had to be designated by the mental health system as the primary caregiver for the identified patient. He or she also had to be knowledgeable (self-described) about the patient's treatment program. In recognition of possible caregiver bias, either personal or professional, a minimum number of 15 caregivers from widely separated geographic areas and work environments were sought as participants.

The great majority of the client's workers were registered psychiatric nurses (12 of 16) with three other caregivers listing themselves as social workers (3 B.S.W.'s with 1 also having been trained as a psychiatric nurse) and one caregiver a psychiatrist. The preponderance of medically trained personnel is not surprising given the frequency of medication issues and needs by the chronically mentally ill. It is possible that some biases were introduced by the caregivers' professional preparations. No attempt was made in this research to determine if such biases existed.

Contact was made with each caregiver of a potential patient in the study. In addition to clarifying any questions about the study, the contact was intended to assist in the screening of patients regarding inclusion criteria.

Patients

Patients came from Calgary, Edmonton, Camrose, Ponoka and the Red Deer area. Each geographic area has different programs and facilities (e.g., group homes, re-socialization programs, acute care hospitals). Therefore, an attempt was made to obtain 50 patients each from Calgary and Edmonton (both larger centers and about the same size), and 25 patients (in all) from Red Deer and the smaller centers of Camrose and Ponoka.

A crucial aspect of the present study involved three patient inclusion criteria, drawn from the National Institutes of Mental Health definition previously presented.

1) The patient must have been diagnosed within the past

two to five years as suffering from schizophrenia, recurrent depressive or manic-depressive disorders, paranoia, or other psychoses that had become chronic.

2) As estimated by the caregiver, the patient must have had serious difficulties in functioning (either due to erosion or prevention of skill development) over a period of at least two years. Further, the difficulties must have involved at least three of the following areas: personal hygiene or self-care, self-direction, social transactions, interpersonal relations, economic self-sufficiency, learning, and recreation.

3) The patient must have received institutional and/or supervised community care (at least one visit per month between caregiver and patient) for at least two years consecutively. To be eligible for inclusion in the study a patient had to be receiving services from: a hospital-based (e.g., Calgary General Hospital), or community service (e.g., Alberta Mental Health Services) intended to provide supervision to individuals formally admitted to the program but still living either independently or assisted by others in the community. Patients in the two provincial mental hospitals, residents in general or psychiatric hospital beds or in other institutions (e.g. as nursing homes)

were not eligible for inclusion in this sample.

Procedure

Caregivers

Caregivers were recruited through either direct contact (as with private practice psychiatrists) or through agency administrators who received letters inviting participation in the project. Meetings with caregivers were held in eight facilities located in Alberta.

The purpose of the study, the information to be obtained, and the time required of the caregiver were explained by the investigator using the following script:

> This study explores the determinants of quality of life for the chronically mentally ill living in community. Methodological issues require the use of several measures of quality of life. In addition, several kinds of information are needed in order to test the hypotheses of the study. The information being sought regarding each patient includes:
>
> 1. Your perspective on the importance of specific need areas for him or her.
> 2. A brief clinical history.
> 3. A measure of role functioning.
> 4. Measures of needs satisfaction.
> 5. A measure of psychopathology.
> 6. A measure of positive and negative affect balance.
> 7. An estimation by each patient of the degree to which stress or concentration difficulties interfere with his or her performance.
> 8. Several measures of quality of life as estimated by each patient.
> 9. Social-demographic data.
>
> Most of the required information will be collected from each patient and will be kept confidential. If you wish it and the patient consents, information will be released to you. A summary of

> our findings will be sent unless you specifically wish us not to.
> I would like to go over the criteria being used to determine whether or not a patient should be in the sample, so that you can determine which of your patients meet the criteria.

The caregiver identified potential participants and provided the information necessary to assess which ones met the inclusion criteria. The caregiver also completed a consent form (Appendix C) for his or her participation in the study. Only this documentation was seen by the investigator prior to interviewing the patient.

After completion of screening to assure participant eligibility, an appointment was made with each patient and his or her caregiver. The purposes of the appointment were (a) to explain the study to the patient, (b) to obtain his or her consent to participate, and (c) to collect patient data through a structured interview. The caregiver was asked to appear briefly at the interview, introduce the investigator to the patient, and then leave.

After the investigator interviewed the patient, the caregiver rated the importance of the patient's various needs and completed measures of patient psychopathology and role functioning.

Patients

The patient was welcomed by the investigator. The purpose of the study was explained using the following script:

> There are many people who require help of certain kinds so that they may continue to live in the community. We believe that people's satisfaction with the services they are getting is related to how happy and satisfied they are with their lives. It would be helpful if we could find out more about what makes people happy and unhappy. This research is attempting to help determine the relationship between the areas of their lives with which people wish to have some help and the services they receive.
>
> I'd like to ask you a lot of short questions about how happy you are, the areas of your life you are concerned about, and the services you are currently receiving. While there are lots of questions, they won't take long to answer and I'll be here to help if you have any trouble.
>
> There aren't any right or wrong answers because the questions are about what you think. All of the answers are confidential and won't be discussed with anyone outside of the research project without your permission. I don't have any connection to (caregiver's name) and won't be talking to him or her unless you want me to. I'd appreciate your best effort at telling me about your opinions. Do you have any questions?

Social-demographic and identifying data previously collected from the caregiver during the screening process were confirmed. The patient's consent to participate (Appendix D) was obtained. The interview, lasting approximately 60 to 75 minutes, was then conducted.

Each patient was asked to grant permission for information about his or her needs and quality of life to be shared with their caregiver; over two-thirds (67.3%) granted permission. The patient's decision about sharing of information had no bearing on whether he or she was included in the study. The patient's decision was communicated to the caregiver and, if consent had been granted, information was shared regarding the results of the interview.

An attempt was made by the interviewer to be sensitive to the issue of "pressure" felt by the patient to reveal information to his/her worker. It is not known if this introduced any bias but the interviewer's impression is that this was not likely in the vast majority of instances.

At the close of the interview, the patient was asked if he or she had any questions. The investigator informed the patient that feedback would be forthcoming unless the patient specifically requested to not be informed of the results. The patient was then given $5.00 as compensation for his or her time. After the patient had left, the investigator rated his or her psychopathology using a standardized scale.

Measures

Table 9 summarizes the measures or scales used in the study and by whom each one was completed. Each of the scales are described below.

Several of the measures listed in Table 9 were developed by the investigator because no standardized measures to assess the constructs of interest were available. Instrumentation that had previously been used with the chronically mentally ill population was used when available.

Table 9

Instruments By Source of Information

Instrument	**Completed By**
Importance of Needs (Patient)	Patient
Opportunities to Satisfy Needs	Patient
Effort Required for Satisfaction of Needs	Patient
Needs Satisfaction Rating	Patient
Effects of Stress/Concentration on Performance	Patient
Satisfaction with Performance	Patient
Affect Balance Scale	Patient
General Information Questionnaire Social-demographic characteristics Family history Clinical information Three quality of life measures	Patient
Inclusion Criteria Sheet	Caregiver
Global Assessment Scale	Caregiver
Importance of Needs (Caregiver)	Caregiver
Global Assessment Scale	Investigator

When measures were used that had been used previously with similar populations an attempt was made to determine whether the results obtained in the present study were similar. Those measures developed for the present study could not, of course, be assessed against this external criterion. Face and construct validity, and reliability were examined for the investigator-devised instruments.

A series of principal components factor analyses (varimax rotation with criterion set at one) revealed that all of the investigator-developed scales were unifactorial. The alpha coefficients computed for each scale are presented with the description of each scale. As well, Table 10 presents the correlation matrix for the investigator-devised measures used in this study.

Examination of Table 10 indicates a number of the correlations between the investigator-developed measures reach levels of statistical significance but that in most instances these levels are modest. Two exceptions to this conclusion do occur. "Needs satisfaction" is highly correlated with both "satisfaction with performances" and with perceived "opportunities for needs satisfaction". As well, "difficulties with stress" (interfering in performance) and "concentration difficulties" are also highly correlated to each other.

These data suggest an independence between most of the

TABLE 10

Correlation of Investigator Devised Ratings

	Needs Satisfaction By Patients	Opportunities for Satisfaction of Needs	Effort Needed	Satisfaction with Performance by Patients	Difficulties with Stress	Difficulties with Concentration	Caregiver's Estimate of Patient Needs
Patient's Needs Importance	-.01 (104)	-.19* (104)	-.20* (103)	-.22* (104)	-.03 (104)	.01 (103)	-.02 (101)
Needs Satisfaction		.56*** (104)	.08 (103)	.53*** (104)	.31*** (104)	.26 (103)	-.03 (101)
Opportunity for Satisfaction of Needs			.19* (103)	.62*** (104)	.23** (104)	.26 (103)	-.07 (101)
Effort Needed				.23** (103)	-.07 (103)	-.24 (103)	-.15 (100)
Selfsatisfaction					.17* (104)	.24 (103)	-.11 (101)
Stress difficulties						.64*** (103)	.29*** (101)
Concentration difficulties							.18* (100)

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

measures but that considerable overlap exists in the measures of stress and concentration difficulties, and between needs satisfaction, performance satisfaction and opportunities for achieving needs satisfaction.

The instruments appear to be face valid and to be, in the main, only moderately correlated with each other. As well, the alpha coefficients to be reported suggest that the measures used were reliable. This decreases the possibility of under-correction when partial correlations are reported.

Importance of Needs (Caregiver and Patient Forms)

This scale (Appendix E) was developed by the investigator to capture opinions of a caregiver and his or her patient as to the importance of selected patient needs in terms of their impact upon the patient's quality of life.

The patient and caregiver were asked to rate the importance of needs in ten life areas or domains shown to concern the chronically mentally ill (Lehman et al., 1982; Tessler & Goldman, 1982). The life domains assessed were: relationships with family; relationships with friends; relationships with others; work or other productive use of time; state of health; living situation; personal safety; health care received; economic/financial situation; and use of leisure/recreational time.

Each domain was rated on a scale from one (most important) to ten (least important). Ratings, as opposed to rankings, were used because the importance of each area was viewed as independent of any other area, e.g., the results obtained for one area did not constrain the results that could obtain for the other domains.

A Cronbach alpha coefficient of .85 obtained for the patients' assessments of their needs. Alpha was .81 for the caregivers' assessments of their patients' needs.

Needs Satisfaction

This measure (Appendix F) was developed by the investigator to assess patients' opinions about how well their needs were being met in each of the ten domains listed above. Patients were asked to rate how satisfied they felt their needs to be in each of ten domains on a scale from zero (not at all satisfied) to four (very well satisfied).

Cronbach's alpha was .84 for this scale.

Opportunities to Satisfy Needs

This measure (Appendix G) was developed by the investigator to assess patients' views concerning the availability of opportunities to satisfy needs in the ten life areas previously described. Patients were asked to rate the opportunities they had to satisfy their needs in each domain on a scale from zero (no opportunity) to four (very often).

Cronbach's alpha was .79 for this scale.

Effort Required to Satisfy Needs

This measure (Appendix H) was developed by the investigator to assess the amount of effort patients believe they need to expend to have their needs met in the same domains. Patients were asked to rate the amount of effort they must exert to improve their situation on a scale from one (very little/hardly ever) to five (often/a great deal).

Cronbach's alpha was .80 for this scale.

Satisfaction with Performance

This scale (Appendix I) was developed by the investigator to measure the degree to which patients are satisfied with their performance in each of nine life domains, regardless of whether or not that performance led to their need being satisfied. The domain of health care was excluded since the chronically mentally ill have little control over choices in the health care they receive from mental health systems that are usually large bureaucracies. Thus asking patients for their estimations of their satisfaction with their performances in attempting to obtain health care was considered likely to not be well understood, and, indeed confusion was experienced by the first several patients filling in this questionnaire. In other domains patients were asked to rate their level of satisfaction with their performance in trying to meet their needs on a scale from one (not at all) to five (very much).

Cronbach's alpha was .82 for this scale.

Effects of Stress on Performance

This measure (Appendix J) was developed by the investigator to assess patients' opinions regarding the effects of stress on their performance in nine areas. Again, patient performance in the domain of health care was considered irrelevant for purposes of this questionnaire. Patients were asked to rate the degree to which difficulty with stress causes them problems on a scale from one (a great deal) to five (not at all).

Cronbach's alpha was .87 for this scale.

Effects of Concentration Deficits on Performance

This measure (Appendix J) was developed by the investigator to assess patients' opinions regarding the effects of lack of concentration on their performance in nine areas. Again, patient performance in the domain of health care was considered irrelevant for purposes of this questionnaire. Patients were asked to rate the degree to which difficulty with concentration causes them problems on a scale from one (a great deal) to five (not at all).

Cronbach's alpha was .90 for this scale.

Affect Balance Scale (ABS)

Patient affect balance was assessed using Bradburn's (1969) Affect Balance Scale (Appendix K) which is thought to measure the degree to which people are feeling both positive and negative regarding recent events in their lives. Separate five-item subscales assess positive and negative affect. An example of a positive item is: "During the past few weeks have you ever felt proud because someone complimented you on something you had done?". An example of a negative item is: "During the past few weeks have you ever felt so restless that you couldn't sit long in a chair?".

Respondents answer each item either no (1) or yes (2) depending on whether or not they have felt that emotion "during the past few weeks." Bradburn (1969) chose this time perspective because he believed that recent events influence happiness more than those that have occurred in the more distant past. Items are summed within each subscale. The total ABS score equals the positive subscale score minus the negative subscale score. The resulting absolute difference represents either a positive or negative affect balance. This balance is interpreted as a measure of the individual's current level of happiness.

Bradburn (1969) reported correlations of .51 for men and .50 for women among the positive affect items, and .54 for both men and women among the negative affect items. He also reported low correlations between the subscales (.02 for men and .09 for women). The test-retest reliability of all three ABS scores (i.e., two subscales and total) was assessed as .86 - .97 (N = 174).

Harding (1982) replicated Bradburn's results (1969) using a representative British sample. His results supported the existence of separate positive and negative affect and that summing the scores of the two scales formed a more powerful predictor of well-being than either alone. Similarly, Stacey and Gatz (1991) reported results of a longitudinal (up to 14 years) study that supported this same two factor theory of well-being. They found stable correlational patterns within both age and affect categories. Bolin and Dodder (1990) describe paradoxical results in their work with undergraduate college students tested on the ABS. They found that the positive items loaded negatively and negative items loaded positively (to total ABS score).

Baker and Intagliata (1982) surveyed 118 chronically mentally ill patients and related Affect Balance Scale (ABS) scores to quality of life ratings for 15 domains as assessed by the Satisfaction with Life Domains Scale (SLDS). The relationship between ABS scores (used as a global measure of quality of life) and SLDS scores was positive ($\underline{r} = .64$, $\underline{p}<.001$). This finding supports the contention that these two types of measures assess elements of the same factor but are not identical. Diener (1984) concludes that the ABS reflects two separate processes and that happiness cannot be computed on the basis of positive ABS minus negative ABS.

Given the confusion as to whether a total ABS score or separate positive and negative affect scores should be used to test hypotheses, Cronbach alphas were computed for both the positive and negative affect subsets of questions. The items comprising the positive affect score yielded an alpha of .51 while those comprising the negative yielded an alpha of .69. The correlation matrix for the ten items comprising the scale are presented in Table 11.

A principal components factor analysis of the ten items comprising the Affect Balance Scale was performed (using a criterion of one for the eigenvalue). Two factors were extracted and cumulatively accounted for 42.8% of the variance. Loadings of the five items comprising the positive items ranged from .44 to .63 on factor one (and accounted for 23.8% of the variance), while four of the five negative items loaded on factor two in a range from .44 to .68. The item asking whether the patient had been upset in the fairly immediate past because someone criticized him or her loaded almost evenly (.40 and .44) on the two factors, and was the only factor to do so. Thus it seems clear that two separate factors are present when using the ABS.

Reflective of the above, all tests of hypotheses involving the use of the Affect Balance Scale use both total ABS score as well as separate positive and negative affect scores.

TABLE 11

CORRELATIONS OF POSITIVE AND NEGATIVE AFFECT ITEMS

	POSITIVE AFFECT QUESTIONS				NEGATIVE AFFECT QUESTIONS				
	P2	P3	P4	P5	N1	N2	N3	N4	N5
P1	.16 (102)	.29 (102)	.20* (102)	.20* (101)	.15 (101)	.08 (102)	.04 (102)	.05 (102)	.24 (101)
P2		.20* (103)	.20* (103)	.11 (102)	.14 (102)	-.07 (103)	-.22* (103)	-.06 (103)	.06 (102)
P3			.17* (103)	.08 (102)	.11 (102)	-.18* (103)	-.01 (103)	.01 (103)	.13 (102)
P4				.21* (102)	.16* (102)	-.04 (103)	.15 (103)	.19* (103)	.16 (102)
P5					.10 (101)	-.21* (102)	-.02 (102)	-.09 (102)	.11 (101)
N1						.37*** (102)	.33*** (102)	.38*** (102)	.21* (101)
N2							.45*** (103)	.46*** (103)	.18* (102)
N3								.26 (103)	.20* (102)
N4									.27 (102)

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

General Information Questionnaire (GIQ)

The General Information Questionnaire (Appendix A), was developed by Lehman (1983a) for use with the chronically mentally ill. Patients provide information about their social-demographic and living situation, family of origin, friendship and family interaction patterns, current social/recreational activities, past and current employment, religious activity, finances, state of health, and whether they have been a victim/perpetrator in the past year.

The GIQ also assesses patient quality of life. As concluded earlier, the validity of quality of life measurement is increased by using ratings of both overall satisfaction with life, and satisfaction in life domains. Within the GIQ, global well-being is measured two ways, namely by a global quality of life question and by semantic differential scales. The GIQ also includes ratings of quality of life in specific domains (e.g., satisfaction with interactions with family).

Table 12 provides a summary of the reliability of quality of life measurement using the GIQ (referenced to Appendix A). Specific details about each scale are described below.

Global Well-Being Measures of Quality of Life

The first global measure asked patients to assess their overall satisfaction with life by answering the question

Table 12

Reliability of Quality of Life Measures

Scale Name (Range)	Items	Reliability Coefficients[a]		
		Study 1[b]	Study 2[c]	Test-Retest(r)[d]
A. Global Well-Being Measures				
Global QOL Question (1-7)	B1, L1 (same question twice)	0.74	0.79	0.71
Semantic QOL Questions (1-7)	L2 (7 adjective pair items)	0.83	0.89	0.81
B. Subjective Life Satisfaction/Measures for Life Domains				
Living situation (1-7)	C3 (to C10)	0.86	0.88	0.79
Family relations (1-7)	D15 (items a-e)	0.85	0.87	0.85
Social relations (1-7)	E3 (through E10)	0.82	0.86	0.62
Leisure (1-7)	F2 (through F7)	0.80	0.84	0.53
Job (1-7)	G1e (through G2i)	0.78	0.88	0.95
Unemployment (1-7)	GIJ, GIK, G2a - G2b	----	0.88	0.68
School (1-7)	G9 (items 1-5)	----	0.72	----
Religion (1-7)	H7 - H10	----	0.79	0.57
Finances (1-7)	I4 - I7	0.83	0.86	0.77
Safety (1-7)	J8 - J12	----	0.80	0.41
Health (1-7)	K12 - K17	0.81	0.82	0.73

Table 12 (continued)

Note. From "Assessment of Chronic Mental Patients Quality of Life: Scoring Guide" by A. F. Lehman, 1984, unpublished manuscript. Items are referenced to the General Information Questionnaire (Appendix A).

[a] Cronbach's alpha. [b] Study 1 sample includes 278 mentally ill residents of board and care homes. [c] Study 2 sample includes 99 in-patients of a large state hospital and 92 patients in community residences. [d] *n*=42 in a subsample from Study 2, interval = 1 week.

"How do you feel about your life in general?" The response scale ranged from one (terrible) to seven (delighted) with the same question asked at the beginning (Global QOL1) and end (Global QOL2) of the interview. The mean of the two (Mean Global QOL) was one measure of global quality of life.

The second global well-being measure was based on seven semantic differential items, each beginning with "I think my life is ...". Patients responded on a seven point scale (interesting.........boring) to yield seven semantic differential scores (Semantic QOL1 to Semantic QOL7). A mean of these scores (Mean Semantic QOL) was computed as the second measure of global quality of life.

Domain-Specific Measures of Quality of Life

Domain-specific quality of life was assessed in ten life areas. The work domain was assessed separately for those who were employed and for those who were unemployed. For example, patients were asked different questions dependent upon whether they reported themselves to be working in a competitive employment situation, unemployed, or participating in a day program.

Each domain was rated on a scale from one (terrible) to seven (delighted). Lehman et al. (1982) reported internal consistency co-efficients of the ten domain-specific scales to be .67 - .87, a range usually considered adequate for group comparisons.

Reliability of and Differences Between Quality of Life Measures

A number of different measures of quality of life are found in the research literature. Their reliability and relationship to one another have not been well established. Therefore, an investigation was undertaken of the reliability and concurrent validity of the three quality of life measures in the present study.

Test-retest reliability of the global well-being question asked at the beginning and end of the interview (Global QOL1 and Global QOL2) is adequate (r = .76, N = 100, $p<.001$). The internal reliability of the semantic differential measure (Mean Semantic QOL) and the domain-specific measures was assessed using Kuder-Richardson alpha coefficients. With a sample size of 97, the alpha of the former is .89 ($p<.001$), which also is adequate. Regarding domain-specific quality of life, a mean score across nine domains was calculated. The work domain was dropped from this calculation because its inclusion would have limited the analysis to just ten cases. The alpha of the domain-specific mean score is .87 for 87 cases ($p<.001$).

Factor analysis of the semantic differential questions yielded a unifactorial analysis with 59.9% of the variance accounted for by that factor. Loadings for each of the seven questions forming the semantic differential quality of life scale ranged from a low of .72 to a high of .85.

Analyses of the domain-specific quality of life ratings also occurred (Table 13). The principal components factor analysis (with criterion of eigenvalue of 1) indicated two factors to account for 55.6% of the variance of the domain-specific assessments.

The first factor can be represented as conditions or circumstances the patient experiences but is not able to significantly change. The domains represented on this factor are those dealing with state of health, living situation, finances and personal safety. These are conceptualized as constituting circumstances or states of being that are not under the patient's immediate control except perhaps to cope or ameliorate circumstances.

A second factor is conceptualized as representing those more personally determined situations. Relationships with family, friends, and day-to-day interactions with other people are the domains represented by this factor.

Three domains (religion, health care and recreation) are represented on both of the factors just described. Previous research indicated that health care is a particularly sensitive area of concern for this population (Lehman, 1983b) and further analyses in this domain were undertaken.

Table 13

Factor Analysis of Domain-Specific Quality of Life Scales

	Factors	
Domain	One[1]	Two[2]
Friends	-.03	.87
Health1[a]	.75	-.11
Health2[b]	.77	.39
Family	.31	.60
Dealing with others	.27	.87
Sheltered employment[c]	.74	.08
Religion	.39	.33
Finance	.60	.25
Living situation	.61	.31
Recreation	.37	.49
Safety	.60	.30

[1] Eigenvalue of 4.17 with 41.7% of variance

[2] Eigenvalue of 1.39 with 13.9% of variance

[a] Health questions (3) that sampled patient's perception of state of health

[b] Health questions (3) that sampled patient's perception of accessability to health care services

[c] Those patients (*N* = 34) attending sheltered employment facilities

Factor analytic studies of the domain-specific ratings first suggested the six questions sampling the health domain were tapping two constructs; three questions assessed a general state of well-being (alpha = .78) with the other three questions appearing to deal with accessibility to health resources (alpha = .57).

Table 14 presents the correlation matrix for Mean Global, Mean Semantic, and domain-specific quality of life ratings. As would be expected given the results of the factor analyses just described, generally the correlations between domain ratings range from .35 to .65 (all $p<.001$), except for religion, which is slightly lower. The work domain is exceptional, in that many correlations between it and other domains are not significant. The correlation between Mean Global QOL and Mean Semantic QOL is .70 (N = 103, $p<.001$), indicating considerable but not total overlap between the two global measures of quality of life. Correlations between the two global quality of life measures and each of the domain-specific measures are generally in the .40 - .60 range. Therefore, it is concluded that the three measures assess at least somewhat different aspects of quality of life.

Table 15 presents frequencies and percentages for the quality of life measures, aggregated into three categories (to minimize the effects of extreme scores). Ratings of 1-2

TABLE 14

Correlation Matrix of Domain-Specific, Global, and Semantic Differential Quality of Life Scales

	Domain-specific Scales										Global Scales	
				Work Situation								
Domain	Friend	With Others	State of Health	Employed	Unemployed	Recreation	Religion	Finance	Living Situation	Personal Safety	Mean Global	Mean Semantic
Family	.39***	.43***	.41***	.18	.01	.41***	.32**	.38**	.36**	.44***	.44***	.36***
Friend	-	.66***	.33**	-.03	.05	.53***	.32**	.28*	.26*	.25*	.47	.46***
Others		-	.46***	.21	.10	.76***	.36***	.44***	.59***	.37**	.56***	.57***
State of health			-	.37*	.09	.64***	.37**	.54***	.55***	.59***	.62***	.52***
Work sit. (employed, n-25)				-	-.21	.38*	.30	.31	.39*	.50***	.43**	.24
Work sit. (unemployed, n=92)					-	.16	-.10	.34**	.12	.22*	.21*	.14
Recreation						-	.40***	.55***	.60***	.38**	.68***	.60***
Religion							-	.27*	.22*	.30*	.25*	.27*
Finance								-	.40***	.44***	.40***	.46***
Living situation									-	.44***	.59***	.41***
Personal safety										-	.50***	.42***
Mean Global QOL											-	.70***

Note. N=105 unless otherwise indicated.

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

Table 15

Domain-Specific and Global Ratings of Quality of Life

Domain/Scale	**Quality of Life Ratings**[a]				
	Dissatisfied	Mixed	Satisfied	Mean[b]	S.D.
Mean Global QOL	19.9	34.0	46.2	4.5	1.4
Semantic QOL					
Boring/interesting	24.6	17.9	53.8	4.7	1.8
Miserable/enjoyable	26.3	16.0	53.8	4.6	1.7
Useless/worthless	22.6	10.4	44.4	4.9	1.8
Empty/full	29.2	22.8	49.9	4.6	1.9
Discouraging/hopeful	22.6	8.5	64.1	4.8	1.9
Disappointing/rewarding	18.0	22.0	60.0	4.8	1.7
Worst chance/best chance	26.0	26.0	48.0	4.5	1.9
Mean	24.6	17.9	57.4	4.7	1.8

Table 15 (continued)

	Dissatisfied	Mixed	Satisfied	Mean	S.D.
Domain-specific QOL					
Family	20.5	32.0	44.1	4.6	1.8
Friend	25.5	16.0	57.7	4.5	1.6
Others	18.1	42.8	38.0	4.5	1.6
State of health	14.2	35.2	50.3	4.8	1.6
Work (employed) (n=25)	8.0	44.0	48.0	4.9	0.9
Work (unemployed) (n=92)	72.3	21.0	6.3	3.3	1.0
Recreation	18.7	38.7	39.5	4.7	1.1
Religion	8.3	34.7	55.6	5.0	1.0
Finance	41.4	28.2	27.7	4.0	1.4
Living situation	17.7	29.1	52.6	4.9	0.9
Safety	19.4	38.2	40.7	4.5	1.1
Mean	25.3	32.5	42.3	4.5	1.3

Note. N=106 unless otherwise indicated.

[a] Percentage dissatisfied (1-2), mixed (3-5), and satisfied (6-7).
[b] Higher score indicates greater satisfaction.

were taken to indicate dissatisfaction, 3-5 "mixed feelings", and 6-7 satisfaction with quality of life. Means and standard deviations are also provided.

Generally, the above results follow the expected pattern reported by Baker and Douglas (1990), Baker and Intagliata (1982), and by Lehman et al. (1982) in that quality of life assessed by means of domain-specific ratings does seem more situation-specific than life satisfaction assessed using semantic differential or global ratings.

Examination of the dissatisfied column of Table 15, for example, illustrates the more critical nature of the domain-specific scales to specific situations. Domains such as religion have as few as 8% of respondents dissatisfied while other domains (work for those who are unemployed) contain 72% of the sample's ratings.

The results of a t-test indicated a significant difference ($p<.05$) between the two global measures. About 34% of the sample reported mixed quality of life in terms of Mean Global QOL, but only 18% reported mixed quality of life in terms of Mean Semantic QOL. Comparison of differences in the standard deviations of the three measures indicates the semantic scales have a greater degree of variability associated with them than the other two scales ($F = 1.65$, 98, 98, $p<.05$). It appears the two global measures seem to assess quality of life differently, or perhaps truly record differences in quality of life. Each approach appears to offer its own "valid" approach to recording quality of life.

Global Assessment Scale

A measure of psychopathology was desired that (a) had been standardized on populations comparable to the chronically mentally ill, (b) was based on a time-limited sample of behavior, and (c) could be completed by both caregivers and the investigator.

The Global Assessment Scale (GAS) (Endicott et al., 1976) focuses on observable illness patterns along dimensions of subjective distress, behavioral disturbances, and disturbances of reality testing (Appendix L). The overall functioning of an individual is rated by either a clinician or trained non-clinician on a scale from 1 (the hypothetically sickest individual) to 100 (the hypothetically healthiest). The GAS is divided into ten equal intervals, each with its own rating guidelines (Endicott et al., 1976).

Inter-rater reliabilities for ratings of inpatients and aftercare patients range from .61 to .91 (Endicott et al., 1976). No information regarding test-retest reliability was reported.

Concurrent validity correlations between GAS and the overall severity score on the Mental Status Examination Record and the Family Evaluation Form are reported by

Endicott et al. (1976) to be moderate at six months following admission ($r = -.62$ and $r = -.52$, respectively). Regarding construct validity, higher GAS scores correlated with lower amounts of intervention planned by clinicians.

In the present research the referring caregiver and the investigator independently rated patients' psychopathology using the Global Assessment Scale. Inter-rater reliability was considered adequate ($r = .79$, $N = 101$, $p<.001$). The mean of these two ratings was used in all subsequent analyses involving psychopathology.

Role Functioning Scale

This measure (Georgia Department of Human Resources, 1978) (Appendix M) assessed patient functioning as judged by their caregivers regarding four roles (i.e., work, independent living, immediate social network, and extended social network). For example, caregivers were asked their views of their client's ability to successfully demonstrate characteristics or behaviors associated with successful workers (e.g., dependability, ability to communicate).

The response scale ranged from one (a complete lack of skills) to seven (optimal level of skills).

Cronbach's alpha coefficient was .83 for the four scores comprising the scale.

RESULTS

The order of presentation of results will be to describe the social-demographic and clinical characteristics of the sample with reference to the study's inclusion criteria and then to describe the tests of the hypotheses.

Description of the Sample and Measures

Social-Demographic Characteristics

A total of 119 patients were deemed by caregivers to meet the study criteria and were referred to the investigator. No formal data were gathered about the characteristics or number of those patients not considered appropriate to the study. Thirteen patients who were referred did not complete the questionnaire. Eight of these patients were willing to do so but provided incoherent answers to questions and appeared to the investigator to be delusional. Another five patients changed their minds about participating after starting the interview and withdrew from the study, leaving a final sample of 106 patients. For various reasons, not all segments of the questionnaire were completed by all 106 patients.

Table 16 presents social-demographic and clinical data regarding the sample obtained in this research. Tessler's and Goldman's (1982) data are also provided to facilitate comparisons of the samples.

Overall, the social-demographic characteristics of the

Table 16

Comparison of NIMH and Alberta Sample of Chronic Patients Living in Community

		Data Samples		
		NIMH		Alberta
Social-demographic Information				
Sex				
Males		47.0%		57.5%
Females		53.0%		42.5%
Marital status				
Married		14.6%		10.4%
Never married		56.0%		61.9%
Divorced		20.9%		22.8%
High school graduates		33.0%		30.0%
Employed		25.9%		16.0%
Living arrangements				
Private home or apartment		40.4%		35.8%
Family home or foster care		10.3%		34.9%
Board and care		12.6%		17.0%
Monthly income	(Median)	$325.00	(Mean)	$592.00
Clinical History				
Median age/first psychiatric contact		24.0		23.0
Primary diagnoses				
Schizophrenia		68.9%		66.3%
Depressive and affective disorders		12.1%		24.5%
Other nonpsychotic disorders		6.6%		8.2%

Note. Data in column 1 are from The Chronically Mentally Ill: Assessing Community Support Programs by R. C. Tessler and H. H. Goldman, 1982, Cambridge, Mass.: Ballinger.

present sample are similar to the Community Support Program clients reported upon by Tessler and Goldman (1982), except the Alberta sample appear to be slightly younger, more predominantly male, and seem to experience more depressive and affective disorders than those in the Tessler and Goldman sample. Both the age and sex differences are likely accounted for by the present study's under-representation of elderly women. About 12% of CSP clients were over the age of 65, compared to only 2% of patients in the current study.

The mean age of the patients sampled was 37.2 years, with a standard deviation of 11.7 years. The vast majority (93.1%) were white, with 4% black and 2% native. Of the 22% that lived in supportive living environments 17% resided in approved homes (with and under the care of another family) and 5% in group homes.

Employment information was obtained for all but three individuals. Sixteen percent were employed, with an additional 19% in pre-employment training programs. The remaining 65% were not currently, or likely in the near-future to be employed in the competitive job market.

Regarding just those patients who were unemployed and not in transitional job training programs, 29% had been unemployed for less than a year, 35% had been unemployed for 1-3 years, and 36% had been unemployed for more than three years.

The unusually high unemployment rates (compared to rates for other disadvantaged groups) do not appear to result from patients' lack of education. The mean grade level achieved was 10.5, with a standard deviation of 2.6. Only 8% of the sample reported their highest achieved grade as Grade 6 or less. Nearly 24% of patients dropped out of school at the end of Grade 10 or 11. Thirty percent had completed Grade 12. While 14% of the patients had attended university, only four respondents had graduated.

All but seven patients answered questions concerning monthly income. Patients were consistently poor, with 83% reporting monthly income of less than $900. The mean monthly income of $592/month was heavily influenced by a Government of Alberta assistance plan that required medical certification of likely inability to ever work again: nearly 39% of the current sample received this benefit. Only 2% indicated income in excess of $1500 per month, and in all cases this was claimed due to full-time employment.

Effects of Social-Demographic Characteristics on QOL

Previously reported literature suggests that social-demographic characteristics influence some aspects of quality of life. The data were analyzed to determine if age, sex, financial condition, education or residence were related to any quality of life measure.

A correlational analysis and a _t_-test, respectively, showed that age and sex were not significantly related to quality of life. The impact of several other socioeconomic or demographic factors were assessed by means of analyses of variance. Only higher educational levels ($F = 2.26$, $df = 9$, $p<.05$) and dissatisfaction with finances ($F = 3.49$, $df = 9$, $p<.001$) were associated with lower quality of life and then only when quality of life was assessed by use of the Mean Semantic QOL.

A one-way analysis of variance was conducted to determine the effects of place of residence on quality of life. The results of the present study are consistent with data reported by Baker and Douglas (1990), Lehman et al. (1982), as well as Segal and Aviram (1977) in indicating that residence does impact quality of life. However, Table 17 presents means of quality of life ratings indicating whether global ($F = 2.90$, $df = 4$, $p<.05$) or semantic ($F = 3.39$, $df = 4$, $p<.01$) quality of life measures are used there is a significant diminution of satisfaction with life between individuals _only_ in an approved home situation as compared to those living with friends or family. There is not the same statistical effect when comparing approved homes to either group homes or patients living on their own.

Adherence to Clinical Inclusion Criteria

To reiterate, the clinical inclusion criteria were

Table 17

Quality of Life Ratings by Type of Residence

	Quality of Life Score					
	Semantic			Global		
Residence Type	N	Mean	SD	N	Mean	SD
With family or friend	36	5.17	1.14	37	4.97	1.29
Living on own in house or appartment	36	4.42	1.58	38	4.39	1.54
Approved home residence	18	4.03	1.57	18	3.72	1.44
Group home	5	5.82	.75	5	5.20	.44
Other	4	5.11	.72	4	4.25	.50
Total	99			102		

Note. Quality of life scores were on a 1 (terrible) to 7 (delighted) rating.

diagnosis, functional difficulties, and chronicity of care by the mental health system. Concerning the first criterion, all diagnoses had been made by a psychiatrist within the previous two years. The files of 10% of patients (chosen randomly) were reviewed by the investigator to confirm the diagnoses provided by the caregiver. In all instances, the reported diagnosis was, in fact, the diagnosis of record. Table 18 presents the diagnoses of record for those in this sample. Nearly two-thirds suffer from a form of schizophrenia. The next most frequent diagnosis is psychotic depression (23%) in either cyclic, bipolar, or unipolar form. Approximately 90% of the sample suffered either a major thought disturbance and/or affective disorder.

The second clinical inclusion criterion involved having moderate to severe functional difficulties in at least three of seven areas, as rated by the caregiver. Table 19 shows the proportion of patients at each level of functioning for each area. In all but one area, at least 60% of patients experienced moderate to very severe difficulties. A more detailed analysis showed that all patients met the functional criterion.

The third clinical inclusion criterion involved having received professional mental health care for at least the last two consecutive years. Caregivers were asked to

Table 18

Diagnoses of Sample

Diagnosis	**Frequency**	**Percentage**
Schizophrenia	69	66.3
Manic-depression	15	14.4
Depression	9	8.6
Hypomania	3	2.8
Personality disorder	5	4.8
Organic brain syndrome	1	0.9
Drug/alcohol abuse[a]	2	1.8
Missing	2	1.8
Total	106	100.0

[a] Inadvertently included although diagnosis does not meet study criterion.

Table 19

Ratings by Caregivers of Patients' Functional Difficulties

Domain	None at All	Slight	Moderate	Severe	Very Severe	N
	Level of Difficulty					
Personal hygiene	36	30	23	7	4	100
				[---------34%-------]		
Self-direction	6	23	49	20	3	101
				[---------81%-------]		
Social transactions	5	21	42	23	9	100
				[---------74%-------]		
Interpersonal relations	3	21	46	23	8	101
				[---------76%-------]		
Economic self-sufficiency	14	11	35	30	11	101
				[---------75%-------]		
Learning	14	27	45	13	2	101
				[---------60%-------]		
Recreation	8	27	33	24	8	100
				[---------65%-------]		

recommend only patients who met this criterion. Spot checks were conducted by the investigator on the files of approximately 10% of patients. These checks (accessing primary sources, if necessary, for further substantiation) confirmed the duration of care to be greater than two consecutive years in all instances.

Impact of Psychopathology on Quality of Life

Psychopathology ratings are presented in Table 20. It can be seen that approximately 80% to 85% of the sample (dependent upon rater) suffered a significant (medium to high) degree of psychopathology. The mean score for psychopathology across all patients is 57.5, with a standard deviation of 11.9.

The effect of psychopathology on quality of life was investigated further by correlating psychopathology with mean global quality of life (r = .21, N = 103, p<.05) and with mean semantic quality of life (r = .25, N = 100, p< .01). Correlations of psychopathology with each of the domain-specific ratings indicates only one significant correlation of psychopathology. Greater levels of psychopathology are associated with less satisfaction (r = .20, N = 98, p<.05) in the recreation domain.

These results indicate that a statistically significant positive relationship exists such that greater psychopathology is correlated with lower quality of life

Table 20

Psychopathology Ratings by Caregivers and Investigator

Level of Psychopathology	**Rater**			
	Caregivers		Investigator	
	Percent (N=99)	Mean GAS Score	Percent (N=102)	Mean GAS Score
Low (70-100)	18.1	90.0	14.7	75.0
Moderate (40-70)	57.5	59.4	61.7	58.6
High (0-40)	24.2	37.7	23.4	42.1

Note. Global Assessment Scale from "The Global Assessment Scale: A Procedure for Measuring Overall Severity of Psychiatric Disturbance" by J. Endicott, R. Spitzer, J. Fleiss, and J. Cohen, 1976, *Archives of General Psychiatry*, *33*, 766-771. Higher scores indicate less psychopathology.

ratings for both global and semantic measures. Domain-specific quality of life ratings appear, with the exception of the recreation domain, to be less impacted by patient psychopathology than are global quality of life ratings.

Prior research (Lehman, 1983b; Lehman et al., 1982; Meltzer et al., 1990; Pinkney et al., 1991; Simpson et al., 1989) had also demonstrated a relationship between psychopathology and quality of life. Therefore a statistical correction for psychopathology was employed in all tests of hypotheses in which quality of life was assessed.

Tests of Hypotheses

Hypothesis 1

This hypothesis predicts that the greater the satisfaction reported by patients with their opportunities to meet self-identified needs, the higher will be their self-reported quality of life.

Partial correlation coefficients, with psychopathology controlled, were computed between the mean of the ten patient-rated opportunity to meet needs scores and both Mean Global QOL and Mean Semantic QOL (Table 21). Resulting correlations were in the range of .61 to .64 and are significant at the .001 level of confidence. A strong relationship would seem to exist between the opportunity to satisfy needs and globally rated quality of life.

Table 21

Correlation of Opportunities to Meet Needs and Quality of Life Ratings

Domain/Scale	**Partial Correlation**[a]
Mean Global QOL	.61***
Mean Semantic QOL	.63***
Domain-specific QOL	
Family	.49***
Friends	.30***
Others	.39***
State of health	.49***
Work	.59***
Recreation	.40***
Finance	.30***
Health care	.32***
Living situation	.45***
Personal safety	.25*
Factor 1	.47***
Factor 2	.50***

Note. N=98. df=36.

[a] Controlling for psychopathology.

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

Each domain-specific opportunity score was correlated with its corresponding domain-specific QOL score (Table 21). As well, the two factors derived from factor analysis of the domain specific quality of life ratings were also correlated with the mean of the opportunity scores. In all ten domains and for each of the two factors, there is a significant positive correlation between opportunity to satisfy needs and quality of life. Hypothesis 1 was fully supported.

Hypothesis 2

This hypothesis states that the greater the difference between patients and caregivers in perception of patients' needs, the lower will be patients' self-reported quality of life.

Absolute difference scores in each of ten domains were calculated for each patient-caregiver pair by subtracting the former's ratings of importance of needs from the latter's ratings. The direction of the difference was ignored as the Oregon theory predicts lowered quality of life on the basis of differences in perception of needs without specifying directionality.

For example, if a patient indicated that relations with family was an extremely important need (i.e., a rating of 1) and the caregiver described that same need as very unimportant (i.e., a rating of 10), a difference score of 9 resulted for that domain. The theory is needs and resourcedriven and therefore predicts possible consequences of differences in ratings as occurring due to either the patient's unwillingness to try to meet a need not seen as relevant, or the caregiver's unwillingness to make available resources for meeting needs not seen as important.

These pair-wise differences were each correlated with quality of life scores (with psychopathology controlled) assessed globally and by means of the factors derived from the domain-specific ratings.

The great majority of the resulting correlations were not statistically significant (Table 22). The few correlations that are statistically significant are still weak in absolute terms. A strong correlation is found between relationships with others and factor 2 of the domain-specific ratings (-.35, _df_ = 39, _p_<.01). The greater the difference in ratings of needs between caregiver and patient as regards the importance of dealing with others, the greater the effect on quality of life as assessed by factor 2 of the domain-specific scales. When caregivers rated the need for patients to interact with other people (than their usual circle of friends) higher than patients, the result is that quality of life decreased on those domains loading on factor 2 (satisfaction with friends, family and interactions with others as well as aspects of health care having to do with accessibility).

Table 22

Correlations of Patient-Caregiver Perceptions of Needs with Quality of Life Ratings (Psychopathology Controlled)

Difference Scores[a] In Domains	Quality of Life Scales Mean Global	Mean Semantic	Fac1[b]	Fac2
Family	.04	-.02	.08	-.13
Friends	-.09	-.01	-.21	-.18
Others	-.06	-.07	.03	-.35**
Work	-.01	.05	.04	.08
State of Health	-.01	-.07	-.13	-.05
Living Situation	.02	.03	.01	-.30**
Personal Safety	.04	.05	.16	-.13
Health Care Access	.21*	.10	-.13	-.02
Finances	.13	.13	.04	-.21
Recreation	-.14	-.14	-.10	-.07

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[a] Patients and caregives separately rated perceptions of patient's needs in ten domains. The caregivers score was subtracted from the patient's rating to determine a difference between the two within each of the listed domains. The direction of difference was ignored.

[b] Domain-specific quality of life scores were factor analyzed and two factors emerged. See text for explanation.

As reported by Lehman (1983b), health care is another sensitive area for the chronically mentally ill and their workers. Caregiver and patient differences in ratings of importance of health care are correlated with quality of life but only when assessed by means of global questions ($\underline{r}$ = .21, $\underline{N}$ = 99, $\underline{p}$<.05). That is, higher difference scores on the need for health care are correlated with higher quality of life score as measured through global questions.

Hypothesis 2 predicts quality of life will vary depending upon caregivers and patients differences in ratings of importance of needs. These data indicate this is not the case for most needs but that limited and condition-specific support exists for hypothesis 2 within two needs areas - health care and the need for external integration.

Hypothesis 3

This hypothesis predicts that the greater the extent to which patients perceive their needs are met contingent upon their performance, the higher will be patients' self-reported quality of life. That is, needs that are met due to the patient's efforts will be more influential of quality of life than needs met without corresponding effort.

Prior to testing the hypothesis, patients' mean domain-specific needs satisfaction scores were correlated with their Mean Global QOL and Mean Semantic QOL scores. Correlations of .40 ($\underline{N}$ = 98, $\underline{p}$<.001) and .46 ($\underline{N}$ = 95,

$p<.001$), respectively, were observed. To avoid the confounding influence of low needs satisfaction on quality of life, partial correlations were computed with needs satisfaction controlled.

Contingent effort ratings (based on patient's estimations of difficulty in performing tasks to obtain needs satisfaction) within each domain were correlated with Mean Global and Mean Semantic QOL. None of the resulting correlations are significant. Hypothesis 3 was not supported.

Hypothesis 4

This hypothesis predicts that the more positive their self-reported affect balance, the higher will be patients' self-reported satisfaction with their performance.

Satisfaction with performance was computed as the mean of the satisfaction with performance ratings with the exception of the health care domain which was judged to be irrelevant for this analysis. Separate analyses of the components (positive, negative and total items) of the Affect Balance Scale were computed.

A partial correlation, with psychopathology controlled, of the positive items comprising the Affect Balance Scale with mean satisfaction with performance across nine domains is significant ($r = .44$, $df = 33$, $p<.01$). This same correlation for the negative items of the ABS is not significant (r = -.13). The total ABS score correlated against satisfaction with performance measured across domains is also significant (r = .45, df = 33, p<.01). The domains represented on each of the two domain-specific factors were both significantly correlated (r = .46 and .43 respectively, df = 33, p<.01) with satisfaction with performance. Hypothesis 4 was supported.

Hypothesis 5

This hypothesis states that the greater their ability to meet performance requirements in terms of stress and concentration, the greater will be patients' self-reported satisfaction with their performance.

Within each domain, patient ratings of their ability to cope with stress and to maintain concentration (with psychopathology controlled) were separately correlated with their satisfaction with their performances (Table 23).

Concentration difficulties are significantly and positively correlated with performance satisfaction ratings only in the domain dealing with family matters. That is, as patient's ratings of their abilities to deal with concentration difficulties increase, so do their ratings of satisfaction with their performances as they attempt to satisfy their needs in dealing with their family.

Difficulties with stress are positively and significantly correlated with performance ratings in that

Table 23

Within Domain Correlation of Stress and Concentration Difficulties and Quality of Life

	Partial Correlations[a]	
Domain	Stress	Concentration
Family	.37***	.20*
Friends	.28**	.12
Others	.07	-.05
Work	.13	.05
Living situation	.11	-.02
Recreation	.28**	.16
Finance	.07	.03
Personal safety	.22**	.08

Note. *df* = 90 for Stress and *df* = 83 for concentration ratings.

[a] Controlling for psychopathology.

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

same domain (family) as well as in the domains dealing with friends, recreation and personal safety. These data suggest that stress plays a more significant, but still limited, role in patient's determinations of their satisfaction with their performances. Hypothesis five is partially supported.

Hypothesis 6

This hypothesis indicates that more positive affect balance and greater ability to meet performance requirements in terms of stress and concentration difficulties will interact to produce greater self-reported satisfaction with performance by patients than either factor alone.

A multiple regression procedure was used to determine whether a relationship exists between the independent variables and self-reported satisfaction with performance (Table 24). This procedure was used as it allows comparisons of continuous variables (affect, stress and concentration difficulties) without establishing cut-off points as would be necessary if a 2 way analysis of variance were used.

The effects of stress and effects of concentration difficulties, each of the factor scores resulting from the factor analysis of the Affect Balance Scale, as well as the cumulative score of the Affect Balance Scale were entered in the regression in five steps. The F of 4.414 (df = 5) is significant at the .001 level (Table 24). Thus it is

Table 24

Regression of Ratings of Stress and Concentration Difficulties and Affect on Satisfaction with Performance

Dependent variable - Satisfaction with Performance

Independent Variables:

1 Factor 1 consisting of 5 items of Affect Balance Scale
2 Factor 2 consisting of 5 items of Affect Balance Scale
3 Total of Affect Balance Scale scores
4 Patient self-reported difficulties with stress
5 Patient self-reported difficulties with maintaining concentration

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	5	11.496	2.299
Residual	92	47.913	.520

Multiple R = .434
R^2 = .193
Adjusted R Square = .15
Standard Error = .72

F = 4.414
Significance = .0012

Variables in the Equation	Beta	T	Sig T
Factor 1 of Affect Balance Scale	-.625	-1.175	.08
Factor 2 of Affect Balance Scale	.299	1.213	.23
Affect Balance Scale score	1.024	2.379	.01
Difficulties with stress	-4.122	-.003	.99
Difficulties with concentration	.111	.898	.37

Note. Listwise deletion of missing data with variables entered on successive steps.

concluded that a statistically significant relationship exists between some of the independent variables and self-reported satisfaction with performance.

Data presented in Table 24 indicates that only positive affect is significantly and positively related to satisfaction with performance. Thus it is concluded that no cumulative effect of stress and concentration difficulties is demonstrated by the data. Hypothesis 6 was not supported.

Hypothesis 7

This hypothesis predicts that the higher the self-reported satisfaction with performance by patients, the higher will be their self-reported quality of life.

Mean satisfaction with performance was partially correlated, controlling for needs satisfaction, with quality of life as assessed by Mean Global ($\underline{r} = .45$, $\underline{df} = 33$, $\underline{p} < .01$); Mean Semantic ($\underline{r} = .35$, $\underline{df} = 33$, $\underline{p} < .05$); and, the two factors emerging from the previously reported domain-specific factor analyzed ratings (factor 1 = $\underline{r} = .39$, $\underline{df} = 33$, $\underline{p} < .05$); and, (factor 2 = $\underline{r} = .46$, $\underline{df} = 33$, $\underline{p} < .01$).

As would be expected from the theory, the relationship is stronger between performance satisfaction and factor two domains (dealing with issues of accessing resources) than with factor one domains (dealing with conditions seen as out of the control of the patients). Hypothesis 7 was supported.

Table 25 summarizes the results of the tests of all seven hypotheses.

Table 25

Summary of Hypotheses Test Results

Hypothesis	**Result**
1. The greater the satisfaction reported by patients with their opportunities to meet self-identified needs, the higher will be their self-reported quality of life.	Significant positive correlations were observed between greater opportunities to satisfy needs and higher quality of life, both globally and within domains. Hypothesis 1 was supported.
2. The greater the difference between patients and caregivers in perception of patients' needs, the lower will be patients' self-reported quality of life.	Differences in quality of life were not associated with differences in caregivers' and patients' perceptions for most domains but needs in health care and dealing with others were significantly correlated. Hypothesis 2 was partly supported.
3. Greater effort expended by patients in order to meet needs will be associated with higher patient's self-reported quality of life.	When needs satisfaction was controlled, contingent effort by patients was not significantly correlated with quality of life. Hypothesis 3 was not supported.

Table 25 (continued)

4. The more positive their self-reported affect balance, the higher will be patients's self-reported satisfaction with their performance.	Greater positive affect was positively correlated with greater satisfaction with performance in all domains. Hypothesis 4 was supported.
5. The greater their ability to meet performance requirements in terms of stress and concentration, the greater their satisfacation with their performance.	Greater self-reported ability to deal with concentration was positively correlated with greater patient satisfaction with performance in family matters only. Stress resistance was correlated with family, friends, recreation and personal safety. Hypothesis 5 was only partially supported.
6. Positive affect balance and greater ability to deal with stress and concentration difficulties were predicted to produce greater self-reported satisfaction with performance.	Only an interaction between positive affect and stress was observed. Hypothesis 6 was not supported.
7. The higher the self-reported satisfaction with performance by patients, the higher will be their self-reported quality of life.	Greater satisfaction with performance was positively correlated with higher quality of life globally and in nine of ten domains. Hypothesis 7 was supported.

DISCUSSION

This research empirically tested the Oregon quality of life theory as a framework for predicting the quality of life of the chronically mentally ill. The discussion focuses first on overarching methodological considerations in interpreting the results. This is followed by discussion of the evidence that supports or refutes the theory, with reference to other quality of life theories. Finally, recommendations for both service provision and future research are offered.

Methodological Issues

Methodologically, several difficulties may have influenced the results of the present research. The first of these potential problems results from sampling uncertainties. Details about those not nominated by caregivers for inclusion are not known. Comparisons between the current sample and other samples of chronically mentally ill individuals living in community suggest, however, this sample is very similar and has no significant aberrations from other samples with the exception of an under-representation of women living in community and older than age 65.

There may have been several biases influencing the data. A great majority of caregivers were nurses and a professional orientation/training bias may have been present. That the caregiver was involved at all may have influenced the responses of some of the patients. Further bias could have been introduced by the suggestion that information would be made available to the caregiver about the interview.

No objective data directly relates to these potential biases. It is my opinion, based on impressionistic data gathered during the interviews, that each of these potential threats did indeed take place to "some" extent. A population as dependent, withdrawn and needy as the chronically mentally ill is likely to contain individuals who may provide the answers they think safest and not the most accurate.

It is just as likely, however, that not involving caregivers would introduce biases. Extremely shy and withdrawn patients are not likely to wish to participate in research that holds little immediate reward and poses risks of embarrassment or possible ridicule. In short, biases are likely to have been introduced regardless of study design but need to be recognized as potential threats.

Most of the measures used are self-report and many are investigator-devised as well and cannot be externally referenced to a known standard. This threat to the validity of the measures could cause difficulty with regard to the confidence placed in interpretations of results. Therefore psychometric exploration of the measures occurred.

The scales used for assessing importance of needs (both from the perspective of the patients and caregivers), the opportunities to satisfy needs, needs satisfaction, ability to deal with stress and concentration difficulties, satisfaction with performance, and amount of effort needed in order for needs to be met were all investigator-devised. Psychometric investigations suggest each appears to possess adequate face validity, internal reliability (as assessed by Cronbach alphas), and generally demonstrated significant, but not excessively high, overlap with the other measures. Scale scores suggest adequate range for individual's ratings and scores, as well. It is concluded that both the reliability and validity of the measures is sufficient to allow tests of the hypotheses.

The lack of external referents is also related to another threat to the validity of the research which E. Diener (personal communication, April 30, 1991) called common methods variance. An observed relationship may be the result of a third and more powerful factor than either of the two correlated items. He suggests, for example, that people who are happy may indicate more of their needs met due to their optimistic outlook as opposed to more of their needs being met leading to current levels of happiness.

Diener's (personal communication, April 30, 1991) caution regarding common methods variance cannot be fully answered by any correlational study as it raises the issue of causality. Yet a growing data pool suggests the chronically mentally ill individual living in community can provide specific responses to questions about what they like or don't like, and are not simply responding to specific questions on the basis of a generalized attitude (as common methods variance as a problem would suggest).

Bigelow et al., (1991) report patient satisfaction did not correlate with caregiver's perceived improvement by patients as a result of treatment, so the judgements patients made about their improvement seem to be specific to treatment and not the result of a global well-being attitude. Lehman (1988; 1983b) also explored the issue of the effects of psychopathology on patient's responses to quality of life assessment. He concluded that only in the health realm was there a significant impact of psychopathology (anxiety and depression but not thought disorders) on the likely responses of the chronically mentally ill.

Similarly, in the current research an effect on quality of life by kind of residence was reported. Those living in "approved homes" were significantly less satisfied with the quality of their lives than those living on their own, with friends or family, or in group homes. That this effect seems localized to issues of residential care is supported by the literature (Baker and Douglas, 1990; Segal and Aviram, 1978) and ratings by clinicians of their patient's ability to deal with stress in residential care.

Caregiver's ratings of patient's overall functioning was correlated with patient's estimations of the effects of stress on their ability to deal with their living situation. The resulting correlation ($\underline{r} = -.21$, $\underline{N} = 96$, $\underline{p} < .01$) indicates that caregivers and their patients agree when the patient is having difficulty in dealing with their residential environment. Yet with the exception of those patients living in "approved homes" there is not a significant difference in general quality of life ratings by patients.

Support for the Oregon Quality of Life Theory

The major findings of this research are that the Oregon quality of life theory is supported in its contention that quality of life of the chronically mentally ill is affected by several key variables. These variables include needs satisfaction, perceived opportunities to satisfy their needs, satisfaction with performance, positive (but not negative) affect, and, to a lesser extent, patient abilities to cope with stress and to concentrate on tasks. Differences in perception of needs between caregivers and patients resulted in lowered quality of life but only in two domains (health care and everyday relationships with others) of the ten domains assessed. The expected relationships between patients' ability to deal with stress and/or maintenance of concentration and satisfaction with performances were weak at best. Unlike the theory's prediction, there was not a relationship between patients' ratings of the degree of contingent effort and quality of life.

Lehman (1988) believes quality of life theories can only be evaluated on three validity bases: face, construct and predictive validity. These represent three different views of the same issue and are not mutually exclusive.

As regards the construct validity of the Oregon theory a possible confound to the current results may come about due to the Oregon theory's ambiguity about the variables postulated to influence quality of life, and particularly, satisfaction with performance. The issue then is how to fairly determine the empirical relationships that adequately test the theory. For example, scales assessing difficulties with stress and concentration problems may have sampled the wrong estimators of the theory's notion of abilities needed to successfully meet needs.

The Oregon theory has been stated by its proponents (Bigelow et al., 1982) to include issues of affect, patient's abilities to deal with stress and concentration problems, and needs satisfaction. It does not seem likely that measures seeking to determine whether needs are being met, or asking about performance satisfaction, ability to deal with stress and concentration issues are incongruent for testing the theory's predictive and construct validity.

There are two levels at which the theory is supported by the present data. First, several but not all of the predictions made by the theory about which variables determine quality of life were supported. This suggests that modifications need to be made to the theory's presumptions about the variables determining quality of life but that the basic conceptualization of determinants of quality of life is supported in the main.

Second, at the heuristic level the theory was intended to help guide and hopefully clarify research in this confused and ill-defined area. The hypotheses drawn from the Oregon theory represent tests of needs satisfaction, patient characteristics (role of stress, concentration problems, positive and negative affect), and combinations of environmental situations and patient characteristics or behaviors (adaptation issues would include differences in perception between caregiver-patient and result on quality of life, whether contingent effort produces greater quality of life than non-contingent efforts at needs satisfaction).

Needs Basis

The Oregon quality of life theory is fundamentally needs-based in that it maintains that meeting needs is of paramount importance to satisfactory quality of life (New York State Office of Mental Health, 1980). Correlations of needs satisfaction and quality of life are generally in the .40 to .50 range and are statistically significant to the .01 or better level. Regression analyses were also conducted to determine the best predictors of Global and Semantic QOL. These analyses support the conclusion that, of all the variables included for test in this research, needs satisfaction is the strongest predictor of quality of life.

If meeting needs is centrally important to quality of life, the availability of opportunities to satisfy needs should, logically, also be of prime importance. There is confirmation of a strong relationship between opportunities to satisfy needs and quality of life (Hypothesis 1).

The Oregon theory is needs-driven but also assumes that individual patients' quality of life will be determined by more than whether their needs are met. It contends that the opportunity structures (for needs satisfaction) that exist will play a crucial role in determining quality of life. This then represents adaptation issues, in that patients' adaptation to their environment is predicted to be a determinant of quality of life.

It is inferred that caregiver-patient disagreements about the relative importance of needs will limit the chronically mentally ill patient's opportunities to satisfy those needs. Santiago, Berren, Beigel, Goldfinger and Hannah (1990) reported that greater differences between caregivers' and patients' perceptions of problems was positively and significantly correlated with likelihood to drop out of treatment.

This contention (Hypothesis 2) was only partly supported. Disagreements about which needs are most important did not significantly impact upon patient's quality of life except for domains of health care and everyday relations with others.

Lehman (1983b; 1982) has reported health care to be a particularly sensitive area for the chronically mentally ill as they rely on it for their continued community tenure. Baker and Douglas (1990), as well as Segal and Aviram (1978) have also reported on the influences of residential care (type and quality) on the willingness of more seriously ill patients to engage in externally (to the residence) integrative behaviors.

If it is assumed that health care accessability and programmatic initiatives intended to motivate the patient to interact with others are represented to patients by their caregivers, then confirmation of hypothesis two in these areas can be seen as confirmation of the theory's predictive validity regarding the need to include caregivers' expectations as well as patients' for issues dealing with their health and how much they interact routinely with others. The difficulty, of course, is the analysis is post hoc and may simply represent rationalization of the results.

Performance Basis

Hypotheses 3 and 7 deal with issues of the patients' satisfaction with their own performance as they attempt to meet their self-identified needs. Results from tests of hypothesis 3 indicated no difference occurred in quality of life as a function of the degree of effort on the part of the patient as they attempt to meet their needs. Data obtained from tests of hypothesis seven indicate that there is a strong relationship between patient's satisfaction with their performance and their quality of life.

These findings support the theory's assertion that personal appraisal of performance influences quality of life. However, it does not appear quality of life is dependent upon how hard the chronically mentally ill believe they must try to perform in order to meet their needs. They are influenced primarily by their opinions about their efforts at needs satisfaction rather than by how hard they believe themselves to be trying to meet those needs. Thus it is clear that both need and performance satisfaction are important contributors to perception of quality of life.

However, the data obtained in the present research do not clarify the relationship between the chronically mentally ill person's contingent effort and their satisfaction with their performances. There is no statistically significant relationship between the perception of trying harder and being more satisfied with performance.

The current findings could be a reflection of service practice rather than a refutation of the theory's prediction that degree of contingent effort should influence quality of life. As indicated previously, the chronically mentally ill are handicapped in meeting their needs and, thus require the assistance of others. At present, most of their needs are met non-contingently by the service system. The results obtained can be interpreted as supporting the premise that, for this population, the service system provides little or no incentive for the chronically mentally ill to apply themselves in pursuit of specific goals. A system that placed greater emphasis on patient effort and attached more contingencies might produce different results.

The above explanation may be more reasonable in some life domains than others, depending on the likelihood of "payoff" for efforts. In contrast to domains such as employment and health care, relations with family and with friends may be characterized by a higher likelihood of increased quality of life with increased patient effort.

However, even in these domains, higher quality of life contingent on patient effort was not observed. Therefore, any suggestion that Hypothesis 3 was not confirmed solely because of service system practices must be viewed with caution.

Patients' Characteristics

The Oregon theory posits patients' characteristics that influence quality of life. These include (a) cognitive and affective attributes and (b) skills for meeting performance requirements. There has been very little systematic research into the personal characteristics, other than psychopathology, that influence quality of life for the chronically mentally ill (Fabian, 1990). Several hypotheses derived from the theory are intended to help deal with this deficit for a population that has clearly defined problems that make it unlikely that their personal characteristics will not influence their quality of life.

Positive affect balance was assumed (Hypothesis 4) to be an important patient determinant of quality of life. The results show positive affect is positively correlated with performance satisfaction, which is, in turn, positively correlated with quality of life. Negative affect was not significantly correlated with performance satisfaction. (This is not surprising as Diener (1984) has summarized the literature demonstrating there is little correlation between the two subscales.) Thus this research suggests that for the chronically mentally ill, negative and positive affect seem specific in their effects and that "feeling bad" does not have much to do with patient's appraisals of their performances while "feeling good" is correlated with satisfaction with performance and is a likely positively contributing factor to greater quality of life.

Patient abilities for dealing with stress and concentration difficulties were also assumed (Hypothesis 5) to be necessary for successful performances. Stress resistance positively correlated with satisfaction with performance in dealing with family or friends, with others on an everyday basis, and personal safety. Concentration ability correlated positively only with dealing with family.

The chronically mentally ill require assistance in dealing with stress primarily to prevent a negative impact on these few life domains. The finding that stress impacts on more domains than concentration difficulties coincides with Lehman's (1988) conclusion that anxiety and depression affect quality of life to a much greater extent than do thought disorders. Without assistance in dealing with stress the chronically mentally ill are likely to not be as satisfied with their performances in the domains mentioned, and therefore experience lessened quality of life.

The predicted relationship between satisfaction with performance and quality of life was strongly confirmed for both global measures of quality of life and for nine of ten domains (Hypothesis 7). Although the current research failed to identify the determinants of satisfaction with performance, it is clear that a strong relationship exists between satisfaction with performance and quality of life.

Suggested Revisions to the Oregon Theory

Several aspects of the theory as it applies to the chronically mentally ill appear to require modification. First, the theory's assertion that needs satisfaction and performance contribute equally to quality of life is not supported by this research. There is a much clearer and stronger linkage between needs satisfaction and the factors impacting upon that satisfaction and quality of life than between quality of life and performance satisfaction.

The variables thought to influence satisfaction with performance require clarification. With reference to Figure 2, the patient's individual abilities coupled with the performance requirements associated with the role are predicted as the determinants of satisfaction with performance. Some of the variables thought to represent these categories have been explored in this research.

Positive affect is related to satisfaction with performance as is ability to deal with stress for several life domains. The ability to concentrate does not seem to have a clear relationship to satisfaction with performance except in the family matters domain. Patient's estimations of the effort required on their part had little to do with their satisfaction with their performances or their quality of life.

The relationship of abilities to successful performance may not be the same for the chronically mentally ill and other groups. Unlike most comparison populations, the chronically mentally ill are often positively reinforced for their inabilities. For example, they receive increased welfare rates contingent upon acknowledging their inability to ever work again. Also, the chronically mentally ill are often repeatedly told to accept their inability to deal with stress because they are mentally ill. Finally, they are often told that their mental illness is incurable and can be controlled only so long as they are compliant with instructions from treatment personnel.

Living under the threat that a remission of symptoms may suddenly cease or may only be intermittent could lead to a situation in which the chronically mentally ill come to believe their most salient personal characteristic is their illness. Moreover, their expectations regarding their abilities to perform may diminish correspondingly, producing, metaphorically speaking, a learned helplessness. Characteristics associated with independence and success in less disabled populations are likely to be less valued by a population reinforced for acknowledging disabilities. It is possible greater ability to cope with stress and to concentrate on tasks does not lead to greater needs satisfaction for this population and, therefore does not play as major a role in their quality of life.

The Oregon theory does need to be more specific about the influence of psychopathology on quality of life. The current research shows that psychopathology has some impact upon quality of life, but that the effect depends in part on the measure used to assess quality of life. Currently, the theory is too vague in this area and does not assist either researchers or clinicians to determine the most relevant aspects of psychopathology as it relates to quality of life.

Third, the theory needs to be improved in its representation of the societal and individual factors influencing quality of life. The theory does not adequately differentiate the multiple factors likely to influence the quality of life of the chronically mentally ill because of their specific and unique dependencies. These factors include the practices of the service system, the personality of the patient, the nature of his or her psychopathology, and the resources available through support systems.

The above perspective is represented in so-called adaptation theories of quality of life, which maintain that people's adaptation to their circumstance is of key importance to their quality of life (Franklin et al., 1986). Adaptation refers to performance of activities of daily living, enhancing self-esteem, and maintaining positive affect.

An adaptation framework suggests that satisfaction with performance is not the result of discrete indicators (e.g., affect balance, ability to deal with stress and concentration problems), but rather is the result of the individual's expectations regarding what needs to be accomplished in order for needs to be met. Therefore, adaptation theories can be seen as more idiosyncratic and psychological than the Oregon theory.

The Oregon theory only hints at adaptation. It includes aspects of performance and indirect opportunities for needs satisfaction. Most of its concepts, however, are vague and sociological (e.g., congruence of role-governed behavior), rather than psychological in nature. The current findings indicate the theory inadequately accounts for the relationship of psychological variables to satisfaction with performance.

The present research appears to support an adaptation approach to quality of life. Three classes of variables are probably important to quality of life, namely certain objective indicators, subjective indicators of well-being, and successful adaptation by the individual to his or her environment. Within each class of variable, it would be necessary to investigate the relative contribution of specific factors to quality of life. This approach could yield more accurate predictions of satisfaction with performance.

For example, Gutek et al. (1983) investigated cognitive factors (such as expectations) believed to be determinants of quality of life in the normal population. Similarly, Staats (1987) proposed hope as a measure that takes into account both cognition and affect. Degree of hope (or lack of it) would seem to be very appropriate for a population whose poverty, ill health, and dependence on others must strongly suggest to them the unlikely possibility of recovery. Thus, the amount of hope may play a very powerful role in the quality of life of the chronically mentally ill, and if it does not, that may be a telling indication about the system providing care.

While the chronically mentally ill are homogenous as regards characteristic symptoms, they are heterogeneous in their abilities to function adaptively in their environment. It would seem reasonable to assume that differences are likely to exist between members of this population as the basis of their hopes for realistic achievement of goals of successful adaptation.

Viability of the Quality of Life Construct

The present research supports conclusions previously reached that the vast majority of those diagnosed as chronically mentally ill can reliably report their quality of life by means of both global and domain-specific measures. The latter measures yield information that is more specific both temporally and in terms of situations encountered by the chronically mentally ill.

Hypotheses 1 and 7 bear directly on the construct validity of quality of life. The results from these hypotheses demonstrate a strong relationship between needs satisfaction and quality of life, and between satisfaction with performance and quality of life. Confirmation of these predicted relationships supports the conclusion that quality of life is a valid, useful construct.

It appears, however, that several variants of quality of life might be usefully conceptualized. There appear to be significant differences between the quality of life determined by asking people global questions about their satisfaction with their lives and asking them specific questions about their satisfaction with their residences and their family. Each type of question can be thought of as providing a different perspective of a unified construct of quality of life, or can be thought of as tapping different aspects of quality of life that is not unidimensional.

The current research basically supports Bigelow et. al. (1991) in their contention that quality of life is an accurate, economical and meaningful outcome indicator for the chronically mentally ill. Specific allowance for psychopathology must be made and multiple measures used in order to accurately assess the construct.

Suggestions for Changes to Services

It seems clear that both global and domain-specific quality of life outcome indicators should be routinely integrated into service planning and delivery for the chronically mentally ill. Several advantages to use of these outcome indicators were described in the earlier literature review. In addition, the more the mental health system explicitly emphasizes optimal quality of life as an important goal, the more the chronically mentally ill may be encouraged to cooperate with caregivers so patients' goals can be achieved.

Needs satisfaction and satisfaction with performance have been shown by the present research to be positively associated with the quality of life of the chronically mentally ill. The former variables should be assessed on an individual-case basis, with caregivers determining patients' beliefs about their needs and patients' concerns about what may interfere with their needs being satisfied. Caregivers should also assist patients to improve their performance and their self-esteem in this regard.

These suggestions are certainly not new conceptually. However, Lamb (1988) recently asserted that lack of individualization of service planning for the chronically mentally ill is endangering the entire deinstitutionalization movement. By this he means goals need to be set for each individual (as opposed to the bureaucracy running the service system) that are meaningful to the patient and take into account the individual's abilities and limitations.

The current research supports the utility of improvement of individualization. It indicates that patients can reliably and validly report their quality of life and that their quality of life will be improved if their needs are felt to be satisfied and that opportunities to perform satisfactorily are available. Satisfaction with their performances as they attempt to meet their needs is also an important determinant of quality of life but there is no necessity (in terms of quality of life improvement) for those performances to be considered challenging by the chronically mentally ill patient.

The results of the present research suggest that there is little justification for placing a continually greater emphasis on contingent effort by the chronically mentally ill in satisfying needs. Increased contingencies will not usually result in improved quality of life and may, given the difficulties the chronically mentally ill have with stress, contribute to decompensation and lessened quality of life. A judicious balance must be found between assisting patients to make realistic and meaningful efforts in their own behalf, and continually increasing contingent demands with the hope they will internalize a "motivation" to achieve ever increasing goals.

Separation of needs satisfaction from performance clarifies the requirement for programs to encourage mastery as well as needs satisfaction. Clinicians can view patient performance within the context of a desire for needs satisfaction, while patient ability to perform can be evaluated relative to the demands of the situation.

Most patients have little power to change the practices of the mental health system. Implementation of the above recommendations would mean greater emphasis on individualization of service planning, a greater array of services tailored to patient needs, and more time spent by caregivers with patients in order to determine hindrances to resource utilization. It would also mean empowerment of patients within the system regarding rights to high quality, individualized care.

Results of the current research suggest differences between caregivers and patients in perception of needs are most crucial in the areas of need for health care and external integration into the community. Overall, patients' perceptions of their needs are most important (compared with caregivers') to their quality of life. However, caregivers' estimations of needs in health care and attempts to have patients interact more routinely with others do have an impact on quality of life ratings in those domains. Awareness of, and sensitivity to this issue may forestall difficulties likely to occur with younger less stabilized chronic patients (Santiago et al., 1990).

Issues of whose definition of needs will be given primacy in matters of residency and degree of external integration are most likely to be problematic. These tend to be areas where mental health programs are most likely to have developed "standards" and these (plus the caregivers opinions) may be in conflict with patient's beliefs. Therefore, mental health systems need mechanisms through which disputes between caregivers and patients can be settled since Santiago et al. (1990) have reported a greater likelihood of " treatment resistance" under this circumstance.

Acceptance of the idea that quality of life ratings by the chronically mentally ill are valid should lead to acceptance of "tracking" the actions of caregivers and/or patients that influence quality of life within specific domains. This process could allow identification of behavior patterns likely to achieve specific goals associated with enhanced quality of life and therefore facilitate preparations for discharge from hospital.

Directions for Future Research

The theory's predicted relationship between satisfaction with performance and quality of life was well supported. However, the predicted interaction of patient characteristics and abilities in determining satisfaction with performance was not substantiated. Adaptation theories of quality of life suggest that adaptation, not patient characteristics and abilities, is crucial to satisfaction with performance. Further research could clarify which perspective is most correct.

Methodologically, more research would be useful in determining causal linkages as regards quality of life. The cross-sectional design used in the present research was helpful in determining which variables are associated with increased or decreased quality of life. A weakness of the design, however, is its inability to address issues of causality.

Staats (1986) investigation of hope as a construct which taps both affect and cognition could be extended to prediction of quality of life of the chronically mentally ill. Cognitive factors of expectations, comparisons with others and hope were not explored in this study but are undoubtedly related to people's feelings about the quality of their lives.

Finally, further research is required regarding programmatic opportunities associated with changes in quality of life. It seems reasonably clear that some characteristics that define the population impact quality of life but it is unclear which characteristics of programs (e.g., sheltered or competitive employment, integrated socialization programs) are most likely to be related to quality of life given specific patient characteristics.

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Appendix A

General Information Questionnaire

NOTE: The numbered brackets to the right of each page are for

OFFICE USE ONLY.

1 [ ] 2 [ ] 3 [ ]
4 [B]
5 [ ] 6 [ ] 7 [ ] 8 [ ]
9 [B]
10 [1]
11 [B]

GENERAL INFORMATION QUESTIONNAIRE

I.D. # ____________________

DATE: ____________________

INTRODUCTION:

We are interested in what your life is like, what you for from day-to-day, and how you feel about things. The following questions ask about different parts of your life. there are no right or wrong answers, so please relax and take your time in answering the questions.

If you require assistance in completing the form or have any questions, an interviewer will be present for this purpose.

THE INFORMATION IN THIS QUESTIONNAIRE IS FOR RESEARCH PURPOSES ONLY AND WILL BE KEPT CONFIDENTIAL.

SECTION A:

A 1. Sex: _____ Male _____ Female 12 [ ]

A 2. Date of Birth: ______/ ______/ ______ day month year 13 [ ] 14 [ ] 15 [ ] 16 [ ]

A 3. Age: __________ years 17 [ ] 18 [ ]

A 4. What is the highest grade you completed in school? (circle one)

	high school	college	grad. school
3 or less/ 4 5 6 7 8/	9 10 11 12/	13 14 15 16/	17 18 19 20

19 [ ] 20 [ ]

A 5. Place of Birth:
_____Alberta
_____Other Canadian Province
_____U.S.A.
_____Elsewhere (specify) ____________________

21 [ ]
22 [ ]
23 [ ]
24 [ ]

A 6. Race: __________

A 7. Are you currently: _____Employed _____Unemployed

A 8. If unemployed, how long have you been unemployed? ______________

A 9. Please indicate if attending any of the following programs:

__________ Work Rehabilitation program for the physically disabled
__________ Work rehabilitation program for the psychiatrically disabled
__________ Psychiatric Day Hospital
__________ Psychiatric Day Care (eg. Self-Help)

25 [ ]
26 [B]

Section B.

B 1. How do you feel about your life as a whole?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

27 [ ]

B 2. a) Has anything happened in the past month that has influenced how you feel about your life? (please specify) ______________________________ 28 [ ]

b) Where on the following scale would you put your life during the past month? (please circle)

Worst life I could expect to have	1	2	3	4	5	6	7	8	9	Best life I could expect to have

29 [ ]

c) Now, think about your life a year ago. Where on the scale would you put your life a year ago? (please circle)

Worst life I could expect to have	1	2	3	4	5	6	7	8	9	Best life I could expect to have

30 [ ]

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

Worst life I could expect to have	1	2	3	4	5	6	7	8	9	Best life I could expect to have

31 [ ]

32 [B]
33 [B]

SECTION C:

C 1. Which of the following most accurately describes your living circumstances? 34

______apartment or house with family or friend
______apartment or house on your own
______approved home
______group home
______lodgings
______hostel
______other (specify) ______________________________

C 2. In this accommodation do you share a room? _____ Yes _____ No
If so, with whom (eg. spouse, friend, children, etc.) ____________ 35 [ ]

C 3. How do you feel about your living arrangements? 36 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

C 4. How do you feel about the amount of time you spend there? 37 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

C 5. How do you feel about the food there? 38 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

<u>C 6</u>. How do you feel about the amount of influence you have in what goes on there?

39 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

<u>C 7</u>. How do you feel about the other people who live there?

40 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly	mixed	mostly	pleased	delighted

<u>c 8</u>. How do you feel about the privacy you have there?

41 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

<u>C 9</u>. How do you feel about the amount of freedom you have there?

42 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

C 10. How do you feel about the prospect of staying on there for a long period of time?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

43 [ ]

44 [B]
45 [B]

SECTION D:

In this section we require some information on your family background. Please keep in mind that the information you give us will be kept confidential.

D 1. Were you brought up by your natural parent(s)? _____ Yes _____ No 46 [ ]

If adopted or a foster child, the following questions apply to your adoptive or foster parents.
If you had an institutional upbringing, please tick and go to question D 9. ☐ 47 [ ]

D 2. Where was your mother born? (province/country)________________________ 48 [ ]

D 3. How far did your mother go in school? (If uncertain, give nearest guess).

	high school	college	grad.school
3 or less/ 4 5 6 7 8/ 9	10 11 12/	13 14 15 16/	17 18 19 20

49 [ ]

D 4. What was your mother's usual occupation while you were growing up?

______________________________ 50 [ ]

D 5. Where was your father born? (province/country) ____________________ 51 [ ]

D 6. How far did your father go in school? (If uncertain, give nearest guess).

high school / college / grad.school

3 or less/ 4 5 6 7 8/ 9 10 11 12/ 13 14 15 16/ 17 18 19 20 52 [ ]

D 7. What was your father's usual occupation while you were growing up?

____________________________________ 53 [ ]

D 8. While you were growing up, did you live with anyone other than your parents for longer than 6 months? 54 [ ]

If yes, continue with the following questions (D 8a. through D 8b.)

If no, go to question D 9.

D 8a. How long altogether did you live with them? 55 [ ]

- _____ 6 months to one year
- _____ more than a year, less than 3 years
- _____ 3 years to 5 years
- _____ over 5 years

D 8b. Which of the following would most accurately describe these living arrangements? (tick more than one if appropriate). 56 [ ] 57 [ ]

- _____ foster home
- _____ institution (eg. orphanage)
- _____ detention home
- _____ living in brother's or sister's home
- _____ living in other relative's home (eg. grandparents, uncles or aunts cousins, etc.)

58 [B]

D 9. What is your current marital status? 59 [ ]

- _____ single
- _____ married or common-law
- _____ separated
- _____ divorced
- _____ widowed

D 10. Do you have any children? _____ Yes _____ No 60 [ ]

If yes, please answer D 10a. and D 10b.

If no, go to question D 11.

D 10a. Please indicate how many of your children are:

- from previous relationships _____ (specify number) 61 [ ] 62 [ ]
- step-children _____ 63 [ ] 64 [ ]
- adopted _____ 65 [ ] 66 [ ]
- from current spouse _____ 67 [ ] 68 [ ]

D10b. Are your children:

	Number of children	Do they live with you?				
				69	70	71
-pre-school age	_____________	_____Yes	_____No	[ ]	[ ]	[ ]
-school age	_____________	_____Yes	_____No	72 [ ]	73 [ ]	74 [ ]
-working	_____________	_____Yes	_____No	75 [ ]	76 [ ]	77 [ ]

D 11. Do you have relatives living in your area? _____Yes _____No 78 [ ]

D 12. Not including the relatives you live with, how often do you get together with a member of your family? 79 [ ]

_____ About once a day or more
_____ At least once a week, but less than daily
_____ At least once a month, but less than weekly
_____ Less than once a month, but at least once a year
_____ Not at all in the past year
_____ Does not apply - no living relatives

D 13. How often do you talk to a member of your family on the telephone (not including the relatives you live with)? 80 [ ]

_______ About once a day or more

_______ At least once a week, but less than daily

_______ At least once a month, but less than weekly

_______ Less than once a month, but at least once a year 1 [ ] 2 [ ] 3 [ ]

_______ Not at all in the past year 4 [B]

_______ Does not apply - no living relatives 5 [2]

6 [B]

D 14. How often do you have contact with a member of your family through the mail? 7 [ ]

_______ About once a day or more
_______ At least once a week, but less than daily
_______ At least once a month, but less than weekly
_______ Less than once a month, but at least once a year
_______ Not at all in the past year
_______ Does not apply - no living relatives

D 15. If no living relatives or family, go to <u>Section E</u>. If you have family, please continue with questions <u>D 15a</u>. through <u>D 15e</u>.

<u>D 15a</u>. How do you feel about your family in general?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

8 [ ]

<u>D 15b</u>. How do you feel about the amount of time you spend with your family?

☐	☐	☐	☐	☐	☐	☐	9 [ ]
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted	

<u>D 15c</u>. How do you feel about how often you have contact with your family.... like by telephone or in letters?

☐	☐	☐	☐	☐	☐	☐	10 [ ]
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted	

<u>D 15d</u>. How do you feel about the way you and your family act toward each other?

☐	☐	☐	☐	☐	☐	☐	11 [ ]
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted	

D 15e. How do you feel about the way things are in general between you and your family?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

12
[ ]
13
[B]
14
[ ]

SECTION E. The questions in this section are about other people in your life, NOT people in your family.

E 1. About how often do you do the following things?

		about daily	about weekly	about monthly	less than monthly	never	
a.	Join with others to play cards, games, or some other activity?	☐	☐	☐	☐	☐	15 [ ]
b.	Try to make friends with	☐	☐	☐	☐	☐	16 [ ]
c.	Sit and talk with friends?	☐	☐	☐	☐	☐	17 [ ]
d.	Talk to new people?	☐	☐	☐	☐	☐	18 [ ]
e.	Telephone someone (eg. friend or acquaintance)?	☐	☐	☐	☐	☐	19 [ ]
f.	Write a letter to someone?	☐	☐	☐	☐	☐	20 [ ]
g.	Do something with another person that is planned ahead of time?	☐	☐	☐	☐	☐	21 [ ]
h.	Spend time with someone you consider more than a friend (eg. boyfriend, girlfriend, "best friend")?	☐	☐	☐	☐	☐	22 [ ]

E 2. Do you have any close friends? _____ Yes _____ No 23 [ ]

If yes, please answer questions E 2a. and E 2b.

If no, what explanation do you have for this? ______________________ 24 [ ] 25 [ ]

____

(go to question E 3)

E 2a. Are these close friends from your place of occupation? _____ Yes _____ No 26 [ ]

E 2b. About how often do you do things with any of these close friends? 27 [ ]

_____ about daily
_____ about weekly, less than daily
_____ about monthly, less than weekly
_____ less than monthly, but at least once a year
_____ not at all in the past year

E 3. How do you feel about the things you do with other people? 28 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

E 4. How do you feel about the amount of time you spend with other people? 29 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

E 5. How do you feel about the people you see socially?

☐	☐	☐	☐	☐	☐	☐	30
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted	[ ]

E 6. How do you feel about how you get along with other people in general?

☐	☐	☐	☐	☐	☐	☐	31
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted	[ ]

E 7. How do you feel about the chance you have to know people with whom you can really feel comfortable?

☐	☐	☐	☐	☐	☐	☐	32
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted	[ ]

E 8. How do you feel about the amount of friendship in your life?

☐	☐	☐	☐	☐	☐	☐	33 [ ]
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted	

E9. How do you feel about the amount of love in your life?

☐	☐	☐	☐	☐	☐	☐	34 [ ]
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted	

E 10. How do you feel about your sex life?

☐	☐	☐	☐	☐	☐	☐	35 [ ]
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted	36 [B] 37 [B]

SECTION F. The following questions are about some of the things you do with your time.

F 1. Which of the things listed below have you done during the past week?

No	Yes on own	Yes with others		
______	______	______	1. went for a walk	38 [ ]
______	______	______	2. went to a movie or play	39 [ ]
______	______	______	3. watched TV	40 [ ]
______	______	______	4. went shopping	41 [ ]
______	______	______	5. went to a restaurant or coffee shop	42 [ ]
______	______	______	6. went to a bar	43 [ ]
______	______	______	7. read a book, magazine, or newspaper	44 [ ]
______	______	______	8. listened to a radio	45 [ ]
______	______	______	9. played cards	46 [ ]
______	______	______	10. went for a ride in a bus or car	47 [ ]
______	______	______	11. prepared a meal	48 [ ]
______	______	______	12. worked on a hobby	49 [ ]
______	______	______	13. played a sport	50 [ ]
______	______	______	14. went to a meeting of some organization or social group	51 [ ]
______	______	______	15. went to a park	52 [ ]
______	______	______	16. went to a library	53 [ ]

F 2. How do you feel about the way you spend your spare time?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

54 [ ]

F 3. How do you feel about the amount of time you have to do the things you want to do?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

55 [ ]

F 4. How do you feel about the amount of time you have?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

56 [ ]

<u>F 5</u>. How do you feel about the amount of relaxation in your life?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

57
[ ]

<u>F 6</u>. How do you feel about the chance you have to enjoy pleasant or beautiful things?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

58
[ ]

<u>F 7</u>. How do you feel about the pleasures you get from the TV or radio?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

59
[ ]

60
[B]
61
[B]

SECTION G. This section deals with employment and schooling.

G 1. Do you have a paying job now? _____ Yes _____ No 62 [ ]

If yes, please answer questions G 1a. through G 1k.

If no, go to question G 2.

G 1a. How many hours a week do you work for pay? _____ hours. 63 [ ] 64 [ ]

G 1b. What is your present job? (describe)_____________________ 65 [ ] 66 [ ]

G 1c. What is your income range per year? 67 [ ] 68 [ ]

_____ $ 0 - $ 5,000
_____ 5,000 - 10,000
_____ 10,000 - 15,000
_____ 15,000 - 20,000
_____ 20,000 - 25,000
_____ 25,000 - 30,000
_____ 30,000 - 35,000
_____ $35,000 - $40,000
_____ 40,000 - 45.000
_____ 45,000 - 50,000
_____ 50,000 - 55,000
_____ 55,000 - 60,000
_____ 60,000 and over

G 1d. Are you currently looking for another job? _____ Yes _____ No 69 [ ]

G 1e. How do you feel about your job? 70 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

__G 1f__. How do you feel about the people you work with?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

71 [ ]

__G 1g__. How do you feel about what it is like where your work ... the physical surroundings?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

72 [ ]

__G 1h__. How do you feel about the number of hours you work?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

73 [ ]

<u>G 1i</u>. How do you feel about the amount of money you get paid?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

74
[ ]

<u>G 1j</u>. <u>IF</u> you were unemployed, how do you <u>think</u> you would feel (or did you feel) about the lack of work in your life?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

75
[ ]

<u>G 1k</u>. <u>IF</u> you were unemployed, how do you <u>think</u> you would feel (or did feel) about being unemployed?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

76
[ ]

GO TO QUESTION <u>G3</u>.

G 2. If you are currently employed, were you unemployed one year ago?

_____ Yes _____ No

77
[ ]

G 2a. If yes, how did you feel about being unemployed at that time?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

78
[ ]

G 2b. How do you feel about being unemployed now?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

79
[ ]

G 2c. Given that unemployment rates are much higher now, how do you feel about being unemployed now as compared to how you would have felt a year ago?

[ ]	[ ]	[ ]	[ ]	[ ]
much better	a little better	no change	a little worse	much worse

80
[ ]

1	2	3
[ ]	[ ]	[ ]
4	5	6
[B]	[3]	[B]
	7	8
	[ ]	[ ]

G 2d. If you indicated a change in attitude over the past year, please specify what you think the reason is for this change. ______________________

____

G 2e. Are you currently looking for work? _____ Yes _____ No

9
[ ]

G 2f. How do you feel about not working, given your present life...that is, the amount of money you have and the way you live?

☐	☐	☐	☐	☐	☐	☐	10 [ ]
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted	

G 2g. How did you feel about your last job?

☐	☐	☐	☐	☐	☐	☐	11 [ ]
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted	

G 2h. How <u>did</u> you feel about the people you last worked with?

☐	☐	☐	☐	☐	☐	☐	12 [ ]
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted	

G 2i. How *did* you feel about what it was like where you worked...that is the physical surroundings?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

13
[ ]

G 2j. How *did* you feel about the number of hours you worked?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

14
[ ]

G 2k. How *did* you feel about the amount of money you got paid?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

15
[ ]

G 3. Have you spent any time at a vocational rehabilitation center, sheltered workshop, Day Hospital, Employment Preparation Center, or someplace where you get help about work during the past 6 months?

_____ Yes _____ No 16 [ ]

If yes, please answer question G 3a. through G 3k.

If no, go to question G 4.

We are interested in your experience at the above mentioned facility and the following questions refer to the time you are spending there now, OR if you are no longer there, please answer the questions as to how you felt when you were there.

G 3a. How many hours a week do you spend there? __________ hours 17 [ ] 18 [ ]

G 3b. How long have you been occupied in this way? ______________ 19 [ ] 20 [ ] 21 [ ]

G 3c. How do you feel about the way you spend your working day? 22 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

G 3d. How do you feel about the food there? 23 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

G 3e. How do you feel about the rules there?

☐	☐	☐	☐	☐	☐	☐	24
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted	[ ]

G 3f. How do you feel about the amount of influence you have in what goes on there?

☐	☐	☐	☐	☐	☐	☐	25
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted	[ ]

G 3g. How do you feel about the staff there?

☐	☐	☐	☐	☐	☐	☐	26
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted	[ ]

G 3h. How do you feel about the other people that go there?

☐	☐	☐	☐	☐	☐	☐	27
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted	[ ]

<u>G 3i</u>. How do you feel about the amount of intrusion into your private life there?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

28 [ ]

<u>G 3j</u>. How do you feel about the amount of freedom you have there?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

29 [ ]

<u>G 3k</u>. How would you feel about the prospect of staying on there for a long period of time?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

30 [ ]

<u>G 4</u>. Have you been a student during the past year? _____ Yes _____ No 31 [ ]
If yes, please answer questions <u>G 4a</u>. through <u>G 4c</u>.

If no, go to <u>SECTION H</u>.

G 4a. At what level was the schooling? 32 [ ]

_____ high school
_____ college
_____ graduate school
_____ vocational school
_____ other (specify)

G 4b. Are (did) you carrying a full-time load of studies? _____ Yes _____ No 33 [ ]

G 4c. Are you attending regularly now? _____ Yes _____ No 34 [ ]

SECTION H: 35 [B]

H 1. How important was religion in your life when you were growing up? 36 [B] 37 [ ]

_____ extremely important
_____ very important
_____ somewhat important
_____ not very important
_____ not at all important

H 2. What was your religion while growing up? 38 [ ]

_____ Protestant
_____ Roman Catholic
_____ Jewish
_____ Other (Specify) _______________
_____ None

H 3. What is your religion now? _______________ 39 [ ]

H 4. How important is religion now in your life? 40 [ ]

_____ extremely important
_____ somewhat important
_____ not very important
_____ not at all important

H 5. How often do you attend religious services?

41 [ ]

______ daily
______ weekly
______ monthly
______ at least once during the past year
______ not at all during the past year
______ never

H 6. How often do you participate in organized activities associated with your religion, other than religious services? (eg. club activities, socials).

43 [ ]

______ daily
______ weekly
______ monthly
______ at least once during the past year
______ not at all during the past year
______ never

H 7. How do you feel about the amount of religion in your life?

43 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

H 8. How do you feel about your religious faith?

44 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

H 9. How do you feel about the religious fulfilment in your life?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

45 [ ]

H 10. How do you feel about the amount of satisfaction you get from religion?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

46 [ ]
47 [B]
48 [B]

SECTION I: The following questions are about finances.

I 1. In the past 6 months have you had any money from the following sources?

Yes	No		
______	______	a. Wages or salaries, pay for work	49 [ ]
______	______	b. Disability payments (compensation, VA, etc.)	50 [ ]
______	______	c. Unemployment Insurance	51 [ ]
______	______	d. Social Assistance	52 [ ]
______	______	e. Family/friends	53 [ ]
______	______	f. Other (specify) ____________________	

I 2. How much money do you receive each month from all sources?

54
[ ]

55 56
[ ] [ ]

______ $ 0 - $ 300.
______ 300 - 600.
______ 600 - 900
______ 900 - 1,200
______ 1,200 - 1,500
______ 1,500 - 1,800
______ $1,800 - $2,100.
______ 2,100 - 2,400
______ 2,400 - 2,700
______ 2,700 - 3,000
______ 3,000 and over

I 3. About how much money do you have to spend on yourself each month, <u>not counting money for room and meals</u>?

57
[ ]

______ less than $25.
______ $ 25. - $ 50.
______ 50. - 100.
______ 100. - 150.
______ 150. - 200.
______ 200. - 250.
______ 250 and over

I 4. How do you feel about the total amount of money you get?

58
[ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

I 5. How do you feel about what you have to pay for basic necessities such as food, housing, and clothes?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

59
[ ]

I 6. How do you feel about how comfortable and well-off you are financially?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

60
[ ]

I 7. How do you feel about how much money you have to spend for fun?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

61
[ ]
62
[B]
63
[B]

SECTION J.

J 1. Have you been arrested during the past year? _____ Yes _____ No — 64 [ ]

If yes, can you describe briefly what happened? ____________________

____________________ — 65 [ ] 66 [ ]

J 2. Have you been accused of a crime during the past year? _____ Yes _____ No — 67 [ ]

If yes, what were the charges? ____________________ — 68 [ ] 69 [ ]

J 3. Have you gone to jail during the pat year? _____ Yes _____ No — 70 [ ]

J 4. Have you been a victim of physical assault or sexual assault during the past year? _____ Yes _____ No (If no, go to question J 5) — 71 [ ]

If yes, can you describe what happened? ____________________

____________________ — 72 [ ] 73 [ ]

J 4a. Where did this occur? — 74 [ ]

_____ at work
_____ at home
_____ on the street
_____ elsewhere (specify) ____________________

J 4b. Who assaulted you? — 75 [ ]

_____ Person living in the same residence (specify) ____________________
_____ Person from your place of daily occupation
_____ Other person known to you (specify) ____________________
_____ Other person unknown to you

J 4c. At what time of day did the assault take place? — 76 [ ]

_____ 8 a.m. to 4 p.m. _____ 4 p.m. to midnight
_____ midnight to 8 a.m.

J 4d. Were you injured so that you required medical care? _____ Yes _____ No — 77 [ ]

J 4e. Were you hospitalized for your injuries? _____ Yes _____ No 78 [ ]

J 4f. Did you report this crime to anyone? _____ Yes (specify) _____________ 79 [ ] 80 [B]

_____ No 1 [ ] 2 [ ] 3 [ ]

J 5. During the past year have you been robbed? _____ Yes _____ No 4 [B] 5 [4] 6 [B]

If no, go to question J 6. 7 [ ]

If yes, can you describe what happened? ______________________________ 8 [ ] 9 [ ]

____

J 5a. Where did this occur? 10 [ ]

_____ at home
_____ at work
_____ on the street
_____ elsewhere (specify) ______________________

J 5b. Who robbed you? 11 [ ]

_____ another resident at your home
_____ a person from your place of occupation
_____ other person known to yourself (specify) _____________
_____ other person unknown to you

J 5c. What was stolen? (be specific) ____________________ 12 [ ] 13 [ ] 14 [ ] 15 [ ]

J 5d. Did you report this crime? _____ Yes (to whom?) _____________ 16 [ ]

_____ No

J 6. Do you know how to contact a lawyer if you need one? 17 [ ]

_____ Yes, definitely
_____ Yes, probably
_____ Not sure
_____ Probably not
_____ Definitely not

J 7. Would you be able to arrange for payment of the lawyer? 18 [ ]

_____ Yes, definitely
_____ Yes, probably
_____ Not sure
_____ Probably not
_____ Probably not
_____ Definitely not

J 8. How do you feel about your personal safety? 19 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

J 9. How do you feel about how safe you are on the streets in this city? 20 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

J 10. How do you feel about how safe you are at your place of occupation? 21 [ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

J 11. How do you feel about the protection you have against being robbed or attacked?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

22
[ ]

J 12. How do you feel about your chance of finding a policeman if you need one?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

23
[ ]
24
[B]
25
[B]

SECTION K:

K 1. In general what would you say your health was like?

_____ Excellent
_____ Good
_____ Fair
_____ Poor

26
[ ]

K 2. During the past year, have any of the following things occurred?

Yes	No	
_____	_____	a. Did you see a doctor for a physical illness?
_____	_____	b. Have you been in a hospital for a physical illness?
_____	_____	c. Have you been prescribed any medication for a physical illness?
_____	_____	d. Have you had an operation?

27
[ ]
28
29
[ ]
30
[ ]

K 3. If you were physically ill, would you know how to contact a doctor?

_____ Yes, definitely
_____ Yes, probably
_____ Definitely not
_____ Probably not
_____ Not sure

31 [ ]

K 4. Would you be able to arrange for payment of the doctor?

_____ Yes definitely
_____ Yes, probably
_____ Definitely not
_____ Probably not
_____ Not sure

32 [ ]

K 5. Would you be able to get to and from the doctor's office or clinic?

_____ Yes, definitely
_____ Yes, probably
_____ Not sure
_____ Probably not

33 [ ]

K 6. Do you have a long-standing or permanent physical disability(s)?

_____ No _____ Yes (specify) ____________________ 34 [ ]

If yes, how long ago did this disability develop? ________________ 35 [ ] 36 [ ]

K 7. Have you ever been treated at a psychiatric unit in a hospital?

_____ Yes _____ No 37 [ ]

If yes, how old were you when you first had contact with psychiatric services?____________________ 38 [ ] 39 [ ]

K 8. During the past year, have any of the following things occurred?

Yes	No		
_____	_____	Have you received professional help for an emotional or behavioral problem...seen someone like a psychiatrist, psychologist, social worker, or counsellor?	40 [ ]
_____	_____	Have you seen any professional on a regular basis for counselling or talking therapy (psychotherapy)?	41 [ ]
_____	_____	Have you been prescribed any medication for emotional problems?	42 [ ]
_____	_____	During the past year, have you been to a hospital emergency room or crisis clinic for emotional problems?	43 [ ]
_____	_____	During the past year, have you been admitted to a psychiatric hospital or general hospital for psychiatric reasons?	44 [ ]

K 9. If you needed help for an emotional or mental problem, would you know how to contact a professional person for this, like a psychiatrist, psychologist, social worker, or counsellor?

45
[ ]

_____ Yes, definitely
_____ Yes, probably
_____ Not sure
_____ Probably not

K 10. Would you be able to arrange payment for this kind of help with emotional problems?

46
[ ]

_____ Yes, definitely
_____ Yes, probably
_____ Not sure
_____ Probably not
_____ Definitely not

K 11. Would you be able to get to and from the office or clinic where you would get this help?

47
[ ]

______ Yes, definitely
______ Yes, probably
______ Not sure
______ Probably not
______ Definitely not

K 12. How do you feel about your health in general?

48
[ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

K 13. How do you feel about the medical care available to you if you need it?

49
[ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

K 14. How do you feel about how often you see a doctor?

50
[ ]

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

<u>K 15</u>. How do you feel about the chance you have to talk with a therapist about your thoughts and feelings when you want to?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

51
[ ]

<u>K 16</u>. How do you feel about your physical condition?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

52
[ ]

<u>K 17</u>. How do you feel about your emotional well-being?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed	mostly satisfied	pleased	delighted

53
[ ]
54
[B]
55
[B]

SECTION L.

<u>L 1</u>. How do you feel about your life as a whole?

☐	☐	☐	☐	☐	☐	☐
terrible	unhappy	mostly dissatisfied	mixed (equally satisfied and dissatisfied)	mostly satisfied	pleased	delighted

56
[ ]

L 2. Which box for each pair of words best describes what you think about your life in general?

	1	2	3	4	5	6	7		
boring	☐	☐	☐	☐	☐	☐	☐	interesting	57 [ ]
enjoyable	☐	☐	☐	☐	☐	☐	☐	miserable	58 [ ]
useless	☐	☐	☐	☐	☐	☐	☐	worthwhile	59 [ ]
full	☐	☐	☐	☐	☐	☐	☐	empty	60 [ ]
discouraging	☐	☐	☐	☐	☐	☐	☐	hopeful	61 [ ]
disappointing	☐	☐	☐	☐	☐	☐	☐	rewarding	62 [ ]
brings out the best in me	☐	☐	☐	☐	☐	☐	☐	doesn't give me much chance	63 [ ]

64
[B]
65
[B]

SECTION M:

M 1. Can you think of any 2 things, no matter how big or small that have made you feel good during the past week?

1. ____

2. ____

66 [ ] 67 [ ] 68 [ ] 69 [ ]

<u>M 2</u>. Can you think of any 2 things, again no matter how big or small, that have made you feel unhappy during the past week?

1. ____________________

2. ____________________

70	71	72	73
[ ]	[ ]	[ ]	[ ]

<u>M 3</u>. Can you think of one thing you would like to change in your life... something that would make your life better?

1. ____________________

____

74	75	76	77
[ ]	[ ]	[ ]	[ ]

THANK YOU FOR YOUR COOPERATION IN COMPLETING THIS QUESTIONNAIRE.

Appendix B

Personalized Letter of Introduction for Research

REFERRAL LETTER

I am conducting research intended to clarify the factors determining the chronically mentally ill persons ratings of happiness and satisfaction while living in the community. The study is being conducted as a part of my Ph.D. program at the University of Manitoba and has been approved by the appropriate Ethics Committees of the institutions participating in the study.

This letter is sent with the hope that you may be able to refer (or facilitate referrals of) individuals you think should be in the study's population. Please excuse the impersonal nature of this letter but until nominations for participants are received the audience for this letter will remain unknown.

The information sheet that is attached will provide specific guidelines that may be of use as you decide whether to participate (or whether you have appropriate participants).

I'd be pleased to discuss further details of the research with you or those you consider most appropriate. My hope is that you will be able to refer either patients or their caregivers.

Sincerely,

Mark Dimirsky, M.Sc.
Psychologist

Attachments: Detail sheets and inclusion criteria

BRIEF DETAIL SHEET: QUALITY OF LIFE STUDY

Purpose of the Study

Ratings of happiness and satisfaction are commonly found as the psychological equivalents of the term quality of life, a term that has been used in a confusing number of ways. Despite both its ideological and clinical important, little research has been done about the determinants of chronic mental patient's ratings of their quality of life. The Oregon quality of life theory predicts variables thought to determine quality of life ratings. Standardized scales will be used to assess the dependent variable, quality of life, as well as the independent variables (needs satisfaction and performance satisfaction, as perceived by the patient). Using a passive observation design and regression and path analyses, eight hypotheses drawn from the Theory will be tested. The research also addresses questions of the reliability of patient ratings and the relative importance of the variety of factors predicted to contribute to the ratings.

Time Required of Participants

Interviews with patients will usually take between 45 and 60 minutes. One interview with the caregivers of patients will be necessary. The time to be spent in this interview should be less than 30 minutes.

Inclusion Criteria

The criteria for including people in the population are important. All three that are listed below must be satisfied.

1. Diagnosis within last five years of schizophrenia, recurrent depressive or manic-depressive disorders, paranoid and other psychoses; and
2. A history of hospitalization and/or treatment within the mental health system for the past two years (consecutively); and

3. Major difficulties (in the opinion of the caregivers) in the patient's functional capacities in at least three of the following areas of life:
    - A. Personal hygiene and self-care
    - B. Self-direction
    - C. Interpersonal relationships
    - D. Social transactions
    - E. Learning
    - F. Recreation
    - G. Economic self-sufficiency

    (A rating scale is provided to assist in this determination).

Procedures

Separate interviews with the caregiver of the patient and patient will occur. Data will be collected through the interview plus a file check for confirmation of eligibility for inclusion.

Feedback

Results of the study will be communicated to all participants within three months of the termination of the study. Results of individual rating scales will be available to patients, and with their permission, the caregiver.

Qualifications of Principal Investigator

Registered psychologist who has practised in Alberta for four years.

Appendix C

Consent Form for Participation of Caregiver

CONSENT TO PARTICIPATE: CAREGIVERS

1, ______________________________, understand that I am being asked to participate in a research study. The study is intended to clarify which factors contribute to the chronically mentally ill individual's ratings of their quality of life. Further, I understand that data will be presented in a fashion that precludes individual identification. I understand that no direct benefit will occur as a result of my participation in the study.

I agree to participate in the study and understand the purpose of the study.

Caregiver: ______________________________

Witness: ______________________________

Date: ______________________________

Appendix D

Consent Form for Participation of Patient

CONSENT TO PARTICIPATE

I, ________________________, understand that I am being asked to participate in a research study. The purpose is to investigate the factors through to help determine each person's ratings of their quality of life. There will not be any changes to my program either because of participating (or not participating) in this study. Further, I understand that the answers I give to the interviewer will not be released to anyone outside of the study unless I have given my permission, or the information is presented in a manner that prevents any individual's identification.

I agree to participate in the study and understand the purpose of the study.

Participant: ___________________________

Witness: ___________________________ Date: _______________

CONSENT TO RELEASE INFORMATION

I, ____________________, give permission for the release of information obtained during my participation in the Quality of Life study. This information may be released to ____________________ within three months of the time the information becomes available. Feedback will also be provided to me regarding my answers and, the findings of the study. I also agree to allow the researcher access to my medical record for purpose of confirming information received verbally.

Participant: ___________________________

Witness: ___________________________ Date: _______________

Interview #:

Appendix E

Importance of Needs: Caregiver's and Patient's Forms

IMPORTANCE OF NEEDS: CAREGIVER'S ESTIMATES

Caregiver's Name: ______________________________ Date: ________________

Patient's Name: ______________________________

Below is a list of needs found to be of concern to many chronically mentally ill people. We're interested in your particular perception of your patient's needs. Please note that ratings (rather than rankings) are asked for so you may rate more than one need with the same rating of importance. The ratings should represent your point of view about your patient's needs and not what you think he or she will say their needs are. Thank you for your co-operation.

RATING OF IMPORTANCE
CIRCLE ONLY ONE NUMBER FOR EACH AREA

LIFE AREAS:	Most Important									Least Important
Relationships with family	1	2	3	4	5	6	7	8	9	10
Relationships with friends	1	2	3	4	5	6	7	8	9	10
Relationships with neighbours, others	1	2	3	4	5	6	7	8	9	10
Work or other productive use of time	1	2	3	4	5	6	7	8	9	10
Health	1	2	3	4	5	6	7	8	9	10
Living situation	1	2	3	4	5	6	7	8	9	10
Personal safety	1	2	3	4	5	6	7	8	9	10
Health care received	1	2	3	4	5	6	7	8	9	10
Economic/Financial situation	1	2	3	4	5	6	7	8	9	10
Use of leisure/recreational time	1	2	3	4	5	6	7	8	9	10

PLEASE MAKE SURE YOU HAVE CIRCLED ONLY ONE NUMBER PER LINE.

IMPORTANCE OF NEEDS: PATIENT'S ESTIMATES

Below is a list of several needs. Please circle the number 1 to indicate it is a very important need for you now, the 2 is next most important, a 3 is for a need that is less important to you now than needs you gave a one or two. A rating of 9 or 10 should be given for those needs that aren't very important to you -- not how well your needs are being met right now. In short, how important the topic is, not how satisfied you are with it.

RATING OF IMPORTANCE

CIRCLE ONLY ONE NUMBER FOR EACH AREA

LIFE AREAS:	Most Important									Least Important
Relationships with family	1	2	3	4	5	6	7	8	9	10
Relationships with friends	1	2	3	4	5	6	7	8	9	10
Relationships with neighbours, others	1	2	3	4	5	6	7	8	9	10
Work or other productive use of time	1	2	3	4	5	6	7	8	9	10
Health	1	2	3	4	5	6	7	8	9	10
Living situation	1	2	3	4	5	6	7	8	9	10
Personal safety	1	2	3	4	5	6	7	8	9	10
Health care received	1	2	3	4	5	6	7	8	9	10
Economic/Financial situation	1	2	3	4	5	6	7	8	9	10
Use of leisure/recreational time	1	2	3	4	5	6	7	8	9	10

PLEASE MAKE SURE YOU HAVE CIRCLED ONLY ONE NUMBER PER LINE.

Appendix F

<u>Needs Satisfaction Rating Form</u>

NEEDS SATISFACTION

This chart asks for your rating of the satisfaction of your needs in each of the life areas listed. Here we are interested in how satisfied you are with your relationships with your family, friends, the health care you receive, where you live, etc. Mark the answer that is most true of how well your needs are being met. Your choices range from "Not at all" to "Very well".

HOW WELL DO YOU FEEL YOUR NEEDS ARE BEING MET?
CIRCLE ONLY ONE NUMBER FOR EACH AREA

LIFE AREAS:	Not At All	Poorly	Neither Well Nor Poorly	Well	Very Well
Relationships with family	0	1	2	3	4
Relationships with friends	0	1	2	3	4
Relationships with others	0	1	2	3	4
Work or other productive use of time	0	1	2	3	4
Your health	0	1	2	3	4
Your living situation	0	1	2	3	4
Personal safety	0	1	2	3	4
The health care you receive	0	1	2	3	4
Your economic situation	0	1	2	3	4
Use of leisure/recreational time	0	1	2	3	4

PLEASE MAKE SURE YOU HAVE CIRCLED ONLY ONE NUMBER PER LINE.

Appendix G

Opportunities to Satisfy Needs Rating Form

OPPORTUNITIES TO SATISFY NEEDS

We are interested in finding out your feelings about the opportunities you have to satisfy your needs. Please keep in mind the distinction between how well your needs are being met and the opportunities you have to meet those needs. For example, you might have the opportunity to see your family but, for one reason or the other, don't actually see them. In that situation you would rate the question on opportunities to deal with family as high.

RATINGS OF YOUR OPPORTUNITIES TO MEET YOUR NEEDS
CIRCLE ONLY ONE NUMBER FOR EACH AREA

THE CHANCES YOU HAVE TO IMPROVE YOUR:	No Opportunity	Hardly Ever	Some, but not often	Often	Very Often
Relationships with family	0	1	2	3	4
Relationships with friends	0	1	2	3	4
Relationships with others	0	1	2	3	4
Work or other productive use of time	0	1	2	3	4
Your health	0	1	2	3	4
Your living situation	0	1	2	3	4
Personal safety	0	1	2	3	4
The health care you receive	0	1	2	3	4
Your economic situation	0	1	2	3	4
Use of leisure/recreational time	0	1	2	3	4

PLEASE MAKE SURE YOU HAVE CIRCLED ONLY ONE NUMBER PER LINE.

Appendix H

Effort Required to Satisfy Needs Rating Form

EFFORT REQUIRED TO OBTAIN SATISFACTION OF NEEDS

Sometimes our needs are met without much effort on our part. In other situations, we have to put out a great deal of energy in order to satisfy our needs. This might be because of difficulties raised by others or may be due to our own problems. Please answer each question about the amount of effort you must put out in order to get your needs met. If the amount of effort varies then put down what you think is most characteristic.

	AMOUNT OF EFFORT REQUIRED TO MEET NEED CIRCLE ONLY ONE NUMBER FOR EACH AREA				
EFFORT NEEDED TO IMPROVE:	Very little/ Hardly Ever	Usually Not	Not often or much	Some-times	Often/A Great Deal
Relationships with family	1	2	3	4	5
Relationships with friends	1	2	3	4	5
Relationships with others	1	2	3	4	5
Work or other productive use of time	1	2	3	4	5
Your health	1	2	3	4	5
Your living situation	1	2	3	4	5
Personal safety	1	2	3	4	5
The health care you receive	1	2	3	4	5
Your economic situation	1	2	3	4	5
Use of leisure/recreational time	1	2	3	4	5

PLEASE MAKE SURE YOU HAVE CIRCLED ONLY ONE NUMBER PER LINE.

Appendix I

<u>Satisfaction With Performance Rating Form</u>

SATISFACTION WITH PERFORMANCE

Below is a list of needs. You were asked before to rate the importance of the needs to you and your satisfaction with each need. Now we'd like you to rate your level of satisfaction with your performance in trying to meet your needs. Did you meet your own expectations for how well you behaved in trying to meet your needs: were you disappointed or pleased with your efforts despite whether they were successful or not?

SATISFACTION WITH PERFORMANCE
CIRCLE ONLY ONE NUMBER FOR EACH AREA

YOUR SATISFACTION WITH YOUR ATTEMPTS TO MEET YOUR NEEDS IN:	Not at All	Mostly Not	Yes and No	Mostly	Very Much
Relationships with family	1	2	3	4	5
Relationships with friends	1	2	3	4	5
Relationships with others	1	2	3	4	5
Work or other productive use of time	1	2	3	4	5
Your health	1	2	3	4	5
Your living situation	1	2	3	4	5
Personal safety	1	2	3	4	5
The health care you receive	1	2	3	4	5
Your economic situation	1	2	3	4	5
Use of leisure/recreational time	1	2	3	4	5

PLEASE MAKE SURE YOU HAVE CIRCLED ONLY ONE NUMBER PER LINE.

Appendix J

Ratings of Effects of Stress and Concentration on Performance

EFFECTS OF STRESS AND CONCENTRATION ON PERFORMANCE

All of us are subject to the effects of stress and difficulties with our concentration. The following questions are intended to help us understand how much effect there is of each of these factors on the need areas listed below. We're interested in whether you feel that difficulty with stress causes you a problem(s) in the areas of life listed and, if so, how much.

EFFECTS OF STRESS ON PERFORMANCE
CIRCLE ONLY ONE NUMBER FOR EACH AREA

LIFE AREAS:	A Great Deal	Often	Sometimes	Hardly Ever	Not at All
Relationships with family	1	2	3	4	5
Relationships with friends	1	2	3	4	5
Relationships with others	1	2	3	4	5
Work or other productive use of time	1	2	3	4	5
Your health	1	2	3	4	5
Your living situation	1	2	3	4	5
Personal safety	1	2	3	4	5
The health care you receive	1	2	3	4	5
Your economic situation	1	2	3	4	5
Use of leisure/recreational time	1	2	3	4	5

(continued)

EFFECTS OF STRESS AND CONCENTRATION ON PERFORMANCE (continued)

EFFECTS OF CONCENTRATION BREAKS ON PERFORMANCE
CIRCLE ONLY ONE NUMBER FOR EACH AREA

LIFE AREAS:	A Great Deal	Often	Sometimes	Hardly Ever	Not at All
Relationships with family	1	2	3	4	5
Relationships with friends	1	2	3	4	5
Relationships with others	1	2	3	4	5
Work or other productive use of time	1	2	3	4	5
Your health	1	2	3	4	5
Your living situation	1	2	3	4	5
Personal safety	1	2	3	4	5
The health care you receive	1	2	3	4	5
Your economic situation	1	2	3	4	5
Use of leisure/recreational time	1	2	3	4	5

PLEASE MAKE SURE YOU HAVE CIRCLED ONLY ONE NUMBER PER LINE.

Appendix K

Affect Balance Scale

AFFECT BALANCE SCALE

<u>During the past few weeks have you ever felt</u>:

	CIRCLE ONE	
Particularly excited or interested in something?	Yes	No
Proud because someone complimented you on something you have done?	Yes	No
Pleased about having accomplished something?	Yes	No
On top of the world?	Yes	No
That things were going your way?	Yes	No
So restless that you couldn't sit long in a chair?	Yes	No
Very lonely or remote from other people?	Yes	No
Bored?	Yes	No
Depressed or very unhappy?	Yes	No
Upset because someone criticized you?	Yes	No

Appendix L

Global Assessment Scale

GLOBAL ASSESSMENT SCALE*

Patient's Name: ____________________
Therapist's Name: ____________________
Date: ____________________

Rate the subject's lowest level of functioning in the last week by selecting the lowest range which describes his functioning on a hypothetical continuum of mental health-illness. For example, a subject whose "behavior is considerably influenced by delusions" (range 21-30) should be given a rating in that range even though he has "major impairment in several areas" (range 31-40). Use intermediate levels when appropriate (eg. 3, 58, 63). Rate actual functioning independent of whether or not subject is receiving and may be helped by medication or some other form of treatment.

91-100 No symptoms, superior functioning in a wide range of activities, life's problems never seem to get out of hand, is sought out by others because of his warmth and integrity.

****

81-90 Transient symptoms may occur, but good functioning in all areas, interested and involved in a wide range of activities, socially effective, generally satisfied with life, "everyday" worries that only occasionally get out of hand.

****

71-80 Minimal symptoms may be present but no more than slight impairment in functioning, varying degrees of "everyday" worries and problems that sometimes get out of hand.

61-70 Some mild symptoms (e.g., depressive mood and mild insomnia) OR some difficulty in several areas of functioning, but generally functioning pretty well, has some meaningful interpersonal relationships and most untrained people would not consider him "sick".

****

51-60 Moderate symptoms OR generally functioning with some difficulty (e.g., few friends and flat effect, depressed mood, and pathological self-doubt, euphoric mood and pressure of speech, moderately severe antisocial behavior).

****

41-50 Any serious symptomatology or impairment in functioning that most clinicians would think obviously requires treatment or attention (e.g., suicidal preoccupation or gesture, severe obsessional rituals, frequent anxiety attacks, serious antisocial behavior, compulsive drinking).

****

31-40 Major impairment in several areas, such as work, family relations, judgment, thinking, or mood (e.g., depressed woman avoids friends, neglects family, unable to do housework), OR some impairment in reality testing or communication (e.g., speech is at times obscure, illogical or irrelevant), OR single serious suicide attempt.

****

21-30 Unable to function in almost all areas (e.g., stays in bed all day), OR behavior is considerably influenced by either delusions or hallucination, OR serious impairment in communication (e.g., sometimes incoherent or unresponsive) or judgement (e.g., acts grossly inappropriately).

11-20 Needs some supervision to prevent hurting self or others, or to maintain minimal personal hygiene (e.g., repeated suicide attempts, frequently violent, manic excitement, smears feces), OR gross impairment in communication (e.g., largely incoherent or mute).

****

1-10 Needs constant supervision for several days to prevent hurting self or others, or makes no attempt to maintain minimal personal hygiene.

Individual completing rating form: ________________________________

* Spitzer, Gibbon, and Endicott. (1976). Archives of General Psychiatry, 33.

Appendix M

<u>Role Functioning Scale</u>

ROLE FUNCTIONING SCALE

Evaluator: ____________________ Client's Name: ____________________

Date: ____________________ I.D. #: ____________________

Instructions: Score each scale by circling the appropriate number to the left of the scale description you think best describes the client.

SCORE	**WORKING: PRODUCTIVITY** Rate the client in the most appropriate expected role (i.e., student, homemaker, wage earner)	SCORE	**INDEPENDENT LIVING, SELF CARE** (Management of household, eating, sleeping, hygiene care)
1	Productivity severely limited; often unable to work or adapt to school or homemaking; virtually no skills or attempts to be productive	1	Lacking self-care skills approaching life endangering threat; often involves multiple and lengthy hospital services; not physically able to participate in running a household.
2	Occasional attempts at productivity unsuccessful; productive only with constant supervision in sheltered work, home or special classes	2	Marked limitations in self-care/independent living; often involving constant supervision in or out or protective environment (e.g., frequent use of crisis services)
3	Limited productivity; often with restricted skill/abilities for homemaking, school, independent employment (requires highly structured routine)	3	Limited self-care/independent living skills; often relying mental/physical health care; limited participation in running household
4	Marginal productivity (e.g., productive in sheltered work or minimally productive in independent work; fluctuates at home, in school; frequent job changes)	4	Marginally self-sufficient; often uses REGULAR assistance to maintain self-care and independent functioning; minimally participates in running household
5	Moderately functional in independent employment, at home or in school. (Consider very spotty work history or fluctuations in home, in school with extended periods of success)	5	Moderately self-sufficient; i.e., living independently with ROUTINE assistance (e.g., home visits by nurses, other helping persons, in private or self-help residences).
6	Adequate functioning in independent employment, home or in school; often not applying all available skills/abilities	6	Adequate independent living and self-care with MINIMAL support (e.g., some transportation, shopping assistance with neighbours, friends, other helping persons).
7	Optimally performs homemaking, school tasks or employment-related functions with ease and efficiency	7	Optimal care of health/hygiene; independently manages to meet personal needs and household tasks.

Role Functioning Scale (continued)

Client: ____________________________

SCORE	**IMMEDIATE SOCIAL NETWORK RELATIONSHIPS** (Close friends, spouse, family).	SCORE	**EXTENDED SOCIAL NETWORK RELATIONSHIPS** (Neighborhood, community church, clubs, agencies, recreational activities).
1	Severely deviant behaviours within immediate social networks (i.e., often with imminent physical aggression or abuse to others or severely withdrawn from close friends, spouse, family; often rejected by immediate social network).	1	Severely deviant behaviors within extended social networks (i.e., overtly disruptive, often leading to rejection by extended social networks).
2	Marked limitations in immediate inter-personal relationships (e.g., excessive dependency or destructive communication or behaviors).	2	Often totally isolated from extended social networks, refusing community involvement or belligerent to helpers, neighbors, etc.
3	Limited interpersonally; often no significant participation/communication with immediate social network.	3	Limited range of successful and appropriate interactions in extended social networks (i.e., often restricts community involvement to minimal survival level interactions).
4	Marginal functioning with immediate social network (i.e., relationships are often minimal and fluctuate in quality).	4	Marginally effective interactions, often in a structured environment; may receive multiple public system support in accord with multiple needs.
5	Moderately effective continuing and close relationship with at least one other person.	5	Moderately effective and independent in community interactions; may receive some public support in accord with need.
6	Adequate personal relationship with one or more immediate member of social network (e.g., friend or family).	6	Adequately interacts in neighborhood or with at least one community or other organization or recreational activity.
7	Positive relationships with spouse or family and friends; assertively contributes to these relationships.	7	Possibly interacts in community, church or clubs, recreational activities, hobbies or personal interests, often with other participants.

Role Functioning Scale (continued)

Client: ______________________________

AREA RATED	1	2	3	4	5	6	7
Work and/or productivity							
Independent living ability							
Immediate relationships							
Extended relationships							

GLOBAL ROLE FUNCTIONING INDEX: ___________ (Total of Role Functioning Scores)

GLOBAL ROLE FUNCTIONING SCALE:

Score	**Description**
Less than 5	Severely limited
5 to 8	Markedly limited
8 to 12	Limited
13 to 16	Marginal
17 to 20	Moderate
21 to 24	Adequate
25 to 28	Optimal

Role Functioning Scale (continued)

Client: ______________________________

SCORE	**GLOBAL PERSONAL DISTRESS** (Subjective, self-reported/observed feelings -- situational/symptomatic, or combination thereof).
1	Non-communicative or unaware of apparent personal symptomatic distresses.
2	Constant and pervasive awareness of markedly painful symptoms; often vaguely described as "nerves" and "depression" or "anxiety".
3	Bothered for major portions of the day and evening by painful symptoms or very negative feelings about self/others.
4	Experiences periodical symptomatic or situational distress; generally dissatisfied with self/others.
5	Moderately impacted by distress from symptoms or situations; some dissatisfaction with self/others.
6	Experiences mild, infrequent personal distress; adequate self image and satisfaction with others.
7	Positive self image and much satisfaction with others with no apparent or reported personal distress.