CHRONIC MENTAL PATIENTS IN THREE-QUARTER WAY HOUSING:

EFFECT ON QUALITY OF LIFE

by

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The purpose of the study was to discover if three-quarter way housing had an effect on the quality of life of chronic mental patients in the community. To determine the effect, five areas were investigated: number of hospital and crisis hostel admissions and days of institutionalization, the independence of the patients in basic living skills, the size and intimacy of the patients' social support system, the severity of their symptomatology, and the three most meaningful activities which gave them satisfaction in structuring their time.

From published literature, measures were adapted and a random sample of 50 residents of a three-quarter way housing program and 20 applicants to the same program were surveyed by structured interview. Earlier self-report data were reanalyzed. The applicants were surveyed again after 12 months when they had become residents. Three-quarter way housing staff reported on the applicant group with the Progress Evaluation Scales in order to validate the self-report measures.

Hospitalization admissions and patients days of institutionalization decreased considerably when patients were in residence. Independence was found to be at an acceptable level for community living but this was found to be due to the strict screening process into the program.
Social networks of the residents, and the applicants when they became residents, were found to be approaching normalcy or within a normal range. The increase in casual relationships from applicant to resident status was statistically significant. Symptomatology was less severe for the resident group than the applicant group; the change in most measures of symptomatology items was statistically significant for the applicant group pre and post residency. Meaningful activities for the patients did not change in the direction of increased productivity or more active pursuits rather than passive, isolated pursuits when they became residents, but satisfaction with their activities was expressed by a large majority of those questioned.

In the view of the patients studied, and supported by the data, three-quarter way housing created an effect on quality of life by significantly improving the mental health of the residents in a normalized environment which is less costly than halfway housing alternatives and requires less supervision.
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INTRODUCTION

Over the past two decades chronic mental patients have been released from institutions or have not been hospitalized because of the nationwide policy to decrease mental hospital populations. Instead mental patients have been released to the community-at-large or to specialized facilities within the community such as halfway housing or three-quarter way housing.

Although the literature on halfway housing programs is growing, little information exists as to the effect on the chronic mental patient population of minimally supportive housing - three-quarter way housing - which seeks to normalize the environment of the mental patient while providing a peer group, and a small measure of supervisory support.

Halfway housing is seen to encompass all the housing types which are not normal by community standards including shared accommodation in a variety of settings such as boarding homes, or other communal living with supervisory staff. Three-quarter way housing in contrast is normalized housing and includes satellite housing such as several patients sharing a suite in an apartment block with part-time or occasional supervision, or patients living independently in self-contained units in an apartment block specifically for patients, with part-time or occasional supervision and socialization opportunities and programs.
To determine whether or not three-quarter way housing has an effect on the quality of life of chronic mental patients a number of questions need to be answered. Will patients in this housing have more or less hospitalizations than they had in other settings? Will the patients have adequate basic life skills to function in the community after having been institutionalized and dependent upon others? Will the distressing symptoms of mental illness change for the better or worse? Will the patients be able to cope comfortably outside of hospital? Will their social network system in this environment be large enough to support them in times of emotional upset and fulfil their needs of normal socialization? Will they become productive citizens? Or will they be satisfied to live non-productive but comfortably structured lives?

This study will determine answers to these questions through an analysis of interviews with patients in a three-quarter way housing program, and interviews with applicants to the same program before and during residency. The quality of life of these patients will be investigated by determining the incidence of hospitalization before and during residency, by determining the independence of the patients in terms of basic living skills, by measuring the size and intimacy of the patients' social network, by examining their symptoms of mental illness, and by looking at their daily activity and the satisfaction derived from it.

Literature Review

Several decades ago chronic mental patients would have been living for long periods or permanently in mental institutions. The policy
of deinstitutionalization of those with psychiatric disorders has seen many thousands of formerly hospitalized people move into the community on both sides of the Atlantic since the nineteen sixties. In 1955 in the U.S. there were 559,000 patients in state hospitals; by 1980 this figure had dropped to 138,000 and outpatient episodes had increased twelvefold (Talbott, 1980: 43; Goldman, 1983: 131; Okin, 1983: 578). This mass exodus is reflected in B.C. statistics. In 1954 Riverview Hospital reported 3,481 patients; by 1981 the caseload had dropped to 1,097 patients, and registered outpatients had risen to 19,425 according to the annual report of the B.C. Ministry of Health.

In the expanding economic times of the sixties there was a push for social justice and the alleviation of suffering: proponents of mass discharges from hospital opined that archaic mental institutions were dehumanizing and antitherapeutic and that care in the community would lead to rehabilitation (Williams et al., 1980: 63). The decline in population of the large institutions has been ascribed not only to the civil libertarian philosophy of the time, (Bachrach, 1978: 575) but also to the advent of psychotropic drugs which controlled symptoms of serious mental illness to the extent that patients could live outside hospital (Williams et al., 1980: 63; Clarke, 1979: 461; Borus, 1981: 339). Other causative factors cited were World War II and the fact that two million Americans were rejected by the armed forces because of psychological impairment, prompting the military to push for reform (Bennett, 1979: 517; Clarke, 1979: 461). Aviram and Segal argued that appropriate levels of income maintenance through public assistance programs were the major factor responsible for the mass movement from institutions
(Aviram, Segal, 1977: 162). In Great Britain deinstitutionalization was attributed to the initiation of the Welfare State and organization of the National Health Service (Bennett, 1979: 517). Influencing thought at this time was Thomas Szasz (The Myth of Mental Illness) who argued that serious mental illness did not exist and therefore large expensive institutions did not need to exist (Borus, 1981: 339).

In hospital all the needs of patients were looked after. In the community they require aftercare, financial assistance, low-cost supportive housing and a range of other services provided in hospital. Those who are discharged from institutions without these aids frequently end up back in hospital because of a recurrence of symptoms brought on by inadequate aftercare augmented by poor environmental conditions without support. High readmissions have led to a revolving door syndrome: by 1972 readmission had climbed to 64% in the U.S. and Canada (Talbott, 1980: 45). The readmission rate at Riverview Hospital is currently 71%, and the disposition of patients in the community has led psychiatrists to term deinstitutionalization a national disgrace (Talbott, 1980: 43). The danger of the current emphasis on putting people out into the community often means that they are abandoned in the name of personal freedom and the least restrictive environment, but they don't know how to fend for themselves (Lehmann, 1976: 5). It has been argued that deinstitutionalization is workable if high quality aftercare is available, if funds are diverted to community programs, if successful models of community care are adapted widely and innovations are made (Clarke, 1979: 476). Realistic goals must be formulated for the previously institutionalized. It is unrealistic to assume that former patients will obtain adequate housing,
5.

return to employment and a high level of social functioning on their own. The most that can be anticipated is that, with help, they can function as comfortably as normals in the community (Lamb, 1981: 106).

An improved quality of life compared to that in an institution is dependent on good living conditions and high quality back-up institutional care (Lamb, 1981: 108). In Vancouver there is high quality back-up care. Ex-patients can choose to attend private psychiatrists or outpatient treatment including drugs, therapy and "brokerage" functions by the community care teams of the Greater Vancouver Mental Health Service. There are also psychiatric beds in general hospitals in the area for those who suffer decompensations, and secondary referral to Riverview Hospital still exists for the more seriously ill who need longer-term care.

It is widely recognized that the quality of life of chronic mental patients in the community depends to a significant extent on adequate housing, especially a situation in which the patient is not isolated. Needed for this group is a continuum of housing types ranging from short-stay crisis hostels to halfway housing or boarding homes, and to independent living in co-operative apartments and staffed apartment blocks with self-contained suites (three-quarter way housing). Some have rehabilitative programs, others are mini-institutions with the same warehousing characteristics that led to criticism of the large archaic mental institutions.

For the acutely ill, Lehmann describes hospitalization as far preferable to dumping patients into the community-at-large. Hospital at least provides shelter, good food, protection from ridicule and facilities for recreation and planned and sheltered work (Lehmann, 1976: 5).
Mosher and Menn describe a created environment, Soteria House, in San Francisco, modelled along the lines of R.D. Laing's Kingsley Hall which was started in 1966 in the United Kingdom. Soteria House is staffed with non-professionals whose role is to share as equals in the experience of schizophrenics undergoing exacerbations of their illness (Wilson, 1982: 9). Residents have been found to stay longer in residence than controls in hospital but they need fewer or no neuroleptic drugs. The experimental group of residents used less outpatient care, exhibited more independence and were significantly more productive than a group of controls receiving traditional treatment. Mosher and Menn admit that the experience was demanding for staff, burn-out was a problem and staff turnover high, however their evidence showed that a supportive "family" atmosphere was just as effective during an acute phase of schizophrenia as hospitalization with large amounts of drugs.

One hundred and six patients placed in 58 foster homes in three provinces of eastern Canada were followed up for eighteen months to ascertain changes in symptomatology and social adjustment (Tcheng-Laroche, 1976: 13). The results for the researchers were to an extent disappointing: the experimental group of patients declined in the number of visitors, the amount of time in bed increased and the hope for an independent life declined significantly. Those who improved the most compared to the control group of 28 hospitalized patients, were long-term chronics, showing that this group could be safely moved into the community to experience an improved quality of life. In homes with relatively little supervision the best results were obtained, suggesting that halfway houses with minimal supervision and increased social interaction might lead to increased rehabilitation.
Halfway housing such as psychiatric boarding homes in Vancouver varies from the rehabilitation-oriented Loma Society program for under-thirties with an allowable six month stay in residence to large homes of permanent residence such as Taylor Manor which provides intermediate care to chronic schizophrenics, those with organic brain syndrome and psychogeriatrics. The typical "halfway" house has a population of about 15 chronic mental patients who share bedrooms. It provides twenty-four hour supervision, provides meals, supervises medication, assists with activities of daily living, and has little or no organized activity, work, or social involvement other than the contact of those who live in close proximity to one another (Ozarin, Witkin, 1975: 102). Often patients have to abide by strict rules governing meals and retiring so that these psychiatric boarding homes or halfway houses are sometimes seen as institutional. Usually the inmates spend too much time in bed and watching television. Whether or not this vegetative life is preferable to full institutionalization is questionable because large hospitals do provide some programming, occupational and recreational therapy. However a majority of residents of halfway houses state a preference for their life in the community over hospitalization.

Another more informal type of halfway housing is the five halfway houses of the Mental Patients Association in Vancouver, in which tasks are shared, meals are prepared communally, and all decisions affecting the community are made by the house "family" at mandatory weekly meetings together with two staff members. Medication-taking and personal care are the responsibility of the individual. In some homes, prescription drug-taking isn't encouraged and "freak-outs" may result; in others,
residents are urged constantly to attend community care teams and take their medication. Rehospitalization from the houses is low. A 1977 survey found an annual 6% return rate in terms of patient days spent in a crisis hostel or in hospital. However the housing is generally sub-standard with little privacy. Bizarre behaviour is usually tolerated kindly in the houses and generous acts of emotional and other forms of support are little short of noble.

Pilon and Marcotte reported on Habitat 2525, a halfway house on the grounds of St.-Michel-Archange Hospital, Quebec City, which runs on the principle of normalization. Residents keep their own space tidy, take their own medication, are careful of their appearance, organize their own leisure activities in the community, enter a sheltered workshop at a low wage, and then become part of a work training program in the Quebec Hilton hotel. Staff of the Habitat 2525 team include psychologists, social workers, vocational guidance workers and a consultant psychiatrist. After nearly three years, one-half the residents had left and were earning minimum wage. The average length of stay was ten months and the return rate was 12%. The results of the program are impressive. They point up the necessity for a high ratio of well-trained staff and well-planned programs in order to achieve results as good and are not indicative of the usual disposition of ex-patients in the community (Pilon, Marcotte, 1976: 41).

Three-quarter way housing, in contrast to halfway housing, is a normalized housing situation which would be acceptable to other members of the community-at-large.
Near-independent living or three-quarter way housing is typified by a sponsor who rents an apartment or a house and sublets it to several mentally ill persons. Either individually or as a group the patients care for themselves and prepare their own food. Typically there is some supervision of the upkeep of the dwelling and some monitoring of the patients so that they continue to receive outpatient treatment and make use of community recreational resources (Tomlinson, Cumming, 1976: 25).

An experiment in three-quarter way housing is described by Chien. In the area immediately surrounding Boston State Hospital are 25 co-operative apartments providing 104 beds for chronic mental patients. Patients live in one apartment in a three-decker house, the landlord in another and the third is rented to someone in the community. Patients attend activity programs or the day care centre in the hospital. They are encouraged to cook their own meals and look after their own medication. At the beginning of the patients' stay the landlord provides meals and assistance. As time passes he works toward having them care entirely for themselves. All apartments are visited at least once a week by the hospital Cooperative Apartment Team. If patients do not turn up to the depot medication station on the hospital grounds the team visits the apartments and administers medication there. Patients have evaluated the program positively. Virtually all of them said that life in the apartments is better than life in the hospital (Chien, 1973: 7). Quality of life is improved to the extent that housing conditions are normalized to resemble that of the community-at-large.
Quality of life.

Quality of life is a topic that permits many definitions and has no standard index allowing the monitoring of changes. Some authors refer to the quality of life as including such basic needs as health and safety; education, skills and standard of living; income; economic equality; human habitat; art, science and free time (Terleckyj, 1975: 16). Others see the quality of life as having more to do with "higher needs" for growth, esteem, freedom, and the pleasure of meaningful relationships and meaningful work. "Thus quality of life might be defined as a sense of wellbeing, a dynamic blend of satisfactions that differs from one person to another and changes over time" (The Quality of American life, 1980: 11). Bigelow perceived the quality of life of chronic mental patients living in the community as encompassing independence, social network, symptomatology, and meaningful activity in the structuring of time (Bigelow, 1977). These are the four indicators chosen to investigate the quality of life of chronic mental patients in three-quarter way housing. It is assumed that the basic needs of this chronic group are met since assisted income, shelter, health care and psychiatric care are provided.

Independence.

Two questions need to be addressed in the consideration of independence as a measure of quality of life. Is independence a significant measure of quality of life for chronic mental patients in three-quarter way housing? How can independence best be measured? The literature indicates that independence is a desirable goal in the treatment of
rehabilitation of patients. Personal freedom and independence have long been principles worthy of defending. Independent living has always been "the underlying rationale of established models of rehabilitative services and. . .has now been legitimized as a rehabilitation model in its own right" (De Loach, 1983: xi). Independent living services are considered those services, if successful, that result in disabled people living "totally self-sufficient lives, freed from the need to rely on others for their self-care needs" (De Loach, 1983: 32).

Patients who were presumably independent prior to their mental breakdown find that the process of institutionalization places them in a totally dependent position. In an institution every aspect of life is cared for. Food is supplied, as are recreation, socialization, medication, therapy, financial support, low-cost housing, employment or vocational rehabilitation, protection, supervision and crisis intervention (Pepper, Ryglewicz, 1982: 389; Borus, 1981: 340). Conformity rather than independence is encouraged in hospital (Okin, 1983: 578).

Discharge from hospital frequently presumes the ability to resume independent functioning but many patients get caught up in repeated admissions. Of those who are not rehospitalized but remain in the community, many do not live independently. Of 1.7 million identified as developing a prolonged severe emotional disability in the U.S., 750,000 or 44% are in nursing homes where all their basic needs are met (Talbott, 1980: 44; 1981: 700; Okin, 1983: 577). Lamb views as illusory the expectation that releasees will experience the functioning of normals. The most that can be anticipated is an improvement in the quality of life for
people living in a non-hospital setting where there is the advantage of freedom of movement (Lamb, 1981: 106).

Not only is independence highly valued socially but evidence also exists that ex-patients value their independence keenly. A significant number live literally on the street in preference to hospitalization or other institutional living even though the conditions of their existence are minimal and often harsh. The ex-psychiatric street people in Los Angeles have been estimated to number between 7,000 and 15,000 in the skid road area of that city (Farr, 1983). In New York the "space cases" number 36,000 homeless chronically mentally ill (Baxter, Hopper, 1982: 394). These people prefer the harshness of the street to the loss of their independence in institutions.

**Measures of independent function.**

The measure of independence is complex and multifaceted. A measure of independence must include all of those activities of daily living and self-care which one must perform in order to function in the community at an adequate and acceptable level. A ten year review of the literature in the activities of daily living and the evaluation of disability revealed that a great deal has been written about the chronically ill elderly and the physically disabled. Less has been chronicled about the well elderly and the mentally retarded, and little has been written concerning the move from dependence to independence of the emotionally disabled. De Loach's (1983) pioneering monograph is the first major work to give perspective on the subject of independent living rehabilitation,
despite the fact that deinstitutionalization of mental patients has moved at a brisk pace in the last three decades.

Some measures of independent living have been developed primarily for the mentally retarded. The Disability Assessment Schedule is a brief screening device for the mentally retarded which includes sections on self-help, vision and hearing, communication, literacy and 23 items on behaviour abnormalities such as echolalia (Holmes, 1982). One item on domestic skills is the only item adaptable to independent living skills of chronic mental patients.

The Adaptive Behaviour Scale deals with such statements as "initiates most of own activities"; "will pay attention for more than fifteen minutes"; "recognizes own family" (Leva, 1976), but has no items relevant to a psychiatric population.

Other scales have been developed primarily to assess the elderly and chronically ill. Sidney Katz had described the Index of Independence in the Activities of Daily Living (ADL) which measures biological and psychosocial functions and was developed to study the treatment and prognosis of the chronically ill elderly. It measures the degree of independence in such categories as bathing, dressing, toileting, transfer, continence and feeding (Katz et al., 1963; Katz, 1970: 20, 26). However, none of these are applicable to dischargees from psychiatric hospitals.

Alan Jette studied non-institutionalized individuals with polyarticular disability with a subset of ADL items in five areas: physical mobility, transfers, home chores, kitchen chores and personal care (Jette, 1980: 85). Most items were specifically linked to physical incapacity,
such as those reported by Bebbington, 1977; Klein, Bell, 1982; Bergel, 1981; Evans, 1981; Zuck, 1980; Lane, 1974. Jette drew on the work of Katz in developing an index of ADL. Deniston and Jette used a pilot Geriatric Arthritis Project Functional Status Instrument which included driving, shopping, using a telephone, housekeeping and personal care among other items specific to the physically incapacitated. It was developed to test the hypothesis that a multidisciplinary health team could improve the quality of life of older adults suffering from arthritis (Deniston, Jette, 1980).

Bloom and Blenkner used a Contentment Index to assess the personal satisfaction of older people living in the community (Bloom, Blenkner, 1970). They and other writers in the geriatric field considered detailed items which did not apply directly to the independence of chronic mental patients (Warren, 1974; Akhtar et al., 1973; Kuriansky, 1976).

Sarno's Functional Life Scale includes a number of items which could be utilized in a measure of independence of chronic mental patients. Sarno's rationale for the scale is that experience has shown that the level of physical function as evidenced in a plethora of measures rating the elderly infirm and the physically incapacitated gives no clue as to the ability of the patient to function in a real life situation (Sarno et al., 1973: 214). The Functional Life Scale, a performance measure, consists of 44 items from which one can ascertain the functioning capability of the individual. It describes the here-and-now situation of the patient rather than his capacity to do more, and lends credence to the fact that his incapacity may not be due to powerless limbs but to his fear of appearing in public, or the fact that others may be helping him to a large
degree. The items are rated by an observer, and rated in a continuum of five points ranging from "doesn't perform the activity at all" to "normal". Studies were carried out to establish reliability and internal consistency and these established the stability of the ratings over time. The scale items include areas of social interaction, outside activities such as shopping and using public transportation, home activities like performing housekeeping chores such as cleaning, and preparing meals, activities of daily living such as grooming and dressing, and cognition (Sarno et al., 1973: 220).

Like Sarno, Switzky and Rotatori introduced a new measure which they call the Community Living Skills Assessment Inventory. They point out that this instrument is adaptable to the emotionally disturbed as well as the multiply handicapped and retarded, and draw attention to the actuality that matching individual behavioural competencies with functional living skills necessary for the individual to be placed in the community has rarely been investigated. All too often a lack of these skills has led to the early return of an individual to an institution or an institutional residence. Because of the prevalent movement of the institutionalized into the community, developing strategies of intervention is crucial to successful placement in the community. The authors provide a description of skills in eight areas: dressing, personal hygiene, eating, housekeeping, care of clothing, food preparation, self-medication and use of functional equipment such as wheelchairs. Skill areas were
identified by community residence operators; the nearly 200 items in the eight areas were generated by professional staff. The inventory is scored by professional or paraprofessional observers. Items are rated on a seven point performance scale. Items which are not applicable in every case such as handling wheelchairs are scored n/a. Interobserver agreement was 80%. According to the authors the data can also be used in the establishment of training objectives by indicating deficit functioning. Data on the usefulness of the inventory was collected over two years in which 100 retarded were placed in community living arrangements. Prior recidivism was 15%. Subsequent to the use of the inventory recidivism was reduced to 3% (Switzky, Rotatori, 1978).

De Loach (1983: 76) has catalogued the techniques and concepts she found to be significant to independent living. She categories four major areas of concern to the disabled: personal adjustment, domestic arrangements, management skills and social adjustment. Within these areas 131 items are listed, covering the factors affecting adjustment to disability: home maintenance, food preparation, self-management, childcare, financial management, adjustment with family and others, expectations of sexuality, use of leisure time, use of community support services, housing arrangements, knowledge of the world of work, and transportation arrangements.

The catalogue is uneven in that some items cover a broad area of interest such as "recognition/application of abilities that can be used to develop and/or participate in activities" while others are narrowly specific such as "use of electric can opener," "use of coffee pots", "clothing features to look for in ready-to-wear clothing". The items
describing personal adjustment and social adjustment may be desirable components of independent living but are not basic skills and are therefore not adaptable as measures of independence of chronic mental patients in three-quarter way housing.

None of the measures perused seem adaptable in their entirety to the independent living of mental patients in the community, however personal experience has indicated areas which are applicable. When patients were released in substantial numbers into the community in the late sixties and early seventies from Riverview Hospital in Coquitlam, B.C., many of them were without funds or shelter. Via the patient grapevine a significant number had heard of the Mental Patients Association drop-in centre which was opened in 1971. The discharges flocked to the centre looking for shelter and help in obtaining financial assistance. Volunteers and knowledgeable ex-patients aided the releasees in dealing with government agencies to obtain welfare payments. Owing to an acute demand for low-cost housing, the Association acquired five houses over a period of several years. The residences, which housed 10 to 12 ex-patients each, were operated on the self-help principle. Everyone took part in housekeeping tasks, shopping and cooking. Sharing of skills was encouraged. Most of the ex-patients, particularly the young men, had no skills in shopping, money management, cooking, housekeeping and personal hygiene because of their lack of home training, or their mental illness and subsequent institutionalization. By way of patient instruction and a good deal of experimentation these basic living skills were acquired, and a "money management" allowance was paid to each resident by M.P.A. so that discharges could become accustomed to budgetting funds for their lunches and other essential items. Instruction was also provided in banking so
that residents were able to write cheques for their room and board and acquire this skill in order to carry out necessary banking practices in their subsequent life in the community at large. Where necessary, ex-patients were shown how to use the transportation system. They were introduced to community resources like recreation centres and encouraged to make use of them. Practically all of the discharges had been receiving medication in hospital. Most were receiving outpatient aftercare but had to learn to supervise their own medication. Some were negligent in this area and decompensated, requiring hospitalization, but many came to accept this responsibility. In the self-help model, they encouraged one another to remember the ritual of self-medicating. Those who did not have a family physician were linked to a health clinic or a general practitioner in order to look after their own health needs. Any measure of independence in the activities of daily living of chronic mental patients must therefore include such items as money management and banking, shopping, preparing well-balanced meals, care of personal hygiene, care of laundry, dealing with community and government agencies, use of transportation, housekeeping skills, supervision of medication and looking after health needs.

The Long Term Care Assessment Form used by the B.C. Ministry of Health includes items useful for the ADL assessment of the disabled. In addition to ADL items such as ambulation, transfer, bathing, dressing, grooming, eating and elimination control there are self care items in food preparation, housekeeping, shopping, travelling, telephone, medications and treatments, which, when scaled by a five point scale elaborating on the range of dependence, present a comprehensive picture of the Long Term Care applicant.
The measure which seems most applicable to the psychiatric population living in the community is the Assessment of Client Independence of the Great Vancouver Mental Health Service. Developed with client input at the Mt. Pleasant Community Care Team, the measure contains 12 items: grocery shopping, shopping for other essentials, preparing well-balanced meals, laundry, cleaning apartment or room, budgetting, personal hygiene and grooming, use of health services, use of recreational resources, use of community resources such as government or social agencies, use of available transportation, and socialization skills. The scale describing the items ranges through "no assistance" to "a lot of assistance". There is no indication where or when this measure has been used.

The measures prepared to test the chronically ill elderly, the mentally retarded and the physically disabled contain few items relevant to chronic mental patients in the community and some are of an unwieldy length so these were not utilized. Prior experience of the dependence of chronic mental patients in the Mental Patients Association suggests a number of factors to consider in preparing a measure of independence. These same factors were those itemized in the Assessment of Client Independence of the G.V.M.H.S. For its relevance to chronic mental patients in three-quarter way housing this assessment was adopted for the study to be used to test the independence of this group. The item on socialization skills was deleted because a separate measure to examine social network would indicate these skills.
Another indicator of quality of life for chronic mental patients is their social participation. Social networks have been variously defined. Speck and Athreave (1973) described social networks as all those human relationships that have a lasting impact on the life of the individual; those family members, kin, neighbours and friends to which most of us are connected throughout our lives - those persons with whom we exchange emotional, physical, economic and informational support, the group that forms our natural support system. Caplan (1974) described support systems as an enduring pattern of social ties which are of major significance in maintaining our psychological and physical integrity. Hammer (1978) has stated that social networks are the focal individual's direct social contacts, the relationships among them, and their relationships with others who are not related to the focal person.

Because of the widely reported link to rehospitalization, the social network variable is considered a major constituent of quality of life. Why are schizophrenics socially isolated? The general characteristics of schizophrenia are not attractive to others. They include blunting of emotions, queer and odd behaviour, seclusiveness, suspiciousness, exaggerated self-consciousness, impulsiveness, characterized by apparently purposeless acts, over-defensiveness, delusions, poor attention, poor judgment, poor appearance and some degree of general deterioration (Shakow, 1979: 170). Even when the person is maintained on medication some of these characteristics are present to a certain degree. All of these traits contribute to the social isolation of schizophrenics. Social
networks may have been long absent or may break down further with each period of acute disorder.

Social ties are a basic human need: someone to talk to, to give and receive affection, to depend on and be depended on, to share problems with, and to experience "a sense of belongingness" (Greenblatt et al., 1982: 978). Greenblatt et al. in reviewing the social network literature found studies that have indicated that social bonds protect and support mental health and may also prevent physical or mental breakdowns during stressful times. Being part of a network aids problem-solving abilities, boosts self-esteem and self-confidence and gives not only emotional sustenance but practical assistance as well. Family members form the nucleus of emotional support in times of crisis while friends and neighbours also make contributions which are sometimes equal to or greater than that of relatives.

*Measures of social network.*

Researchers have found that mentally ill and normal persons have quite different social networks both in quantity and quality. In one study those who were emotionally disabled reported a social network half the size of that of a normal population; the people they knew also knew each other, thus providing a denser network less dispersed than normals and affording fewer links to other social groups (Greenblatt et al., 1982: 979). Another study reported that if more positive social ties could be introduced or restored in a schizophrenic's life that the patient would have more support in times of stress (Greenblatt et al., 1982: 980).
Greenblatt and his colleagues looked at the environments where mental patients have benefitted socially, such as boarding homes and halfway houses, and co-operative apartments, all with positive outcomes. Hospital behaviour modification programs have promoted socialization by rewarding patients who are socially active. Those who succeed in acquiring social skills have lower recidivism rates than those who fail or have not been trained in these skills.

Mueller found that among the factors associated with high rates of psychopathology were the absence of adequate social ties or social support, and that incongruent groups have fewer network ties and experience greater social isolation (Mueller, 1980: 148-9). Mueller also reported that a group of psychotics had very small primary networks, highly interconnected, smaller and denser. He argued that although those with psychiatric disorders have networks smaller in size than normals, with the proportion that are kin higher for schizophrenics, results with regard to network density and interconnectedness are less clear (Mueller, 1980: 150).

Henderson conducted an experiment with 50 psychiatric patients and 50 normals in Canberra. He found that patients had fewer good friends, fewer contacts with persons outside the nuclear family, and fewer attachment figures. A high level of inter-observer reliability was achieved in a pilot study and this reliability was maintained throughout the major study. On the basis of this study Henderson et al. generalized that mental health was associated with having several good friends, many contacts, and a number of attachment figures (Henderson et al., 1978: 85).
Brugha et al. replicated Henderson's study with 50 non-psychotic patients and 50 normals in a psychiatric outpatient clinic in Dublin. Normals were pair-matched to patients according to age, sex, marital status and occupation. They were tested with the Social Interaction Schedule developed by Henderson. Contact with each member of the subject's primary group was recorded over a week, as were non-primary group contacts, hours of social interaction and whether or not the interaction was pleasant, unpleasant or neutral. The intensity of the interaction on a three part scale was also noted. Paired and unpaired t-tests were used to test the differences between means. The Wilcoxon matched-pairs test was used on comparisons of borderline statistical significance. The experiment confirmed that psychiatric outpatients and normals differed. The patients had fewer close friends, close relatives and attachment figures. Reliability was satisfactory and the findings of Brugha et al. confirmed the findings of Henderson (Brugha et al., 1982: 53).

Greenblatt and his colleagues were so impressed with the importance of a strong social network that they recommended social networking should be taken into account in mental health planning on the following basis: individual treatment plans should include assessment of a patient's social network in both hospital and home environments. Professionals should work to repair or reconstruct their patient's social supports by working with his support groups. Social support services such as halfway houses and co-operative apartments should be established in the community. Links between a patient's social systems should be part of his treatment plan. Community changes should be cognizant of social support systems in place that could be disconnected by change. Greenblatt et al. concluded
that a patient's mental illness could be improved by interventions that made his existing network more supportive or by the addition of support people - new friends, professional caregivers, or support groups like A.A. or supportive housing (Greenblatt et al., 1982: 983).

Froland et al. found in their study comparing mental patients and outpatients with a normal group that the former's personal social network was smaller in size with fewer ties with kin, fewer long-term friends and less interaction with family, friends and relatives (Froland et al., 1979: 85).

Mitchell and Trickett reported that a large number of authors have found that those with psychiatric disorders, both psychotic and neurotic, have networks which compare unfavourably with normal populations, with fewer network linkages, fewer close relationships, more variation in relationships and more dependent relationships. Clients tend to use their linkages less in times of stress, their linkages are more one-sided than normals and intimate links are far fewer. The desirable life qualities in the world of the schizophrenic are those supplied by social networks and support systems and by establishing a new environment for schizophrenics. These authors found that schizophrenics were more likely to be rehospitalized if their networks were small (Mitchell, Trickett, 1980: 36). Sokolovsky and his colleagues also found that there was an inverse relationship between network size and the likelihood of return to hospital (Sokolovsky et al., 1978: 14).

Murrell suggested that one method of intervention is to relocate the individual into a different system that is more sensitive to his
or her requirements or to create a new system for special populations to which no present social network is sufficiently responsive (Murrell, 1973).

Intervention which helps individuals to strengthen their social support systems will decrease their vulnerability and increase their sense of belonging in a naturally occurring network of interpersonal relationships (Mitchell, Trickett, 1980: 39).

Sokolovsky and his team studied ex-patients in a Manhattan single-room occupancy (SRO) hotel to determine their personal networks in relation to their psychiatric diagnosis and how this related to community adaptation or the need for rehospitalization. Of 31 persons in the sample who had been resident over two years, one-half had been rehospitalized at least once. The high rehospitalization group had the fewest social links. At greatest risk were those tenants who had no links outside the hotel and hadn't entered the internal social organization (Sokolovsky et al., 1978: 11).

According to Hammer, a normal individual's social network consists of perhaps 6 to 10 intimately known individuals and an additional 30 or so individuals who are also regularly seen by the subject for a total of about 40. The range in her data and other data she was able to find was about 25 to 50 with a mean slightly less than 40 (Hammer, 1978). Pattison et al. reported a mean of 22.4 persons in the social network of normals (Pattison et al., 1979: 64).

The approach taken in Bigelow's (1977) quality of life study was to investigate the quantity and quality of network ties with kin, close friends and acquaintances in a sample of 50 mentally ill clients.
of community mental health teams. The size and intimacy of the patients' social network was noted in the three areas of kin, close friends and acquaintances and was compiled in narrative form. Bigelow summarized the findings qualitatively rather than scoring specific scales. His categories of size and intimacy of network ties with the three friendship types seemed most adaptable to the brief examination envisaged by the researcher rather than the in-depth studies over time by other authors.

According to Mueller, network density and interconnectedness of relationships of schizophrenics and other emotionally disabled persons, are not so important as the size and intimacy of the social network upon which Hammer, Pattison et al. and Bigelow concentrated. The approach decided upon in investigating the social networks of chronic mental patients was to adopt the strategy of discovering the size and intimacy of the patients' social network with kin, close relationships and casual relationships.

**Symptomatology.**

Symptoms which are typical of schizophrenia even when the individual is maintained on medication include: an exaggerated importance of self, lack of insight, baseless fears, blunting of affect, heightened anxiety, periods of depression, disturbed sleep, social isolation, restlessness, lack of a feeling of safety, poor self-esteem, lack of confidence and indecisiveness. Many of these symptoms also apply to the anxious person, the manic depressive in the depressive phase of his illness and those suffering from a depressive disorder. These are the debilitating effects of illness which necessitate specialized facilities for the
mentally ill, interfere with their chances of leading a normal and productive life and isolate them from others to the extent that they are in increased danger of emotional crises and rehospitalization.

**Measures of symptomatology.**

Symptomatology is an important component of quality of life to the chronic mental patient. What was wanted was a brief and concise means to assess the variable of symptomatology — the state of the chronic patient's mental health in terms of widely recognized symptoms of anxiety and depression — and those traits necessary for functioning at a suitable level in the community such as satisfactory decision-making and problem-solving and a sense of self-worth.

Rapid assessment instruments are tools available to assess such traits and symptoms and were considered for their relevance to a population of mental patients living in the community. In general RAI's are short, easy to administer and complete. They provide a means for attaching a numerical value to a client's condition and for indicating the degree to which a client has that condition by having the client rate himself or herself on scales. That there is a need for assessing symptoms is evident by the number of rating scales available; however, all do not meet the requirement of inclusiveness, the need to be short and simple, and the ability to be quantified.

Max Hamilton has stated that the description and definition of the population from which a sample is drawn is of fundamental importance but a problematic area for research; diagnostic categories are unreliable
but rating scales are invaluable (Hamilton, 1959: 50). The scale he developed is intended for use with those diagnosed as suffering from anxiety - found in agitated depression, obsessional states, organic dementia, hysteria and schizophrenia. Twelve groupings of symptoms, and the patient's behaviour at the interview, were the 13 variables of the scale, including anxious mood, tension, fears, insomnia, cognitive changes, depression, general somatic symptoms, cardiovascular, respiratory, gastro-intestinal, genito-urinary, and general autonomic symptoms. Each of the variables was defined by a series of 90 individual descriptors such as fatiguability, inability to relax, tachycardia, etc. (Hamilton, 1959: 54). Assessments were made on a five point scale ranging from none to very severe and grossly disabling. The reliability of the scale was determined by 35 patients being rated on two occasions by two interviewers simultaneously. The weighted mean of the correlations based on the sum of crude scores for each patient was .89.

A less sophisticated measure to assess anxiety disorders is that developed by Zung who wanted an instrument which was short and simple, available in two formats so that both the patient and an observer could complete them using the same set of criteria, and inclusive with respect to symptoms of anxiety (Zung, 1971: 371). The instrument is comprised only of the most commonly reported symptoms of anxiety, and includes 20 statements, five of which are stated in a symptomatically positive way. Typical statements of the Self-rating Anxiety Scale include "I feel like I'm falling apart and going to pieces"; "I feel more nervous and anxious than usual"; "I get upset easily or feel panicky"; "my arms and legs shake and tremble" (Zung, 1971: 375). The four point rating scale ranges
from "none or a little of the time" to "most or all of the time". Two hundred and twenty-five patients of various diagnostic groups were tested with the scale and those who had a diagnosis of anxiety disorder obtained scores significantly higher than those of other diagnostic groups. In rank order, mental disintegration, tremors, body aches and pains, anxiousness, apprehension, nausea, fear, panic and palpitation rated higher in severity than other symptoms. Correlation between observer-rated scores and patient-rated scores was $r = .74$ (Zung, 1971: 378).

With regard to depression, adjective checklists and old standbys like the Beck Depression inventory and the Zung Self-Rating Depression Scale were reviewed. Beck et al. developed an inventory of 21 categories of depression consisting of 89 sentences. These were scored by an interviewer who read the sentences to a patient and asked for the most appropriate response describing his or her symptom (Beck et al., 1961: 565). Zung prepared the Self-Rating Depression Scale which is similar in format and contains the same number of items as his anxiety scale, and includes statements such as "I have crying spells or feel like it"; "I feel downhearted and blue"; "I feel that others would be better off if I were dead"; "I have trouble sleeping at night" and 16 other statements (Zung, 1965: 66) Sleep disturbance, indecisiveness, diurnal variation and psychomotor retardation ranked highest in severity of all the items. Zung rated the presence of sleep disturbance as an important if not the most important symptom in depressive disorder with respect to diagnosis.

Prager prepared a list of client-developed measures. Unexplained anxiety and fear were ranked as items with the highest order of severity when tested with clients of a community mental health centre (Prager, 1980: 8).
In preparing a measure to obtain a clear picture as to the sense of wellbeing of chronic mental patients in three-quarter way housing it was decided not to include items indicating psychosis. Most if not all of the residents of the housing who are diagnosed as schizophrenic are maintained on medication and closely monitored in therapy, therefore such questions would be inappropriate for a population already living in the community and presenting not florid but residual symptoms.

In order to investigate feelings of both anxiety and depression in a short easy-to-use measure, it was decided to incorporate only those items which appeared in several scales, were ranked as high severity items, or had been frequently mentioned in personal experience with mentally ill clients. Anxiety and fear were incorporated from the Prager, Hamilton and Zung scales. Sleep disturbance was used from the Hamilton and Zung lists. Feelings of sadness (depressed pessimistic mood) was included from the Prager, Hamilton and Zung scales. Social withdrawal was used from the Bigelow quality of life study and the Zung depression scale.

Items of self-esteem, self-confidence, a sense of security and the ability to make decisions and solve problems were incorporated from the Bigelow study, recognizing that these traits are necessary for functioning at an adequate level in the community. To incorporate more than these ten items from the widely used standard scales would be to produce a list too unwieldy to use in a short period of time with interviewees. It was hoped that the items used in the list, together with items scaling loneliness and optimism, would present an honest picture of the current state of chronic mental patients in three-quarter way housing as to their symptomatology.
Meaningful activity.

The chronic mental patient in three-quarter way housing usually has an abundance of free time. If this time is structured with meaningful activity, the quality of life can be enhanced.

The meagre literature on the subject of meaningful activity or the positive structuring of time is confined mainly to the field of gerontology. Many gerontologists claim that the meaningful use of leisure contributes to satisfactory adjustment to retirement, but what is meant by meaningful? "Basically the concept of meaning overlaps with that of satisfaction so that an experience or activity which is meaningful is satisfying as well" (Weiner, Hunt, 1981: 444).

Studies have found that the level of meaning derived from work and leisure were similar. When the Work-Leisure Attitude Inventory was administered to a group of Fort Lauderdale retirees, a significant positive correlation was found between 8 of 13 work and leisure concepts; in other words, retirees satisfied with certain aspects of their past work experience were also satisfied with these same aspects in their leisure (Weiner, Hunt, 1981: 444).

Roadburg found that when people retire or age that their perception of leisure tends to move from productivity towards pleasure. Activities he categorized as leisure were reading/writing; television; cards/games; walking; arts/crafts/hobbies/sewing; visiting family/friends; physical activity; gardening; fishing; hunting; travel/camping; outings/driving; eating out; listening to radio/records; dancing; attending sporting events; clubs/organizations; cooking/entertaining; all relaxing activities; volunteering; sleeping; housework; shopping (Roadburg, 1981: 144).
Bley reported that when the elderly were asked by questionnaire why they attended certain activities, the major finding revealed that the elderly weren't seeking intimate ties but were attracted by a program, an opportunity to be useful to others, or the wish to be with people in general (Bley, 1973: 366).

Overs opined that most individuals in our culture believe that earning money justifies everything else (Overs, 1976: 22). However in pursuing an avocational activity the question whether it is useful or meaningful to the individual is of primary importance. There are non-monetary values of work which are also applicable to leisure pursuits:

1. A job structures a substantial portion of the available time. In either a paid job with required work hours or a systematic leisure pursuit plan, the individual is relieved of continual decisionmaking about what to do with his time.

2. A required daily schedule with work or leisure is a useful antidote to mild depression or anxiety. The activity requires sufficient attention so that the individual is distracted to some extent from absorption in his own problems. We are all familiar with this phenomenon, and we say, "It snaps you out of it."

3. Many jobs and some leisure activities have a supportive social structure. There are friends, or at least acquaintances, to have lunch and coffee breaks with (Overs, 1976: 22).

People who are most comfortable in social situations can have their needs satisfied in volunteer work or by joining leisure groups where these needs are met. In a recession practically no one who is severely disabled and marginally qualified will be hired in the workplace. For these individuals who are unable to secure work the development of leisure goals is essential. Overs categorizes the nine major groups of
avocational activities as games; sports; nature activities; collection activities; art and music activities; educational, entertainment and cultural activities; volunteer activities; crafts, and organizational activities (Overs, 1976: 23). He concluded that leisure offers a challenging new direction in which vocational evaluation and work adjustment may expand to meet client needs which are frustrated by lack of work opportunities.

In a study of the interrelationship of leisure and mental health, a sample of Houston adults was surveyed by structured interview concerning leisure activities, value preferences, social attitudes and various aspects of mental health (Gordon et al., 1973: 13). A conceptualization of leisure ranged from very high involvement intensity (dancing and drinking; participation in sports or exercise) to very low intensity (cultural consumption; television viewing; solitude). An additional study of the participants' goals and values was related to the leisure findings. The data supported the contention that goals and values have a determining impact on choice of leisure activity: among the most powerful determinants is education, another is personal growth. The amount of leisure participation, especially the active, participatory forms of leisure are positively correlated with measures of psychological wellbeing. The data of Gordon et al. show that "the active and social and external forms of activity rather than the passive, individual and home-bound forms, are predictive of psychological wellbeing" (Gordon et al. 1973: 22). He concluded that he and his colleagues have obtained empirical support for the belief that active lifestyles result in pleasure and reduce loneliness, depression and the anxiety of isolation, a position also taken by Kuenstler (1976: 636) and Fasting (1982: 117).
Measure of meaningful activity.

From the categories of above-mentioned authors and from the findings of the quality of life study by Bigelow, a list of activities was prepared, ranging from high intensity involvement such as regular sports activities and competitive work full-time to low intensity pursuits such as mainly watching television, listening to the radio, mainly staying home alone. Those leisure activities which require spending money such as travel, fishing, hunting, driving, outings, were not included since the chronic mental patients under study are virtually all below the poverty level.

Because most chronic mental patients are recipients of assisted income and are therefore deemed unemployable, it was not expected that many residents of three-quarter way housing would be involved in competitive or even sheltered work, full-time or part-time. What was anticipated despite the serious illness of the patients was that they had somewhat normalized the structure of their time to include what was for them the most satisfactory and meaningful activity which could be expected of a widely diversified group of people with residual symptoms.

Actual productivity is a strong social expectation and a source of gratification including higher income, the opportunity to make social contacts, a feeling of usefulness - and a site of major impairment in mental illness. Gunderson and Mosher (1975: 902), estimated that the cost of schizophrenia is in lost productivity, the yearly cost yields a figure from $8 billion to $11 billion in 1973 dollars. The cost is equally great in loss of social status, identity as a worker, and loss of morale among clients who cannot get and keep work in a tight and diminishing labour market.
The productivity expected was in volunteer work, and involvement in time-consuming hobbies such as handicrafts.

A list of activities was prepared from Roadburg including reading, watching t.v., walking, handicrafts, listening to the radio, sports activity, cooking, visiting friends, and from personal experience with the activities of chronic mental patients including such items as taking bus rides, visiting coffee shops and volunteer work, keeping in mind that the data of Gordon et al. show that psychological well-being is a result of social and external forms of activity rather than passive, home-bound forms. The list of activities was open-ended so that interviewees could add activities important to them.

In order to investigate which of these activities would be the ones pursued by chronic mental patients in three-quarter way housing it was decided to request that the study population choose three activities most important to them in structuring their time. Weiner and Hunt have stated that the concept of the meaningful use of free time overlaps with that of satisfaction. In view of this belief a simple scale of satisfaction was prepared to test interviewees as to the amount of satisfaction found in those major activities in which they spend their time.

Conceptual Framework

The purpose of this study is to investigate the effects of three-quarter way housing on the quality of life of chronic mental patients. The effects of three-quarter way housing become the independent variable which is investigated. The dependent variables which reflect the implementation of the independent variable are independence, social network,
symptomatology and meaningful activity. Also investigated are elements of demographic data and the incidence of hospitalization and brief emotional crises or decompensations which require crisis hostel intervention.

The conceptual framework determining the boundaries of the study shows two alternative courses of action: to leave the chronic mental patients in their present housing, or to move them into three-quarter way housing.

Intervening variables in the implementation process are tenant selection from the application process to three-quarter way housing and actual screening into the program to await residency.

Adjunct variables which have an influence on the clients' ability to fit into three-quarter way housing are programs in the teaching of basic life skills such as cooking, offered at some community care teams of the Greater Vancouver Mental Health Service. Other influences to be considered in this context are the patients' motivation to succeed in such housing, to continue in therapeutic aftercare at a community care team or some other therapeutic situation and to continue taking psychotropic medication as prescribed.

Unintended consequences of a move into three-quarter way housing are readmission or crisis hostel placement. Some patients find that the stress of a major change in their life such as a move into different housing precipitates an emotional crisis. Others may find that they cannot cope independently and are forced to return to the more dependent situation of a supervised boarding home.

Bridging variables include three-quarter way housing staff assistance, an improved environment, and socialization programs designed
to promote interpersonal interaction and the resulting expansion of the individual's supportive social network.

Constraint variables over which a three-quarter way program has no control include funding by the provincial Ministry of Health. A cut in funding would be expected to have a serious effect on a three-quarter way program, with a resulting decrease in staff and program activities. Funding has thus far been assured but there is no guarantee that in a time of restraint the present level of funding will continue.

The hoped-for consequences to be realized from implementation of the process are that some tenants will move on into the community to live completely on their own, and that others who have reached an optimum level of functioning but still require minimal support will remain as permanent residents.

The conceptual framework is summarized in Figure 1.

**Hypotheses**

As a result of three-quarter way housing it is hypothesized that the quality of life of chronic mental patients will change in the following ways:

1. Significant changes will be observed in the incidence of hospitalization and the number of days of institutionalization.
2. Significant changes will be observed in independence as measured by skills in daily living.
3. Significant changes will be observed in the severity of symptoms of mental illness.
Figure 1. Conceptual Framework of Effect of Three-quarter Way Housing on Quality of Life of Chronic Mental Patients.
4. Significant differences will be observed in the
total numbers of casual acquaintances and intimate
relationships of the patient's social network.

5. Significant changes will be observed in productive
and social pursuits and passive, isolated pursuits
in the meaningful activity reported by the patients.

Design

This is a two-part study. The first is a reanalysis of cross-
sectional comparative data collected in January, 1983, at which time a
random sample of 50 residents in three-quarter way housing was compared
with 20 applicants on a waiting list. The latter was a purposive sample
because the applicants were the only available subjects who had been
screened. They were matched through the screening process to the resident
group by reason of their acceptability to three-quarter way housing.
All subjects were interviewed at that time and data were collected on
the variables of independence, social network, symptomatology and meaningful
activity. Also collected were data on hospitalization and demographic
items.

The second part of the study is a follow-up of the original
applicants to obtain longitudinal data to validate the first cross-
sectional design. All original measures were used in the follow-up.
In addition, a satisfaction question in relation to the use of free time
in meaningful activity was applied to supplement the qualitative data of
that variable. Another addition was a validation measure of patient
current status which was completed by three-quarter way housing staff.

The design of the study is a quasi-experimental, partially
controlled field study, descriptive and explanatory in relation to the
type of information produced. The 1983 comparison of 50 residents and 20 applicants was on an ex post facto basis. The second part of the study - the follow-up of applicants who became residents over the course of a year - was on a prospective basis since this group was measured at two points in time, before and during residency. The additional validation measure completed by housing staff was ex post facto. The information gathered was mainly quantitative, although qualitative data were collected in the form of anecdotal comments on the dependent variables so as to enrich the findings.
METHOD

Setting

Subjects for the study were selected from the population of four apartment blocks of 106 mainly bachelor suites operated by the Coast Foundation Society in Vancouver. Started in 1974 the apartment project houses those chronic patients who are deemed capable of functioning in a minimally supportive environment with the support of their peers (Tomlinson, Cumming, 1976: 25).

The Coast Foundation apartment program supplies self-contained modern bachelor suites at a rent equal to the shelter variable of the residents' assistance income. A communal lounge is located in each apartment block as a focal point for program activity, socialization and the alleviation of loneliness. Weekly coffee hours and weekly cooking classes with resulting communal dinners are held in the lounges to promote social interaction. At a mandatory monthly meeting of all tenants, concerns are shared and additional activities are planned. A resident manager cares for each building and maintenance. An apartment block community mental health worker termed a "social coordinator" is on call on a twenty-four hour basis for personal crisis intervention and counselling in each building. By daily involvement with residents, staff are able to provide guidance in the structuring of time in suitable recreational or vocational
activities and to act as "friends" in co-operation with each individual's therapist.

The objectives of the Coast Foundation housing division are to house those ex-patients who have reached a plateau of functioning ability, and those who can be prepared to move on into the community-at-large; to increase the number of days the residents successfully live in the community as measured by rehospitalizations and incidences of decompensation; to increase the demonstrated levels of living skills of the residents and to increase the levels of social involvement through an expanded social network. Also expected is the increase of normative behaviour of the residents to a level adequate for community living and an increase in the numbers of primary and secondary resources used in the community. Residence is not time-limited since it is recognized that the process of adapting to community living varies widely from person to person. Some tenants will remain permanently in the project and others will move on to independent living in the community.

Subjects

The residents of Coast Foundation housing are formerly hospitalized people who are chronically mentally ill and in regular treatment with private psychiatrists or therapists of the community care teams of the Greater Vancouver Mental Health Service. They are screened into the program by a screening committee of Coast Foundation comprised of housing division staff, a tenant of the program and a psychiatric social worker to ascertain if they are in need of housing, if they have basic living skills for community living and if they are in ongoing aftercare which
provides therapy and medication. They are accepted into the program if they pass the screening and also receive a positive referral from their primary therapist as to their suitability for this housing.

Residents.

The population studied was a homogeneous group of chronic mental patients who came into three-quarter way housing from hospital, from boarding homes and transitional housing, and from substandard and isolated living conditions in the community. They were in continuous aftercare, receiving psychiatric medication for the alleviation of symptoms of mental illness, mainly schizophrenia but also including manic depressive, depressive and anxiety disorders. The residents surveyed in the Hooper (1983) study had been tenants of Coast Foundation mainly from two to four years. Seventy names were selected from a list of 106 residents by randomly pulling names out of a container. Nine people refused to be interviewed, one was in hospital, one was out of town, two had moved out of the blocks, and five names weren't used because a quota of 50 had been reached. The random sample of 50 residents was interviewed in a cross-sectional 1983 study, and data were collected to measure their current status in terms of independence, social network, symptomatology and meaningful activity. Also collected were data on their hospitalization in the three years prior to residence in Coast housing, and their hospitalization since living in Coast.
Applicants.

The applicants to Coast housing came from the same background and were similar to the residents, having passed through the same screening process. The 20 applicants who had been screened into the program were interviewed in the cross-sectional 1983 study and data were collected on the same measures of independence, social network, symptomatology and meaningful activity. Their previous hospitalizations were also recorded. For the 1984 longitudinal study 15 of the 20 applicants who had become residents were interviewed again after twelve months. Of the attrition of five applicants, one found alternative housing before a vacancy occurred and declined to move in. One moved out within three weeks because of a personality clash with another tenant. One underwent surgery and later moved out of town. Two women declined to be re-interviewed because they found the first interview made them uncomfortable. Each of these five people is known by the interviewer. They had no outstanding problems or differences from the other interviewees which would affect the results of the longitudinal study. The re-interview covered the same ground as the 1983 study.

As a validation check of the original measures, Coast Foundation staff completed a survey, using the Progress Evaluation Scales, of 17 of the original 20 applicants, excluding the three applicants who were not resident at the time. This survey was completed at the same time as the re-interviewing.
Procedure.

At Tenants Council monthly meetings in each apartment block the impending interview procedure of the residents was described. This was followed by a letter to all tenants informing them in detail about the interview, the hope that they would consent to be interviewed and the assurance that they could refuse without jeopardizing their tenancy. Staff members were notified when names were selected and because of this two subjects' names were dropped as not being well enough to take part in the survey. One woman was largely out of touch with reality and was very belligerent and the other was in a state of extreme anxiety. Interviewees were then phoned to arrange a meeting time and place at their convenience. Solicitation of interviews with applicants was undertaken after each patient passed the screening procedure, and interview dates and locations were arranged at the applicants' convenience. For the second study - the follow-up of the applicants - the same procedure was used: a first contact by letter and a follow-up phone call to arrange the interview. Most people chose to be interviewed in their own homes although two chose the Coast Foundation housing division office, two chose the Coast activity centre and one chose a coffee shop.

The Interview.

Whenever possible the interviewer sat beside the interviewee, consciously avoiding a confrontational posture with emotionally fragile people. The interviewee was thus able to read what was being scaled or written so as to allay anxiety. The interviewees were assured they were
granting a favour by being interviewed and were reassured that the data would remain confidential and that in no way would their answers either jeopardize their tenancy or jeopardize the applicants' acceptance to the program when a suite became available. The interviews were quite different. Some interviewees were straightforward, some were confused, and needed patient explanation and more time than others, some were reticent and needed encouragement, and a few were very anxious and required a gentle approach. In all cases the interviews were continued until the information required was obtained and documented, and until the interviews ended on a reassuring and positive note. No interviews were aborted.

Measures

*Measures completed by housing coordinator.*

*Progress Evaluation Scales.*

The follow-up validation measure of 17 of the 20 original applicants with the Progress Evaluation Scales was conducted by the housing coordinator of Coast Foundation together with the social coordinators of the apartment blocks. The housing coordinator who knows all the residents completed the assessments, with input from the social coordinator from each apartment block to update and expand on any information about the tenants of which the housing coordinator wasn't aware. Ratings were made on the basis of this information and the coordinator's knowledge of the tenants. The patients were not involved in this study. The sample size was 17, because, as pointed out earlier, one patient declined to move in, and two had moved out.
A program outcome measure, the Progress Evaluation Scales are made up of seven scales each consisting of five levels with the characteristics of each level described. For purposes of quantifying, the five levels of the scales are assigned values of 1 to 5, from the most pathological to the healthiest levels of functioning in each of seven areas such as "Attitude toward self" or self-esteem. The lowest level score characterizes negative self-esteem most of the time, the middle level portrays an almost equal negative-positive attitude and the highest level is characterized as having a positive attitude toward oneself most of the time.

The first of the seven scales, "Family Relations," was substituted by "Independence." Information about family relationships was not available to the coordinators but independence was readily observable. This item was prepared by the researcher, following the format and descriptions of the other sub-scales. It was characterized by five descriptions ranging from heavy dependence to a state of almost complete independence, to conform with the characterizations of the other six items.

To use the scales, the coordinators assigned a value to each of the seven scales describing best the current functioning level of the individual concerned.

With various client samples numerous studies were carried out with these scales over eight years, to study their psychometric properties such as rater reliability, etc. (Ihilevich et al., 1981: 456). In an early study of the P.E.S. scales a staff member sat in on an initial interview of the client by the therapist and independently rated the
client's present status. A sample of 20 clients was rated. Reliability estimates for current status ranged from .49 for "Problems" to a high of .86 for "Getting along with others". The median reliability for present status was .65 (Ihilevich et al., 1981: 457). Stability of ratings over occasions was examined by having 65 adult patients fill out rating scales on two occasions two weeks apart. Their therapists also rated them on two occasions. There was little if any systematic variance attributable to occasions of rating on any of the scales, nor any differential trend over occasions between ratings of client and therapist.

Well functioning members of the community, i.e. those requiring no services should obtain higher scores than the emotionally disturbed. To test this assumption 261 non-patients in various jobs and school programs were compared to 270 male and female outpatients. Self-ratings on all seven scales significantly differentiated patient and non-patient groups. All differences were in the expected direction. It is therefore evident that the P.E.S. Scales are capable of making valid discriminations among patients and non-patients as to their emotional, interpersonal and community adjustment.

Pre-testing of the P.E.S. scales with the follow-up group of 17 new residents of Coast Foundation was carried out by the housing staff who found no problem with the scales.
Because the sub-scales of the P.E.S. scales did not match the items chosen for the self-report measures in subject matter, cross-tabulations were applied only to those sub-scales which seemed to be measuring the same traits.

Outcome of Independence of the P.E.S. sub-scales was compared with Independence of the self-report measure. Cross-tabulations were applied to the Attitude toward self sub-scale of the P.E.S. scales and Self-esteem of the self-report measures. They were applied to the Feelings and mood sub-scale of the P.E.S. scales and Loneliness, Sadness, Anxiety and Optimism of the self-report measures to see if a relationship occurred between these items. The Problems sub-scale of the P.E.S. scales was also cross-tabulated with Loneliness, Sadness, Anxiety and Optimism of the self-report measures to see if a relationship existed between these items. No other items of the P.E.S. sub-scales were deemed to be similar enough to the items of the self-report measures to examine concurrent validity.

Measures completed by researcher with residents.

Independence Scale.

For the purpose of this study, independence for chronic mental patients is defined by the items of the following measure.

The Independence scale is adapted from the Assessment of Client Independence used by the Greater Vancouver Mental Health Service. The measure contains 12 items: grocery shopping, shopping for other essentials, preparing well-balanced meals, laundry, cleaning apartment or room, budgetting, personal hygiene and grooming, use of health services, use of
recreational resources, use of community resources such as government or social agencies, use of available transportation, and socialization skills. The item on socialization skills was not used because it would duplicate the separate social network measure. The two items on shopping were combined and an item on personal supervision of medication was included.

The independence scale therefore includes 11 items to be scaled "yes", "need assistance", "no", to such questions as "Are you able to budget your own money and manage banking?" Each of the items deals with a common activity of daily living designed to cover all those activities necessary for a normal life in the community. The scale is quantified for statistical purposes with "yes" rating 3, "need assistance" rating 2, and "no", 1.

**Social Network Scale.**

As indicated in the literature review, the social network scale measures the size and intimacy of the patient's social network, outlined by various authors as the most important data to be collected and to be compared with the network size of normals. The latter, according to Hammer and others have a mean of slightly less than 40 individuals with a range of 25 to 50, with 6 to 10 of these being intimately known individuals. Therefore social network for the purposes of this study is defined as the number of one's close and casual relationships. Close relationships are those social ties which are intimate in nature and occur on a regular and frequent basis.

The social network scale has six questions requiring actual number of intimate friends and casual acquaintances, within the apartment
blocks, outside in the community, and such links with kin. The questions were worded in these areas to help facilitate the patient's recall of his close and casual relationships. Close relationships and casual relationships were then totalled.

Symptomatology Scale.

In order to investigate the current state of symptomatology in a short easy-to-use measure, high severity items and items recurring in several widely used scales as indicated by the literature were incorporated. Anxiety, fear and feelings of sadness were used from the Prager, Hamilton and Zung scales. Sleep pattern was incorporated from the Hamilton and Zung scales. Items of social withdrawal, self-esteem, self-confidence, a sense of security and the ability to make decisions and solve problems were used from the Bigelow study. Loneliness and outlook for the future were incorporated from personal experience with depressed patients.

In all, 12 items form the symptomatology scale which is described in five levels - "always", "most of the time", "sometimes", "hardly ever" to "never". "Always" is rated as 5, "never" as 1 for statistical purposes. Five of the questions were presented in a negative format to balance the questionnaire for the reader and prevent repetitive scoring in the same levels. These five items must be scaled in reverse. Question 13: "In your present living situation is your sleeping pattern satisfactory? can be scaled 5 for "always" through to 1 for "never".
Meaningful activities list.

A list of activities was prepared from Roadburg and from personal experience of the activities of chronic mental patients, mindful that Gordon et al. made the point that psychological wellbeing is associated with active and social activities rather than passive, homebound activities. However, Bigelow has pointed out that for some chronic mental patients, watching t.v. and passive pursuits may be optimum activities for those with significant pathology, and expectations of productivity may be unrealistic. If such people are satisfied with their daily activities and feel comfortable with them, this is the more realistic measure of what is meaningful.

The meaningful activities section of the measures lists 20 suggested activities such as "sheltered work part time", "volunteer work", "visiting with friends or relatives", "mainly watching t.v.", and invites the interviewee to list other activities if those listed are not his major pursuits. Three activities which are the most important to the respondent are chosen. Each activity is scaled "yes" 2, or "no" 1. A satisfaction scale accompanies the measure. To be rated in four levels it is scored at 4 for "very satisfied", 3 for "satisfied", 2 for "dissatisfied" and 1 for "very dissatisfied" with the three most important activities chosen by the interviewee.

Demographic data.

The part of the measures devoted to demographic data lists 22 items including age, sex, education, referral source, diagnosis, former
housing, income, years of psychiatric service, type and frequency of aftercare. Some items contain a range of answers. "Diagnosis" offers five choices to the reader: schizophrenic/psychotic, manic depressive, depressive disorder, anxiety disorder and personality disorder. Choices are numbered from one to five for statistical purposes.

**Hospitalization.**

Hospitalization is covered in some detail by 16 items which break down institutionalization into admissions to hospital, hospital day care, and "Venture" crisis hostel. Questions also refer to the institution entered and the time period covered by institutionalization. Because the average resident in the 1983 study had been living in three-quarter way housing from two to four years, half the questions covered institutionalization in the three year period prior to living in such housing, and half the questions refer to institutionalization in the period since residency. These questions were also asked of the applicants in the follow-up study although their period of residency ranged from three months to a year when interviewed. These questions are scored by actual numbers of institutionalizations and numbers of days institutionalized.

**Method of Statistical Analysis**

Frequency distributions were compiled for demographic data, including hospitalizations and other institutionalizations, for the measure of Independence and for the Meaningful activities schedule.
Because of low frequencies and unbalanced distributions of these data extended statistical analysis was not possible, but cross tabulations were utilized to look at the associations between selected variables and to provide some indications of trends. Cross tabulations were utilized in a comparison of supervisory staff assessments of the patients and patients' self-reports.

In looking for differences between the current status of residents and applicants, t-tests were applied to social network variables. T-tests were also utilized to examine differences in the scaled variables of the Symptomatology measure between the two samples, and to examine the differences between the Time 1 measure of applicants and the Time 2 measure of applicants when they had become residents, regarding their social network and their symptomatology.
RESULTS

Demographic information: residents and applicants.

The resident sample of 50 was made up of 26 men and 24 women. Average age overall was 44 years, SD = 13.3. The applicant control group of 20 was evenly divided by sex with an average age of 36 years, SD = 9.6, portraying a middle-aged population nearly evenly divided by sex and all but two of single status. Comparative age distribution is shown in Figure 2.

Nearly 60% of both groups had earned at least part of a secondary school education; 30% of the residents and 35% of the applicants had post-secondary schooling.

The majority of residents interviewed were long-term tenants of three-quarter way housing, nearly two-thirds having lived in the apartment blocks between one and four years, therefore most residents sampled were able to describe themselves in relation to the housing program with knowledge gathered from considerable experience.

More than half of the residents were referred to three-quarter way housing by the community care teams of the Greater Vancouver Mental Health Service, whereas nearly two-thirds of the applicants had heard of the housing program through friends. In the early years of
Figure 2. Percentage Age Distribution of Residents and Applicants.
the housing program the community care teams were the primary means of referral to the housing resource. By 1983 when the applicants were interviewed the housing program had become well established in the community in its nine years of operation. Its availability to mental patients had become well-known by word-of-mouth via the patient grapevine and although most referrals of a professional nature continue to be made by the community care teams, the majority of applicants now self-refer on the advice of friends.

The majority of the residents were diagnosed as schizophrenic, 56% compared to the applicants' 60%. Other disorders were manic depression, depressive disorder, anxiety disorder and personality disorder as shown in Table 1.

Housing characteristics of both groups were similar, with most having lived alone, and a third having resided in psychiatric boarding homes prior to residency in Coast Foundation apartment blocks. Former housing types for most residents and applicants included rooms which were not self-contained, suites which were self-contained, psychiatric boarding homes and Mental Patients Association houses. Other types which accounted for the few remaining people were hotel rooms, family homes, hard-to-house shelters such as Lookout, home-sharing and hospital. Housing characteristics are shown in Table 2.

Source of income was comparable, with two-thirds of the residents and over half of the applicants receiving Handicapped Persons Income Assistance. Only one resident and one applicant were employed. Several were receiving social assistance which is usually paid to those under 30 in preference to H.P.I.A. unless the individual has a
Table 1

*Diagnoses were obtained from agency records and it should be noted that they are subject to change, and would have been made originally by various professionals.
### Table 2

**Housing Characteristics of Residents and Applicants**

Before They Moved into Coast Foundation

<table>
<thead>
<tr>
<th></th>
<th>Residents</th>
<th>%</th>
<th>Applicants</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living alone</td>
<td>23</td>
<td>46</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>Living with relative(s)</td>
<td>5</td>
<td>10</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>Living in a boarding home or transitional housing</td>
<td>16</td>
<td>32</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>Communal living</td>
<td>5</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hospital</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>100</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

N = 50  
N = 20
poor prognosis and is deemed permanently unemployable at an early age. Other sources of income included Old Age Pension, Gain, D.V.A. pension, estate income, Canada Pension Plan Disability, and U.I.C. Only one of the residents and one applicant were receiving in excess of a poverty level income, set at $747.50 per month in large Canadian cities by the National Council of Welfare in 1982. All others were receiving well below this limit at less than $600 per month.

Length of some form of psychiatric service averaged 16 years, SD = 9.8, for the residents; 12 years, SD = 6.2, for the applicants, both groups being fairly chronic psychiatric convalescents. Follow-up care for both groups was typically attendance at a community care team. Frequency of attendance was comparable, with one quarter attending once a week, one quarter every two weeks, and approximately 40% visiting once a month.

The chronic nature of the illness of the population is evidenced by the number of their hospitalizations. Average number of hospitalizations of the residents was 4, SD = 2.5, and a range of 0 to 10. Mean hospitalizations of the applicants was 7, SD = 5.7, with a range of 1 to 25. The difference in the number of hospitalizations between the residents and the applicants is explainable because of the applicants' younger mean age, and current hospitalization policy. The average hospitalization 15 to 20 years ago was a great deal longer than today. People are now admitted more frequently and usually no longer than a month or six weeks which allows stabilization on medication but prevents dependency on institutions and the detrimental effects of institutionalization. The figures do not include hospitalizations of under 24 hours
such as an overnight stay in the emergency department of a hospital because of an overdose. Nor do they include any intervention which is not of an in-patient nature. Chronicity is the only useful finding from the frequency of institutionalization. What the figures do not reveal is the seriousness of the intervention: eight short hospitalizations of a few days' or weeks' duration cannot be compared with one admission which lasts 10 years. The total duration of all hospitalizations was not compiled because a significant number of those interviewed had first been hospitalized many years ago, in some cases in other parts of Canada, and the information would probably not be reliable.

Hospitalization three years prior to, and subsequent to three-quarter way housing residence.

What is more relevant to the study than the number of past hospitalizations is the number and duration of hospitalizations in the three years before residence and in the span of time since residence. Three years was chosen as a cut-off point since the majority of the resident sample had been tenants of three-quarter way housing for two to four years. Also examined in this time span was the number and duration of hospital day care admissions and the number and duration of Venture (crisis hostel) admissions.

Hospitalizations subsequent to residency were verifiable from Coast Foundation records. Only those self-reported hospitalizations in the three years prior to residency were not verified. Confirmation of this information was not sought due to the degree of anxiety provoked
when clients were asked to sign hospital release of data forms.
Hospitalizations are a very traumatic incident in a person's life and well remembered as to time and duration. The degree of accuracy in reporting of hospitalization data since residency has borne this out.

Fifty per cent of the resident sample were hospitalized as in-patients in the three years prior to residence. Only 12% have been hospitalized since, which is equal to the high risk factor of 10 to 15% of those screened into the housing program. At each screening into the program of about 20 to 25 applicants, two or three people are accepted who are at high risk of being returned to boarding homes, hospitals, or other dependent settings. They are characterized by more severe symptoms, lack of productivity, and more hospitalizations in the past. The rationale is that peer support and the example of others will help integrate the high risk people into the program. Pressure has been exerted on Coast Foundation by the Ministry of Health to accept high risk clients from the Fernwood community preparation program at Riverview Hospital and this has been done with some success, with one Fernwood graduate coping well in one of the blocks for over three years.

Admissions of the resident sample to Venture decreased slightly: 20% were admitted to Venture in the three years prior to residency; 16% were admitted since residency. Tables 3 and 4 show institutionalization of residents prior to and since residency. Average length of stay in psychiatric facilities was 61 days duration prior to residency; 21 days since residence. Hospital day care stays were shortened from 99 days to 44 days average stay. Venture stays dropped from an average of 9 days to 7 days.
Table 3

No. of Admissions of Residents to Institutions in the Three Years Prior to and Subsequent to Living in Three-quarter Way Housing

<table>
<thead>
<tr>
<th></th>
<th>Hospital Inpatient</th>
<th>Hospital Day Care</th>
<th>Venture</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Coast housing</td>
<td>47</td>
<td>11</td>
<td>17</td>
<td>75</td>
</tr>
<tr>
<td>Post Coast housing</td>
<td>8</td>
<td>3</td>
<td>13</td>
<td>24</td>
</tr>
</tbody>
</table>
Table 4

No. of Institution Days of Residents in the Three Years Prior to and Subsequent to Living in Three-quarter Way Housing

<table>
<thead>
<tr>
<th>Type</th>
<th>Hospital Inpatient</th>
<th>Hospital Day Care</th>
<th>Venture</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Coast housing</td>
<td>2860</td>
<td>1088</td>
<td>149</td>
<td>4097</td>
</tr>
<tr>
<td>Post Coast housing</td>
<td>172</td>
<td>132</td>
<td>86</td>
<td>390</td>
</tr>
</tbody>
</table>
Institutionalization of applicants followed the pattern of the residents, with slightly more than half of the sample hospitalized as inpatients in the three years prior to residency and the number of admissions nearly equalling the sample size. Table 5 shows the average admissions of patients per month. Average institutionalization of applicants per month pre and post residency is shown in Table 6. A one year period was used because most applicants had been residents for a full year at Time 2 testing.

**Independence.**

When assessed with the Independence schedule, residents and applicants were observed in practically all cases in their homes so that a lack of personal hygiene or lack of ability to perform housekeeping chores was obvious to the researcher. In nearly all cases living environments attained a fairly high standard of neatness and cleanliness. All 50 residents were capable of maintaining their personal hygiene and grooming, were capable of supervising their own medication and looked after their own transportation needs. All but one or two did their own shopping, looked after their physical health needs, managed their own budgetting and banking, sought their own recreation resources and had no problems dealing with government and social agencies. Three people required assistance in doing their own laundry and preparing meals. Six individuals reported needing assistance in doing their own housekeeping chores. In all cases those requiring assistance did so
Table 5

Average No. of Admissions per Patient per Month of Applicants in the Three Years Prior to Three-quarter Way Housing and in the One Year Period Subsequent to Housing

<table>
<thead>
<tr>
<th>Type</th>
<th>Hospital Inpatient</th>
<th>Hospital Day Care</th>
<th>Venture</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Coast Housing</td>
<td>.03</td>
<td>.01</td>
<td>.003</td>
<td>.043</td>
</tr>
<tr>
<td>Post Coast housing</td>
<td>.01</td>
<td>.00</td>
<td>.02</td>
<td>.03</td>
</tr>
</tbody>
</table>

N = 15
**Table 6**

Average No. of Institution Days per Patient per Month of Applicants in the Three Years Prior to Three-quarter Way Housing and in the One Year Period Subsequent to Housing

<table>
<thead>
<tr>
<th>Type</th>
<th>Hospital Inpatient</th>
<th>Hospital Day Care</th>
<th>Venture</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Coast Housing</td>
<td>1.2</td>
<td>.83</td>
<td>.02</td>
<td>2.05</td>
</tr>
<tr>
<td>Post Coast Housing</td>
<td>.06</td>
<td>0.0</td>
<td>.05</td>
<td>.11</td>
</tr>
</tbody>
</table>

N = 15
because of physical health problems or problems of aging. The applicants at Time 1 testing were able to perform every item of the Independence schedule except for two individuals who required assistance in preparing meals and one who needed help in budgeting and banking.

Apart from these isolated examples, residents and applicants managed very well on their own despite their sometimes lengthy stays in institutions and psychiatric boarding homes where all basic needs were met and medication supervised. When the applicants became residents they were assessed again with the same instrument and were found to be independent in every item of the measure. The high degree of independence of the residents, the applicants at Time 1 testing, and Time 2 testing when they had become residents reflects the tight screening procedure to enter three-quarter way housing. If applicants seem incapable of performing basic living skills they are not accepted into this type of housing. Those residents who become physically disabled through disease or aging are provided with homemakers through the Ministry of Human Resources.

**Social network.**

Residents of three-quarter way housing were found to have established a number of interpersonal relationships in the apartment blocks, an average of 7 acquaintances, SD = 6, and one close friend, SD = 1.2. Casual acquaintances totalled an average of 18, and total close relationships averaged 5, for an overall average total of 23. Applicants' Time 1 testing showed a total of casual relationships of an average of 10, with a total average of close relationships averaging 4
for an overall average total of 14. Applicants' Time 2 testing, after they had become residents, showed a mean total of 20 acquaintances, a mean total of 7 close relationships for an overall mean total of 27 individuals in their social network. Table 7 shows a raw data comparison in the mean number of social relationships by type between the sample of residents, the sample of applicants, and the latter when they had become residents.

When the data are clustered, i.e. when all casual relationships in present housing, in the community, and with relatives are considered together, and when all close relationships are considered together, the total difference between the residents and the applicants in average casual relationships is statistically significant ($t = 4.12, df = 67.95, p < .01$) and the difference in total mean close relationships approaches significance ($t = 1.36, df = 55.81, p = .18$).

Analysis of the social networks of the 50 residents, and 20 applicants Time 1, shows that the difference between acquaintances in the residents' present housing and the applicants' present housing is statistically significant ($t = 4.97, df = 67.47, p < .01$). Close relationships of residents in their present housing compared to close relationships of the applicants in their present housing approaches significance ($t = 1.54, df = 68, p = .10$) as do differences between the two groups regarding their acquaintances in the community ($t = 1.35, df = 61.83, p = .18$). The comparison of the social network of residents with applicants at Time 1 testing is shown in Table 8.
Table 7
Mean No. of Social Relationships by Type, of Residents, Applicants Time 1 Testing, and Applicants Time 2 Testing When They had Become Residents

<table>
<thead>
<tr>
<th>Network Variables</th>
<th>Residents</th>
<th>Applicants Time 1</th>
<th>Applicants Time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casual acquaintances in housing</td>
<td>7.04</td>
<td>1.90</td>
<td>6.80</td>
</tr>
<tr>
<td>Close friends in housing</td>
<td>.90</td>
<td>.45</td>
<td>1.00</td>
</tr>
<tr>
<td>Casual acquaintances in community</td>
<td>7.60</td>
<td>5.70</td>
<td>11.00</td>
</tr>
<tr>
<td>Close friends in community</td>
<td>2.28</td>
<td>2.20</td>
<td>4.33</td>
</tr>
<tr>
<td>Casual relationships with kin</td>
<td>3.26</td>
<td>2.65</td>
<td>2.53</td>
</tr>
<tr>
<td>Close relationships with kin</td>
<td>2.04</td>
<td>1.55</td>
<td>1.60</td>
</tr>
<tr>
<td>Mean total</td>
<td>23.12</td>
<td>14.45</td>
<td>27.26</td>
</tr>
</tbody>
</table>

N = 50        N = 20        N = 15
Table 8
Mean No. of Social Relationships by Type, of Residents
Compared with the Mean No. of Social Relationships
of Applicants Time 1 Testing

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>DF</th>
<th>t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquaintances in housing</td>
<td>R</td>
<td>7.04</td>
<td>6.03</td>
<td>67.47</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>1.90</td>
<td>2.61</td>
<td></td>
</tr>
<tr>
<td>Close friends in housing</td>
<td>R</td>
<td>.90</td>
<td>1.16</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>.45</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td>Acquaintances in community</td>
<td>R</td>
<td>7.60</td>
<td>7.56</td>
<td>61.83</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>5.70</td>
<td>4.07</td>
<td></td>
</tr>
<tr>
<td>Close friends in community</td>
<td>R</td>
<td>2.28</td>
<td>2.42</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>2.20</td>
<td>1.70</td>
<td></td>
</tr>
<tr>
<td>Casual relationships with kin</td>
<td>R</td>
<td>3.26</td>
<td>4.14</td>
<td>65.69</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>2.65</td>
<td>1.98</td>
<td></td>
</tr>
<tr>
<td>Close relationships with kin</td>
<td>R</td>
<td>2.04</td>
<td>1.96</td>
<td>54.93</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>1.55</td>
<td>1.23</td>
<td></td>
</tr>
</tbody>
</table>

** p < .01

1 separate variance estimate utilized
2 pooled variance estimate utilized

R = residents
A = applicants
Rn = 50
An = 20
Analysis of the social networks of the applicants at Time 1 and the applicants when they had become residents at Time 2 portrayed in Table 9 shows that the difference between acquaintances in present housing is statistically significant \((t = -2.76, df = 14, p < .05)\). A comparison of acquaintances in the community at Time 1 and Time 2 is statistically significant \((t = -2.79, df = 14, p < .05)\). The difference between close friends in the community at Time 1 and Time 2 is also statistically significant \((t = -3.19, df = 14, p < .01)\).

**Symptomatology.**

The interview is primarily an indirect means of obtaining information from the client; the direct means would be to observe his or her behaviour under natural conditions. Structured interviews with the residents and applicants to three-quarter way housing revealed the extent of symptoms of anxiety, depression, social withdrawal and the ability to cope with life in the community. Feelings of sadness, self-esteem, making decisions, feelings of security, and social withdrawal differentiated the two groups at a statistically significant level as shown in Table 10. The fifty residents scored a mean of 3.66, \(SD = .8\) out of a possible score of five in coping with feelings of sadness compared to the applicants' 3.15, \(SD = .8\). The residents scored a mean of 4.06 out of 5, \(SD = .7\) in expressing their self-esteem whereas the applicants scored 3.4, \(SD = .7\). In assessing their ability to make decisions the residents scored a high of 4.2, \(SD = .8\) compared to the applicants 3.8, \(SD = .6\). Feelings of security of the residents scored highest
Table 9

Mean No. of Social Relationships by Type of Applicants at

Time 1 Compared with Applicants When They

Became Residents at Time 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>DF</th>
<th>t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquaintances in housing</td>
<td>A1</td>
<td>2.13</td>
<td>2.85</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>6.80</td>
<td>5.26</td>
<td></td>
</tr>
<tr>
<td>Close friends in housing</td>
<td>A1</td>
<td>.46</td>
<td>.99</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>1.00</td>
<td>1.41</td>
<td></td>
</tr>
<tr>
<td>Acquaintances in community</td>
<td>A1</td>
<td>5.60</td>
<td>3.94</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>11.00</td>
<td>7.61</td>
<td></td>
</tr>
<tr>
<td>Close friends in community</td>
<td>A1</td>
<td>2.46</td>
<td>1.84</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>4.33</td>
<td>2.22</td>
<td></td>
</tr>
<tr>
<td>Casual relationships with kin</td>
<td>A1</td>
<td>2.33</td>
<td>2.02</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>2.53</td>
<td>1.64</td>
<td></td>
</tr>
<tr>
<td>Close relationships with kin</td>
<td>A1</td>
<td>1.40</td>
<td>1.18</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>1.66</td>
<td>1.54</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05
** p < .01

A1 = applicants Time 1
A2 = applicants Time 2
N = 15
Table 10
Comparison of the Symptomatology of the Residents With Applicants Time 1 Testing

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>DF</th>
<th>t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness</td>
<td>R</td>
<td>3.40</td>
<td>.93</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>3.00</td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>Sadness</td>
<td>R</td>
<td>3.66</td>
<td>.85</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>3.15</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>R</td>
<td>3.72</td>
<td>.93</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>3.55</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>Esteem</td>
<td>R</td>
<td>4.06</td>
<td>.71</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>3.40</td>
<td>.68</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>R</td>
<td>3.78</td>
<td>1.03</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>3.40</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td>Solve problems</td>
<td>R</td>
<td>3.96</td>
<td>.75</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>3.75</td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>Make decisions</td>
<td>R</td>
<td>4.22</td>
<td>.76</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>3.75</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>Fears</td>
<td>R</td>
<td>3.78</td>
<td>1.03</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>3.60</td>
<td>.88</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>R</td>
<td>4.50</td>
<td>.61</td>
<td>23.642</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>3.30</td>
<td>1.12</td>
<td></td>
</tr>
<tr>
<td>Sleep</td>
<td>R</td>
<td>3.88</td>
<td>.94</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>3.80</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>Self confidence</td>
<td>R</td>
<td>3.80</td>
<td>.83</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>3.45</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>Withdrawal</td>
<td>R</td>
<td>3.84</td>
<td>1.02</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>3.20</td>
<td>.95</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05    ** p < .01

1 pooled variance estimate utilized. 2 separate variance estimate utilized.
R = Residents    A = applicants    R_n = 50    A_n = 20
with a total of 4.5 out of 5, $\text{SD} = .6$, whereas the applicants scored only 3.3, $\text{SD} = 1.1$, and an estimate of the residents' ability to avoid social withdrawal was 3.8, $\text{SD} = 1.0$ compared to the applicants' 3.2, $\text{SD} = 1.0$.

Feelings of loneliness, anxiety, and self-confidence approached significance in differentiating the two groups. In all items, the residents scored higher than the applicants.

When the applicants became residents they were tested again. In comparing these residents at Time 1 and Time 2, optimism, self-esteem, the ability to solve problems, the ability to make decisions, feelings of security, self-confidence and social withdrawal differentiated the Time 1 and Time 2 measures at a statistically significant level as portrayed in Table 11, and the difference in feelings of loneliness and sadness approached significance. Feelings of fear, feelings of anxiety and sleep pattern did not show a significant change.

All mean scores were consistently higher in the second testing of the applicants when they had become residents. Optimism was scaled at 3.9 out of 5, $\text{SD} = .7$; self-esteem at 3.9, $\text{SD} = .5$; solving problems scored 4.1, $\text{SD} = .3$; making decisions 4.3, $\text{SD} = .6$; security reached a higher level than all previous scores at 4.5 out of a possible 5 points; $\text{SD} = .6$; self-confidence was rated at 4.0, $\text{SD} = .4$; and ability to avoid social withdrawal was rated 4.1, $\text{SD} = .9$.

Meaningful activity.

No appreciable change was noted in the structuring of free time between the residents, the applicants Time 1 and the applicants
Table 11
Comparison of the Symptomatology of Applicants Time 1 and the Applicants When They Became Residents Time 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean A1</th>
<th>Mean A2</th>
<th>SD</th>
<th>DF</th>
<th>t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness</td>
<td>3.00</td>
<td>3.40</td>
<td>.93</td>
<td>14</td>
<td>-1.70</td>
</tr>
<tr>
<td>Sadness</td>
<td>3.07</td>
<td>3.47</td>
<td>.80</td>
<td>14</td>
<td>-2.10</td>
</tr>
<tr>
<td>Optimism</td>
<td>3.47</td>
<td>3.93</td>
<td>.74</td>
<td>14</td>
<td>-2.17*</td>
</tr>
<tr>
<td>Esteem</td>
<td>3.33</td>
<td>3.87</td>
<td>.72</td>
<td>14</td>
<td>-2.26*</td>
</tr>
<tr>
<td>Anxiety</td>
<td>3.33</td>
<td>3.60</td>
<td>1.05</td>
<td>14</td>
<td>-1.07</td>
</tr>
<tr>
<td>Solve problems</td>
<td>3.66</td>
<td>4.06</td>
<td>.62</td>
<td>14</td>
<td>-2.45*</td>
</tr>
<tr>
<td>Make decisions</td>
<td>3.73</td>
<td>4.27</td>
<td>.59</td>
<td>14</td>
<td>-2.48*</td>
</tr>
<tr>
<td>Fears</td>
<td>3.67</td>
<td>3.93</td>
<td>.97</td>
<td>14</td>
<td>-1.07</td>
</tr>
<tr>
<td>Security</td>
<td>3.20</td>
<td>4.53</td>
<td>1.15</td>
<td>14</td>
<td>-3.70**</td>
</tr>
<tr>
<td>Sleep</td>
<td>3.93</td>
<td>3.93</td>
<td>.59</td>
<td>14</td>
<td>0.0</td>
</tr>
<tr>
<td>Self conf.</td>
<td>3.53</td>
<td>4.00</td>
<td>.74</td>
<td>14</td>
<td>-2.43*</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>3.20</td>
<td>4.06</td>
<td>1.01</td>
<td>14</td>
<td>-3.67**</td>
</tr>
</tbody>
</table>

* p < .05      ** p < .01
A1 = applicants Time 1; A2 = applicants Time 2 when they had become residents.
N = 15
when they had become residents at Time 2, which is portrayed in Table 12. Time 2 measurements were accompanied by a satisfaction scale which showed that thirteen per cent of the residents of the Time 2 measurement were "very satisfied" with their activities, 80% were "satisfied" and only one, 7%, was "dissatisfied".

Validation of measures by Progress Evaluation Scales.

After the applicants to three-quarter way housing became residents their present status was assessed by Coast Foundation supervisory staff with the P.E.S. Scales which examined Independence, Occupation, Getting along with others, Feelings and mood, Use of free time, Problems, and Attitude toward self. This assessment served as validation of the self-report measures used in the rest of the study.

The supervisory staff viewed over 80% of these residents as mainly independent in every way or only occasionally requiring direction from staff. Less than 20% were seen to be lacking independence either in several areas or a number of important areas.

Almost two-thirds of the residents were seen to be lacking in occupational skills, seldom or never holding a job, attending classes or caring for a home. One quarter of the sample were seen sometimes to hold a job or take classes or regularly work and pursue upgrading.

Most of the residents were judged to be able to get along with others well, with nearly 60% viewed as having regular close friends and the remainder having occasional friends.

Nearly 30% of the sample was seen to be usually in a good mood and to be as happy, sad, or angry as the situation called for,
Table 12
Three Activities Rated Most Meaningful by the Patients in the Structuring of Their Time

<table>
<thead>
<tr>
<th>Activities</th>
<th>Residents</th>
<th>Applicants Time 1</th>
<th>Applicants when they had become residents Time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Productive Activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitive work, full time</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitive work, part time</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Sheltered work, part time</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Community work (CIP)</td>
<td>13</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Volunteer work</td>
<td>6</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Job-searching</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Babysitting</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social Activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visiting friends/kin</td>
<td>26</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>c.c. team programs</td>
<td>2</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Coffee shop visits</td>
<td>11</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Apt. lounge visits</td>
<td>10</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Regular sports</td>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Drop-in centres</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Walking</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping/window</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Church activities</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Playing bridge</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CONTINUED
Table 12 continued

<table>
<thead>
<tr>
<th></th>
<th>Residents</th>
<th>Applicants when they had become residents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
</tr>
<tr>
<td>bus rides</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>pub visits</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>race track</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Solitary Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>handicrafts/hobbies</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>reading/studying</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>watching t.v.</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>radio listening</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>cooking/baking</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>home, alone</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>creative writing</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>150</strong></td>
<td><strong>60</strong></td>
</tr>
<tr>
<td></td>
<td>(3 x 50)</td>
<td>(3 x 20)</td>
</tr>
<tr>
<td></td>
<td><strong>45</strong></td>
<td><strong>3 x 15</strong></td>
</tr>
</tbody>
</table>

N = 50       N = 20       N = 15
with an additional 50% occasionally feeling nervous or unhappy or angry all day. The remainder were viewed as frequently in a good mood but occasionally nervous, or depressed or angry for days at a time.

Over half of the sample was seen to be participating in, as well as creating a variety of recreational activities and hobbies for themselves and others, whereas several people were judged to take part in only occasional recreational activity.

Nearly three-quarters of the residents appeared to staff to have only occasional mild problems or moderate problems. One quarter were described as having mild to severe problems on a more regular basis.

Coast staff considered that two-thirds of the residents had a positive attitude toward themselves much or most of the time. One quarter were seen to be equally positive or negative and the small remainder were judged to have a negative attitude much of the time.

Validation of residents' self-report with the P.E.S. Scales.

Independence

According to the self-report scales the applicants who had become residents scored as independent in every item of the measure of Independence. The results of the measurement of the Independence variable in the P.E.S. Scales were not so favourable with less than half the residents viewed as not requiring direction from staff.
Attitude toward self-sub-scale.

Fairly close agreement was shown between Self Esteem in the self-report scale and Attitude toward self in the P.E.S. Scales as indicated in Table 13. Eighty per cent of residents saw themselves with positive self-esteem always or most of the time; staff recognized two-thirds of the residents in these categories and the remaining third more negative about themselves. This was the only case in which residents rated themselves more positively than the rating of supervisors.

Feelings and mood sub-scale.

The Feelings and mood sub-scale of the P.E.S. Scales was cross-tabulated with all of those self-report variables which seemed to fall into the same subject area: feelings of Loneliness, Sadness, Anxiety, and Optimism. In rating Feelings and mood, supervisory staff viewed 80% of the residents as usually in a good mood, occasionally feeling nervous, depressed or angry all day, but usually able to be appropriately happy, sad or angry as the situation warranted. However the residents did not view their feelings in such a favourable light. Two-thirds felt sometimes lonely; nearly two-thirds felt sad sometimes; in excess of one-half felt anxious more than occasionally. Rating of anxiety showed the least agreement with Feelings and mood. Best agreement was shown between Feelings and mood and Optimism, with over 70% of residents expressing an optimistic outlook all or most of the time. This comparison is shown in Table 14.
Table 13
Association Between Residents' Self-report of Self Esteem and Staff Rating of Self Esteem

<table>
<thead>
<tr>
<th>Self Esteem Self Rating</th>
<th>Self Esteem Staff Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Negative Often</td>
</tr>
<tr>
<td>Positive sometimes</td>
<td>0</td>
</tr>
<tr>
<td>Positive most times</td>
<td>1</td>
</tr>
<tr>
<td>Positive always</td>
<td>0</td>
</tr>
</tbody>
</table>

N = 15
Table 14

Association Between Residents' Self-report of Optimism and Staff Rating of Feelings and Mood

<table>
<thead>
<tr>
<th>Feelings and Mood Staff Rating</th>
<th>Optimistic Sometimes</th>
<th>Optimistic Most Times</th>
<th>Optimistic Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good mood sometimes</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Good mood usually</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Appropriate good mood</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

N = 15
Problems sub-scale.

The Problems sub-scale was also cross-tabulated with Loneliness, Sadness, Anxiety and Optimism of the self-report scales to identify any association. Again little agreement was noted, with 80% of residents judged by staff to have only occasional moderate or mild problems, whereas self-reports indicated a greater degree of distressing feelings. Best agreement was shown with the Optimism item. Cross tabulation of both Feelings and Mood, and Problems, of the P.E.S. scales with Optimism in the self-report scales show a degree of association with a 47% agreement in both cases.


DISCUSSION

Findings from the demographic data show that the residents and the applicants are a homogeneous population with comparable backgrounds in education, former housing, diagnosis, socio-economic status, and type and frequency of follow-up care. Length of psychiatric service was less for the applicants which was expected because of their younger average age, 36 compared to 44 for the resident group. The difference in age can be explained by the course of deinstitutionalization in this country which saw the middle-aged and elderly released first from hospital in significant numbers in the sixties and seventies.

Hospitalization.

It was hypothesized that the incidence of hospitalization would change in terms of the number of days of institutionalization for the residents of three-quarter way housing. The results bear out this expectation and the null hypothesis that there would be no change in hospitalization is rejected. A decreased need for rehospitalization is a good measure of mental health. Hospitalization in terms of the number of individuals hospitalized and total patient days showed a marked decrease in both inpatient stays and hospital day care stays since residents have been living in three-quarter way housing. Fifty per cent of the resident sample had been hospitalized as inpatients in the three years prior to residence in Coast Foundation housing. Only 12% have been
hospitalized since, over a similar period of time. Admissions to Venture have decreased slightly; 20% were admitted to Venture in the three years prior to residence; 16% have been admitted to Venture since residence. Venture placements cannot be expected to change significantly for this population as moderately to severely ill individuals will continue to suffer emotional setbacks and short periods of emotional crisis due to recurring symptoms.

Average length of stay in psychiatric facilities has shortened. Average inpatient hospitalization was 61 days prior to residence, average stay was 21 days since residence. Hospital day care stays were shortened by more than half: 99 days to 44 days average stay. Venture stays dropped from an average of 9 days to 7 days.

Not shown by analysis of the rehospitalization data was any relationship between the length of residence in three-quarter way housing and the size of the social network of the 6 individuals rehospitalized. All of those rehospitalized were long-term residents with a social network equalling the average of the sample. However the 11 individuals involved in both return to hospital and placement in Venture have been maintained in the housing program and have not had to return to a more supervised setting where 7 of them, 63%, had resided prior to moving into three-quarter way housing.

Because no relationship was discovered between hospitalization and social network, the possibility was explored that the individuals hospitalized fell into the high-risk percentage screened and accepted into Coast Foundation. The profiles of the six hospitalized individuals showed that two of the six fitted this description well, and have had a
number of decompensations during residency besides placements in Venture. The other four residents, all originally from boarding homes, have been relatively stable over a long period of time, but in each case had discontinued medication once, and had decompensated severely, requiring rehospitalization. Even so, their combined hospitalization was only 78 days over a period of Coast Foundation residency totalling 27 years.

Institutionalization of applicants at Time 1 testing shown in Table 3 was comparable to residents in the three years prior to residency with the number of admissions totalling 18 per 20 applicants compared with 47 admissions per 50 residents. Since residency of the applicants at Time 2 testing, the institutionalization figures in Table 4 seem to have decreased dramatically, but this may partially reflect the fact that the time periods involved are not the same: three years as opposed to up to one year of comparison in the latter measurement. In view of the experience of the residents, one would feel safe in predicting that institutionalizations will indeed diminish during residency of the applicant group, except for brief stays in the crisis hostel, Venture, of a day or two duration.

In the early years of the apartment project it was thought that former boarding home residents and recent dischargees from hospital would face a very difficult period of adjustment to independent living, having largely to fend for themselves after being cared for. Some older, long-time hospital patients were at first accompanied when shopping, assisted in planning meals and closely assisted in budgetting. However
it was discovered that this population, despite a lengthy background of dependence in institutionalized living, managed surprisingly well on their own (Tomlinson, Cumming, 1976: 27). Acting on this information and empirical findings, Coast Foundation staff now operate on a "deep end" strategy: throw them into the deep end of the pool and hope they can swim. If individuals come forward with problems in basic survival or exhibit difficulty in managing money such as borrowing from fellow residents or being tardy in paying rent, staff will step in and help the individual to budget through a financial crisis, make special arrangements to recover overdue rent without inconveniencing the tenant or as a last resort arrange with the Ministry of Human Resources to administer income.

Residents, particularly young men who have few cooking skills, are encouraged to obtain low-cost meals at the Coast Foundation activity centre and to attend the weekly cooking class and communal dinner in their apartment blocks. Two applicants at Time 1 testing who reported needing assistance in cooking nutritious meals had solved this problem by the Time 2 testing. One had acquired a girl friend who prepared meals for him, and the other had made an arrangement with a buddy to share the responsibility of meal preparation most nights of the week. Both arrangements are working well. The only other item in which one applicant in the Time 1 testing reported needing assistance was in budgeting and banking. By the Time 2 testing she had mastered this skill.

A sample of comments by the residents indicates their approval of the opportunity to enjoy independence. "I can go to bed and get up when I want; I have a lot more freedom than I had in the boarding home."
"I lived with my parents until about three years ago but since then I've been living on my own and managing well except when under stress; I haven't had any stress since living at Coast." "Coast has helped me a lot in feeling independent with no pressure on me at all. I couldn't get along in boarding homes. I spent eight years in hospital so it's been a great change for the better to live independently." "I eat out a lot but can cook for myself." "I took a course in cooking at the West Side Team." "I cook really simple meals." "My physical health requires that I have a homemaker and Meals-on-Wheels." "I do a little housekeeping every day." "At the beginning it was hard organizing my day but I have now become more methodical."

These comments contrast to those of the applicants at Time 1 testing who noted: "I've been living independently off and on but don't know much about cooking." "I could use a little assistance in planning and preparing meals." "I may need a little help with managing money because I haven't been on my own up to now." However other applicants looked forward to managing independently in three-quarter way housing. "I've been living independently in three-quarter way housing. "I've been living independently for three years, mostly hot-plate cooking in a housekeeping room with plaster falling off the ceiling." "I've been living next door to my mother; I guess I tended to lean on her." "I don't like boarding homes because I like to be independent." "I lived on my own before I was in hospital and look forward to doing so again."

It was hypothesized that independence in three-quarter way housing would change as measured by skills in daily living. Because of the stiff screening procedure those who cannot perform at a level
adequate for independent living are not accepted into the program. Apart from the residents whose physical disabilities hamper their independence, all those tested at Time 2 were capable of performing basic living skills as outlined in the Independence schedule. The hypothesis is therefore largely irrelevant in considering this population.

**Social network.**

Because of the widely reported link between rehospitalization and an inadequate social network of chronic mental patients, the social network category was considered a major component of the study. It was hypothesized that the total numbers of casual acquaintances and intimate relationships would change in three-quarter way housing. The hypothesis was supported by the findings; the change showed an increase in both casual and intimate relationships.

The total social network of the residents averaged 23 persons, with 18 casual relationships and 5 close relationships, less than Hammer's estimate of the norm which she reported to be 40 persons, with a range of 25 to 50, and 6 to 10 intimately known individuals. On the average, however, Coast Foundation residents' networks are very close to the low end of the normal range of social network, and close relationships miss normalcy by only one individual.

On the other hand, the Coast applicant group at Time 1 testing showed an average social network of 14 individuals, significantly lower than the resident sample, and far below the norm mean of 40 and normal range of 25 to 50. Casual relationships of the applicants numbered an average of only 10 individuals; intimates numbered 4 individuals. After
the applicants moved into three-quarter way housing and were re-tested at Time 2, results showed an average social network of almost double their former number, at 27 individuals, within the normal range. Twenty of these were casual relationships, 7 were intimates, again within the normal range of 6 to 10 intimately known individuals according to Hammer and others.

It might be argued that the availability of socialization activities and the communal lounges in the Coast Foundation apartment blocks ensure that social networks of individuals in this housing will expand as a result of the programming, however, no one is coerced into joining a group or visiting the lounge. Those who value privacy can successfully keep to themselves throughout their residency if they so wish. That they do not, but choose to expand their acquaintances and enter into friendships is a personal initiative and one that is undoubtedly reflected in diminished institutionalizations. That the change in the number of casual relationships after chronic mental patients have entered three-quarter way housing is statistically significant both in the case of the residents at Time 1 testing and the applicants when they had become residents at Time 2 testing shows the impact of three-quarter way housing on this population. Applicants at Time 2 showed a change in casual relationships in present housing, a change in casual relationships in the community, and a change in close friends in the community, all of which were statistically significant, showing that three-quarter way housing increased their ability to make social connections not only in Coast Foundation housing but outside as well.
With a broadened social support system patients are at less risk of serious emotional crises (Greenblatt et al., 1982: 980; Henderson et al., 1978: 85; Mitchell, Trickett, 1980: 36; Sokolovsky et al., 1978: 14). That a change in family relationships between the residents and applicants was not statistically significant is not surprising since relationships with family members continue over time and can be expected to remain relatively unchanged.

Comments of the residents showed the satisfaction engendered by the opportunity for expanded socialization. "I'm satisfied. I don't have anybody outside much but I have friends in Coast." "I'm always meeting new people." "I've got more friends since I moved into Coast. I have a really full social life; sometimes I don't have enough time to be on my own." "I have friends in my church and I've made friends here in the block." "I make friends easily. I haven't been close to my family because they drifted away when I was first ill, but I appreciate my friends." "I haven't found too many people who share my interests but I have kept friends from the boarding home who are at Coast now." "In the boarding home you are forced to associate with people whether you like them or not, but in Coast you can choose your friends and you don't have to live with them." "I have more friends in Coast than anywhere." "Because I have an apartment of my own I can ask people over." "Somebody told me that I wouldn't get to know people in the block but that isn't true; I've made friends here."

The applicants at Time 1 testing presented a different picture. "I could use more friends. I hope to meet more people in Coast when I move in." "I lost my old friends when I was in hospital. I'm sort of
in between old friends and new friends." "I visit people I know at the Coast block." "I would like to know a different group of people - people I have more in common with." "I'd like a fuller social life because I've got lots of time on my hands and life is pretty lonely." "I'd like more friends." "I need sociability."

These same people a year later when they were residents were saying: "I have a couple of really close friends and have benefitted from this." "I'm satisfied with the number of acquaintances I have." "I'm satisfied with my social life." "I would like to have a girl friend." "My social life is great. I have enough friends." "I get around more since I left the boarding home." "A big problem is not having enough money to do things." "I've been joining new groups like the Britannia Centre." "I'm satisfied."

Having a choice of whether or not to act on opportunities to expand their circle of acquaintances and friends, residents tend to choose to do so and derive a high level of personal satisfaction from their expanded social network. A social system within or approaching normalcy is of major importance in reducing the risk of emotional crisis, giving meaning to the structuring of time, and reducing serious symptomatology.

Symptomatology.

It was hypothesized that the severity of symptomatology would be altered in three-quarter way housing. This was emphatically shown by
the scores of residents, and the applicants when they became residents, compared to the scores of applicants in the Time 1 testing when they were living in boarding homes and various other settings in the community. Those indicators which differentiated applicants and residents at a statistically significant level merit further discussion.

Feelings of sadness are a good indicator of depression. Nearly half of the residents reported that they never or hardly ever feel sad and half said they felt sad only sometimes, revealing that the vast majority are free of serious depression in this three-quarter way housing. One resident who sometimes feels sad said that she goes to the apartment lounge in order to alleviate these feelings by mingling with others. She attends the coffee hour and dinner so that she can meet and talk to people and "get my mind off myself and my feelings." One man said, "In a better environment you feel less depressed."

An optimistic outlook for the future was expressed by nearly two-thirds of the residents. Considering that the majority of residents are deemed unemployable and are struggling to get by on a sub-poverty level income it is heartening that so many of them have an optimistic outlook. In discussion with the residents it was clear that good housing, a small but steady income and the availability of help from the community care teams and Coast Foundation staff all assist the resident to maintain a favourable view of the future. The applicants when they had become residents scored optimism higher, at 3.93 out of 5, $SD = .7$, than the earlier scoring of residents. This may reflect the hopeful outlook for the future of people in a relatively new situation which seems to hold promise of more friends, more activities and more possibilities for self-improvement.
Crucial to a successful social adjustment is a sense of self-esteem. Over 80% of the residents reported feeling good about themselves always or most of the time. Differences in self-esteem between the two groups at both measures were statistically significant. Reported self-esteem seems somewhat higher than one would expect in a moderately to severely emotionally disabled population, and much higher than one would find in a hospitalized population given the latter's sense of failure, loss of dignity, powerlessness and dependence. Self-esteem seemed to be related to the achievement of independence. Being able to manage on their own was for a number of tenants a large boost in their feelings of self-worth. One resident related that she felt much better about herself now that she could entertain her friends and family in her own suite. One man said, "I think being independent and being on my own has made me feel better about myself and feel better generally." Another said, "Being on my own in Coast has given me the freedom to come and go as I want and has done a lot for my self-esteem."

An everyday requirement for independent living is the ability to solve problems. Some residents noted that everything was done for them in hospital or in a boarding home but now that they are on their own they have developed self-reliance in this area. Obtaining feedback and checking things out with others is important to the residents in dealing with problem-solving and is indicative of a beneficial coping skill in living independently in the community. One woman said, "I used to have to depend on other people to solve my problems but now I can manage on my own which has been a boost to my self-esteem." Another said, "I feel better than I used to feel. If I have problems I've learned to phone friends, or the
community care team, or my priest or doctor, and talk to them." Another echoed this sentiment: "It helps to talk my problems over with my worker. I feel one hundred per cent better than I used to when I suffered from depression. It's a gradual thing, to be able to face your problems. I think medication helps too." A man said, "I don't run away from my problems like I used to."

Residents and applicants made a measurable distinction between problem-solving and making decisions, which was an area of concern in devising the Symptomatology schedule as to whether a clear distinction existed between the two concepts. Making decisions is a necessary part of coping on one's own and was seen by residents as one of the most important factors in their success at establishing themselves in independent living. Residents at both first and second measurements rated themselves over 4.2 out of 5, in being able to manage this skill. As in problem-solving, obtaining feedback was a major coping mechanism in decision-making. Residents check out decisions with their therapist, doctor, friends, family and housing staff. That the large majority of residents report no problem in this area indicates that despite a considerable amount of psychic distress this population can cope well in independent living. The frequent references to receiving feedback from a therapist points out the importance of back-up support from the community care teams to a housing resource of ex-patients.

A sense of security received the highest rating from the residents, 4.5 out of 5, $SD = .6$. Over 90% of the residents felt secure always or most of the time and mentioned the importance of security in their comments. "I feel safer here than I have in most places. I have
no feelings of personal danger like I used to have. "I feel really secure." "It's secure in the block. I know the people and nothing has ever been taken from the laundry or anywhere." "The most important thing about Coast is the feeling of safety and security; most of the time I don't need a hospital anymore." A sense of security in one's home environment is crucial in a mental patient's life which is often beset by anxiety and fears. One woman told a story about how she had been ostracized by fellow tenants in her former housing and evicted by the landlord as undesirable after she had "freaked out" and been hospitalized. Having to make a stressful change in residence hard on the heels of a hospitalization is enough to cause a recurrence of symptoms and further incarceration. Those who live in three-quarter way housing are well aware, from the example of others, that illness, however bizarre, will be largely tolerated. His or her suite will be kept available for a person's return from hospital or Venture. And Coast staff and fellow residents will welcome the person home - whereas in the private sector a tenant's return from a mental hospital is likely to provoke a reaction of fear, suspicion and rejection, particularly if police and an ambulance accompanied the departure.

By providing a secure environment for residents, three-quarter way housing reduces appreciably the stress in a chronic mental patient's life, enabling the individual to add to his or her bank account of emotional stability and subsequently to be able to expand emotional energy in other areas of life.

Self-confidence was viewed by the residents in relation to their general wellbeing, independence and meaningful activity or productivity.
One man said his self-confidence had improved since he had been a resident and was related to the fact that he felt generally better. Several others said that their confidence had increased since they left boarding homes and found themselves able to manage on their own. One man who saw himself as confident only sometimes said, "I used to be a very self-confident person; I'm not so confident anymore since I broke down." Episodes of acute illness are confidence-shattering. In a population of formerly hospitalized people the number of those who have regained or maintained their self-confidence is remarkable.

A score of 4 out of 5, SD = .9 differentiated the Time 2 testing of the applicants who had become residents from the applicants at Time 1 testing in the ability to avoid withdrawal and social isolation. These are well-known symptoms of schizophrenia, depression and the depressive phase of manic depressive illness. One resident said that he fights his self-imposed retreat from the world by forcing himself to attend coffee hours and communal dinners in the block. Another said that when things are bad for him he "holes up" for a few days, then forces himself out into the company of others.

The fact that feelings of anxiety, fears and sleeping pattern did not change significantly in the two measures indicates that these aspects of mental illness are inherent in the disease and are not greatly improved by an improved environment.

General comments on mental health showed insight on the part of the residents and revealed that they recognized factors which were crucial to improvement in their emotional stability. "I feel my mental health is pretty good - better than it used to be." "My mental health
has improved by getting away from a boarding home and being more independent. "I never have breakdowns anymore." "I hear voices but they don't bother me anymore." "The community care team has helped me a lot and so has the support of Coast housing." "I'm doing better since I moved into Coast; I'm on less medication than I used to be." "My mental health is better than when I was living in a hotel. My relatives think so too." "Meeting and getting to know more people in Coast has helped." "I don't have the strain and tension I used to have." "There's no pressure on you; you're let be yourself here and without pressure I feel well." "I can be with people when I want company. The suite is bright and cheerful." "I'm feeling very good - better than I have for twenty years."

Meaningful activity.

By virtue of the fact that most of the residents and applicants are recipients of Handicapped Persons Income Assistance and are therefore deemed unemployable, it was not expected that many of either group would be involved in competitive or even sheltered work and this was borne out by the findings. Productivity is a strong social expectation and a source of gratification including higher income, the opportunity to make social contacts, a feeling of usefulness - and a site of major impairment in mental illness. Gunderson and Mosher, 1975, estimated that 80% of the cost of schizophrenia is in lost productivity. The cost is equally great in loss of social status, identity as a member of the work force, and a loss of morale amongst patients who cannot get and keep work in a tight and diminishing labour market. Expected productivity of this population lies in the area of the community involvement program and volunteer work.
Unfortunately the provincial government has discontinued the community involvement program which meant so much to the disabled in taking part in community work, and being reimbursed for their expenses. What can be hoped for is that chronic mental patients will involve themselves in social activities and establish a comfortable daily routine from which they will derive satisfaction. The three measurements, of the residents, the applicants, and the applicants when they had become residents showed an approximately equal number involved in social pursuits such as visiting with friends and relatives, or regularly going to coffee shops or drop-in centres. A comparable number also spent time on solitary pursuits such as reading and watching television. No change was noted between the different measurements of activities. The hypothesis that meaningful activity would change in productivity and social pursuits compared to passive, isolated pursuits was not shown by the data. However the applicants at Time 2 who had become residents, did strongly express satisfaction with their daily routine which is a good indication that despite distressing residual symptoms chronic mental patients can realize contentment from their daily activity.

Since productivity and community involvement programs are not realistic goals for this population, expectations of chronic mental patients must centre on the development of social pursuits either in volunteer work or in activities such as those recorded in the study.
Validation of measures by Progress Evaluation Scales.

Criterion validity represents a practical approach to validation. Validity is determined on the basis of the measuring procedure and is thus empirically based. In this case the concurrent validity is dependent on the results of the self-report measures agreeing with the findings of the P.E.S. Scales. That the items of the P.E.S. Scales were not identical with the self-report scales presents a serious challenge in establishing validity. Those traits which seemed to be identical, such as Independence and Attitude toward self of the P.E.S. Scales with Independence and Self-esteem of the self-report scales were examined, as were Feelings and Mood, and Problems of the P.E.S. with items of Loneliness, Sadness, Anxiety and Optimism of the Symptomatology measure which seemed to be comparable.

Because measurements of Independence did not agree it is probable that staff using the P.E.S. Scales were not measuring Independence in the basic activities of daily living but scoring according to the amount of advice they offered from time to time to the residents being assessed.

Self-esteem in the self-report scales and the P.E.S. Scales showed fairly close agreement and were the only associations examined which indicated a more positive outlook by residents than ratings by supervisors. Supervisors may feel that self-esteem automatically suffers when other traits are not rated highly, however the self-esteem scores
do not reflect this possibility: self-esteem was the third highest score of the residents at Time 1 testing with the applicants and shows that chronic mental patients do have a favourable attitude toward themselves despite other distressing symptoms and a generally non-productive lifestyle.

That staff viewed residents as feeling better than they viewed themselves was a trend obvious throughout the remainder of the comparisons. The Coast Foundation staff reported a high percentage of residents functioning well in regard to their Feelings and mood, and coping well with Problems. On the other hand, the residents reported a relatively high level of anxiety, sometimes feeling lonely and sad, with few reporting freedom from these feelings. The picture presented is one of a group of chronic mental patients with significant residual symptoms, particularly of anxiety, convincing staff that they are better than they feel.

The comparison of the self-report scales with the P.E.S. Scales was generally weak. Variables in most cases were too dissimilar to show much association and those which would have been expected to show a marked association such as Independence were probably measuring different aspects of the same variable. The P.E.S. Scales are inadequate as a strong means of validation of the self-report ratings but indicated that housing staff rate patients higher in terms of absence of distressing symptoms than the patients rate themselves. This may be a reflection of the fact that staff are only minimally supportive and do not know most residents very well. The P.E.S. Scales would probably be administered more successfully by the patients' individual therapists than by housing staff who do not see residents on a regular basis as therapists do.
Implications for social work practice.

The civil libertarian philosophy of the sixties led to mass discharges from mental hospitals on this continent. Dehumanizing and antitherapeutic institutionalization was expected to give way to rehabilitation in the community and a better life for mental patients in the future.

For the more fortunate mental patients who were not set adrift in urban centres, life in the community has meant incarceration in boarding homes and nursing homes. The rules, supervision and regulated life in these homes are reminiscent of hospital; the t.v.-centred living rooms are like the day-rooms of psychiatric wards and the homes themselves are like mini-institutions, with little opportunity for a normalized life or privacy for the inmates. The literature abounds with descriptions of supposedly superior boarding home programs, however these programs do not pretend to offer a normalized existence and what they do offer is usually at a high cost to the supporting level of government or agency.

Three-quarter way housing which is a relatively recent concept in after-care should be one of the first choices in the development of support services for the ex-patient. Coast Foundation experience has shown that chronic mental patients from a variety of supervised settings can cope well in minimally supportive three-quarter way housing, in a normalized environment. An unknown percentage of chronic mental patients who cannot live independently or administer their own medication will continue to require the supervision of boarding and nursing homes but a large number should be able to enter three-quarter way housing when they leave an institutional setting.
Social work practitioners who are responsible for the development of supportive housing for chronic mental patients should be aware that minimally supportive three-quarter way housing is less costly than other varieties. Three-quarter way housing can also be easily converted into market housing should a need for patients no longer exist.

Coast Foundation apartments are subsidized by the B.C. Ministry of Health at a 1983 per diem of $10.12. The alternative of psychiatric boarding homes in B.C. cost $19.25 per person per day for personal care. By way of comparison, institutionalization at 1983 rates was $98.74 per day in the Venture crisis hostel, and $315.85 per day in St. Paul's Hospital psychiatric ward.

An important consideration for social work practitioners in practice and administrative roles in the mental health field is recognition of three major concerns relating to housing options for ex-patients: that housing to be provided be as normalized a setting as possible with opportunities for privacy; that a substantial number of chronic mental patients are capable of managing independently and comfortably under normative conditions, and that financial advantages are inherent in the three-quarter way housing option.

Summary

The purpose of the study was to discover if the quality of life of chronic mental patients in three-quarter way housing was changed in terms of hospitalizations, that independence was at an acceptable level for community living, that social networks of the patients had changed
in regard to that of normals, that symptoms of mental illness had altered
and that the structuring of free time was meaningful.

To accomplish the examination a random sample of 50 residents
of three-quarter way housing and an applicant group of 20 individuals
were studied by structured interview. Earlier self-report data were
reanalyzed, the applicants were studied again at a later point in time
when they had become residents, and three-quarter way housing staff examined
the latter group in order to validate the self-report measures.

Hospitalizations were found to have decreased considerably,
from 47 admissions in the three years prior to residence to 8 admissions
since residence for the random sample of 50 residents. Fifty per cent of
the residents were hospitalized prior to residency; 12% have been hos­
pitalized since residency.

Independence was found to be at an acceptable level for living
in the community but this was not a factor attributable to the housing.
The tight screening process into the housing program virtually eliminates
those individuals who do not possess basic living skills.

Social networks of the resident group, and the applicants
who later became residents were found to be approaching or in the normal
range. The applicant group was found to be lacking in the size of their
social support system.

Judging from the comments of the patients, symptomatology was
in a reasonably comfortable range for the great majority of residents.
The changes in symptomatology from Time 1 to Time 2 testing in most items
of the measure were found to be statistically significant. Both residents
and applicants were positive about their outlook for the future. The
applicants were more socially isolated than the residents. Most telling was the pervasive feeling of safety of the residents and the marked lack of a feeling of security among the applicants.

What was revealed as the most important activity of both residents and applicants was the time they spent with friends or family members. Productivity was largely impaired in the population but satisfaction with the manner in which they spent their time was expressed by a large majority of those questioned.

In the view of the chronic mental patients studied and substantiated by the data there has been an improvement in their mental health in three-quarter way housing, and to this extent, an improvement in their quality of life.
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**INDEPENDENCE (in basic living skills)**

- **Is not independent. Will probably not be able to remain in program.**
- **Is mainly independent but occasionally requires direction.**
- **Lacks independence in a number of important areas. Requires staff input regularly.**
- **Is mainly independent in every way.**

**OCCUPATION (school, job or homemaking)**

- **Does not hold job or care for home or go to school.**
- **Holds regular job, or classes, or does housework (or some combination of these) but with difficulty.**
- **Seldom holds job, or attends classes, or cares for home.**
- **Holds regular job, or attends classes, or does housework (or some combination of these) with little or no difficulty.**

**GETTING ALONG WITH OTHERS**

- **Always fighting or destructive; or always alone.**
- **Seldom able to get along with others without quarrelling or being destructive or is often alone.**
- **Sometimes quarrelling, but seldom destructive; difficulties in making friends.**

**PROGRESS EVALUATION SCALES**

Instructions: Circle one statement to describe situation in the last two weeks.

**Date**

**Name**

**Client**

**Sig. Other**

**Therapist**
<table>
<thead>
<tr>
<th><strong>GETTING ALONG</strong></th>
<th>Gets along with others most of the time; has occasional friends.</th>
<th>Gets along with others most of the time; has regular close friends.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FEELINGS AND MOOD</strong></td>
<td>Almost always feels nervous, or depressed, or angry and bitter, or no emotions at all.</td>
<td>Often feels nervous, or depressed, or angry and bitter, or hardly shows any emotion for weeks at a time.</td>
</tr>
<tr>
<td></td>
<td>Usually in a good mood, but occasionally feels nervous, or unhappy or angry all day.</td>
<td>In a good mood most of the time; and usually able to be as happy, or sad, or angry as the situation calls for.</td>
</tr>
<tr>
<td><strong>USE OF FREE TIME</strong></td>
<td>Almost no recreational activities or hobbies.</td>
<td>Only occasional recreational activity, or repeats the same recreational activity over and over again, or hobbies.</td>
</tr>
<tr>
<td></td>
<td>Often participates in recreational activities and hobbies.</td>
<td>Participates in, as well as creates, variety of own recreational activities and hobbies for self and others.</td>
</tr>
<tr>
<td><strong>PROBLEMS</strong></td>
<td>Severe problems most of the time.</td>
<td>Severe problems some of the time or moderate problems continuously.</td>
</tr>
<tr>
<td><strong>ATTITUDE TOWARDS SELF</strong></td>
<td>Negative attitude most of the time.</td>
<td>Negative attitude much of the time.</td>
</tr>
<tr>
<td></td>
<td>Positive attitude toward self much of the time.</td>
<td>Positive attitude toward self most of the time.</td>
</tr>
</tbody>
</table>
# COAST FOUNDATION HOUSING EVALUATION

### Category 1.

<p>| | |</p>
<table>
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<tr>
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<tbody>
<tr>
<td><strong>1. Name</strong></td>
<td><strong>2. Age</strong></td>
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<tr>
<td><strong>3. Address</strong></td>
<td><strong>4. Sex</strong></td>
</tr>
<tr>
<td><strong>5. Phone no.</strong></td>
<td><strong>6. Tenant no.</strong></td>
</tr>
<tr>
<td><strong>7. Education:</strong></td>
<td><strong>8. How long have you lived at Coast?</strong></td>
</tr>
<tr>
<td>0-8</td>
<td>0-1 yr.</td>
</tr>
<tr>
<td>8-12</td>
<td>1-2 yr.</td>
</tr>
<tr>
<td>12+</td>
<td>2-4 yr.</td>
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<tr>
<td><strong>9. Referral source:</strong></td>
<td><strong>10. Diagnosis:</strong></td>
</tr>
<tr>
<td></td>
<td>Schizophrenic/psychotic</td>
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<tr>
<td></td>
<td>manic depressive</td>
</tr>
<tr>
<td></td>
<td>depressive disorder</td>
</tr>
<tr>
<td></td>
<td>anxiety disorder</td>
</tr>
<tr>
<td></td>
<td>personality disorder</td>
</tr>
<tr>
<td></td>
<td>other</td>
</tr>
<tr>
<td><strong>11. Were you living:</strong></td>
<td><strong>12. Former housing:</strong></td>
</tr>
<tr>
<td>alone</td>
<td>hotel</td>
</tr>
<tr>
<td>with spouse</td>
<td>room/not self-contained</td>
</tr>
<tr>
<td>with relative/s</td>
<td>ste./self-contained</td>
</tr>
<tr>
<td>with friends</td>
<td>family home</td>
</tr>
<tr>
<td>boarding home</td>
<td>boarding home/MPA</td>
</tr>
<tr>
<td>communal living</td>
<td>transition housing (Loma, Vista)</td>
</tr>
<tr>
<td>other</td>
<td>hard-to-house (Lookout, Triage)</td>
</tr>
<tr>
<td></td>
<td>hospital</td>
</tr>
<tr>
<td></td>
<td>Venture</td>
</tr>
<tr>
<td></td>
<td>other</td>
</tr>
<tr>
<td><strong>13. Principal source of income:</strong></td>
<td><strong>14. Income amount</strong></td>
</tr>
<tr>
<td>employment:</td>
<td>0-600</td>
</tr>
<tr>
<td>s/a</td>
<td>600-750</td>
</tr>
<tr>
<td>HPIA</td>
<td>750+</td>
</tr>
<tr>
<td>OAP/OAS</td>
<td></td>
</tr>
<tr>
<td>Gain</td>
<td></td>
</tr>
<tr>
<td>UIC</td>
<td></td>
</tr>
<tr>
<td>DVA</td>
<td></td>
</tr>
<tr>
<td>savings</td>
<td></td>
</tr>
<tr>
<td>other</td>
<td></td>
</tr>
<tr>
<td><strong>15. How long did you live at your previous address?</strong></td>
<td><strong>16. For how long have you been receiving psychiatric service?</strong></td>
</tr>
<tr>
<td><strong>17. How many times have you been hospitalized?</strong></td>
<td><strong>18. In the 3 years before living in Coast, how many admissions to hospital?</strong></td>
</tr>
<tr>
<td><strong>19. How many days total?</strong></td>
<td><strong>20. Which hospital?</strong></td>
</tr>
<tr>
<td><strong>21. How many admissions to hospital day care?</strong></td>
<td><strong>22. Which hospital?</strong></td>
</tr>
<tr>
<td><strong>23. How many days total?</strong></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>24. How many admissions to Venture?</td>
<td></td>
</tr>
<tr>
<td>26. Since living in Coast, how many admissions to hospital?</td>
<td></td>
</tr>
<tr>
<td>28. How many days total?</td>
<td></td>
</tr>
<tr>
<td>30. Which hospital?</td>
<td></td>
</tr>
<tr>
<td>32. How many admissions to Venture?</td>
<td></td>
</tr>
<tr>
<td>34. Do you attend a Community Care Team?</td>
<td></td>
</tr>
<tr>
<td>36. Do you attend private psychiatrist?</td>
<td></td>
</tr>
<tr>
<td>38. Other form of follow-up care?</td>
<td></td>
</tr>
<tr>
<td>25. How many days?</td>
<td></td>
</tr>
<tr>
<td>27. Which hospital?</td>
<td></td>
</tr>
<tr>
<td>29. Since living in Coast, how many admissions to hospital day care?</td>
<td></td>
</tr>
<tr>
<td>31. How many days total?</td>
<td></td>
</tr>
<tr>
<td>33. How many days?</td>
<td></td>
</tr>
<tr>
<td>35. How often?</td>
<td></td>
</tr>
<tr>
<td>37. How often?</td>
<td></td>
</tr>
<tr>
<td>39. How often?</td>
<td></td>
</tr>
</tbody>
</table>
Category II - Independence

1. Are you able to look after your personal hygiene adequately?
   yes need assistance no
2. Are you able to look after your laundry needs?
   yes need assistance no
3. Do you manage your housekeeping adequately?
   yes need assistance no
4. Are you able to look after your shopping?
   yes need assistance no
5. Do you manage to cook nutritious meals?
   yes need assistance no
6. Do you supervise your own medication?
   yes need assistance no
7. Do you look after your physical health needs adequately?
   yes need assistance no
8. Are you able to budget your own money and manage banking?
   yes need assistance no
9. Do you look after your own recreational needs like libraries, or going to community centres?
   yes need assistance no
10. Can you manage to deal with government and social agencies adequately?
    yes need assistance no
11. Do you look after your own transportation needs?
    yes need assistance no
12. Could you comment generally on your feelings about your independence?
Category III - Social Network

Note: Casual acquaintances are people you know well enough to have a cup of coffee with, but not share intimacies. Close friends are those with whom you can be intimate and share your personal thoughts and feelings. Do not include therapists, social workers and Venture workers.

1. How many casual acquaintances do you have in your present housing?

2. How many close friends do you have in your present housing?

3. How many casual acquaintances do you have outside of your present housing?

4. How many close friends do you have outside of your present housing?

5. How many loose, casual relationships do you have with family?

6. How many close, intimate relationships do you have with family?

7. Could you comment on your social life?
Category IV - Symptomatology

*1. In your present living situation are you lonely?
   Always Most of the Time Sometimes Hardly ever Never

*2. In your present living situation do you suffer from feelings of sadness?
   Always Most of the Time Sometimes Hardly ever Never

3. In your present living situation is your outlook for the future optimistic?
   Always Most of the Time Sometimes Hardly ever Never

4. In your present living situation do you feel good about yourself (self-esteem)?
   Always Most of the Time Sometimes Hardly ever Never

*5. In your present living situation do you suffer from unexplained anxiety - (feeling up-tight, tense for no good reason)?
   Always Most of the Time Sometimes Hardly ever Never

6. In your present living situation do you feel able to solve your problems?
   Always Most of the Time Sometimes Hardly ever Never

7. In your present living situation do you feel able to make decisions?
   Always Most of the Time Sometimes Hardly ever Never

*8. In your present living situation do you suffer from fears that prevent you from doing things?
   Always Most of the Time Sometimes Hardly ever Never

9. In your present living situation is your sense of security adequate? (safety from eviction if you go to the hospital; secure with a live-in caretaker, and secure with other tenants nearby whom you know?)
   Always Most of the Time Sometimes Hardly ever Never

10. In your present living situation is your sleeping pattern satisfactory?
    Always Most of the Time Sometimes Hardly ever Never

* reverse weighting
11. In your present living situation are you sure of yourself? (self-confidence)
   Always Most of the Time Sometimes Hardly ever Never

*12. In your present living situation do you have a problem with being withdrawn, feeling isolated, lacking in sociability?
   Always Most of the Time Sometimes Hardly ever Never

13. Could you comment generally on your feelings about your mental health?
Category V - Meaningful Activity and Productivity

What are the most important activities in your life? Choose 3.

- competitive work full time
- competitive work part time
- sheltered work full time
- sheltered work part time
- VIP/CIP
- vocational training
- education upgrading
- volunteer work
- studying/reading for self-improvement
- handicrafts
- attending drop-in centres, MPA/Kettle/CMHA/Coast
- regular sports activities
- socializing in apartment lounge
- regularly attending programs at community care teams
- visiting friends
- socializing in pubs
- visiting coffee shops regularly
- mainly watching T.V.
- sleeping
- mainly staying home alone
- other _________________________

Could you comment generally on the structuring of your time?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

General comments about Coast Foundation Society?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________