

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

EFFECTS OF RELOCATING AN INPATIENT PROGRAMME  
FOR THE "DIFFICULT-TO-PLACE" MENTALLY ILL,  
FROM A HOSPITAL TO A COMMUNITY SETTING.

A thesis presented in partial fulfilment of the requirements  
for the degree of Master of Arts in Psychology,  
Massey University

ROBERT DALDY

1999

## ABSTRACT

In order to effect final closure of Lake Alice Hospital, the need for a special inpatient facility for the ongoing treatment of a residual “long-stay” patient population was recognised. The Intensive Learning Centre (ILC) was developed to cater for this group, that were “difficult-to-place” by virtue of their unsuitability for existing trust and sheltered accommodation in the community. Consistent with the long-term plan, the programme was relocated from the hospital grounds to a community setting at Castle Cliff, Wanganui, continuing operation as Endeavour Lodge. The present research had three principal aims: to determine effects of relocation on the original ILC programme; to assess the functioning of the current Endeavour Lodge client group in order to extend findings from previous research; and to make a formal characterisation of the prevailing “Ward Atmosphere” or therapeutic milieu, in the new community location. A comparison of the two programmes was made on the basis of information gained from semi-structured staff interviews, and reviews of programme operating manuals and previous research. Client functioning was assessed with the use of two informant driven measures; the Rehabilitation Evaluation Hall and Baker (REHAB) and the Adaptive Behaviour Scale (ABS). Characterisation of the therapeutic milieu was made with the Ward Atmosphere Scale (WAS-R). It was found that relocation coincided with a loss of key personnel responsible for the development of the original ILC programme, who had experience and expertise in the use of “Behaviour Modification” techniques. Formal behavioural modification strategies that were an integral part of the original ILC prescription, appeared to have fallen into comparative disuse at the time of the current study. An initial significant improvement in general functioning was found between baseline and the 5- month follow-up. No other significant change in functioning was identified for either general functioning or maladaptive behaviour, between any of the subsequent follow-up periods. However, a descriptive supplemental analysis of mean group total scores, did identify meaningful and consistent trends of behaviour change over time. The implications of the findings, and recommendations for the programme and future research are discussed.

## ACKNOWLEDGEMENTS

First, I would like to express my sincerest gratitude to my supervisor Dr. Frank Deane, for his inexhaustible patience, ready sense of humour, and expert guidance throughout the duration of this project.

My thanks also to Judy Bright, Leta Kessy, and the Endeavour Lodge staff and residents for making me welcome while I visited, and for the considerable time they invested in the completion of questionnaires and interviews.

I am also most grateful to my family for their ongoing support, and encouragement over the course of my study and throughout this project.

Finally, thanks also to my friends for their encouragement and assistance during my study.

# TABLE OF CONTENTS

ABSTRACT.....	II
ACKNOWLEDGEMENTS.....	III
TABLE OF CONTENTS.....	IV
LIST OF TABLES .....	VI
LIST OF FIGURES .....	VII
<b>CHAPTER ONE</b>	
INTRODUCTION .....	8
<i>Overview of the Introduction</i> .....	8
<i>Deinstitutionalisation</i> .....	9
<i>The “Difficult-To-Place” Mentally Ill</i> .....	11
<i>Treatment and Care of the “Difficult-to-Place”</i> .....	13
<i>Factors Mediating Treatment Effectiveness</i> .....	17
<i>Lake Alice Hospital and the ILC Programme</i> .....	20
<i>Relocation and Maintenance of Innovative Programmes</i> .....	23
<i>Aims of the Current Research</i> .....	24
<b>CHAPTER TWO</b>	
METHOD.....	26
<i>Ethical Issues</i> .....	26
<i>Design</i> .....	27
<i>Instruments</i> .....	29
<i>Participants</i> .....	33
<i>Setting</i> .....	34
<i>Procedure</i> .....	35
<b>CHAPTER THREE</b>	
RESULTS .....	39
<i>The Endeavour Lodge Programme</i> .....	39
<i>Effects of Relocation</i> .....	42
<i>ILC and Endeavour Lodge Programme Comparison</i> .....	48
<i>Pre-Post Analysis of Group Adaptive Functioning</i> .....	52
<i>Pre-Post Analysis of Individual Adaptive Functioning</i> .....	58
<i>Ward Atmosphere Analysis</i> .....	67

## CHAPTER FOUR

DISCUSSION .....	73
<i>Effects of Relocation and Programme Development</i> .....	73
<i>Client Outcomes</i> .....	76
<i>The Therapeutic Milieu</i> .....	80
<i>Conclusion</i> .....	82
REFERENCES.....	87
APPENDIX A: REHABILITATION EVALUATION HALL AND BAKER SCALE (HALL & BAKER, 1983).....	93
APPENDIX B: AAMD ADAPTIVE BEHAVIOUR SCALE (NIHIRA ET AL, 1975).....	95
APPENDIX C: WARD ATMOSPHERE SCALE (MOOS, 1974, 1989, 1996).....	116
APPENDIX D: MASSEY UNIVERSITY HUMAN ETHICS COMMITTEE, RESEARCH APPROVAL LETTER.....	120
APPENDIX E: MANAWATU-WHANGANUI ETHICS COMMITTEE, RESEARCH APPROVAL LETTER.....	121

## LIST OF TABLES

Table 1.	Descriptions of WAS Subscale Dimensions.....	32
Table 2.	Schedule of administration of REHAB and ABS ratings of ILC and Endeavour Lodge clients.....	37
Table 3.	Effects of Relocating the ILC Programme for Endeavour Lodge Residents.....	42
Table 4.	Effects of Relocating the ILC Programme for Endeavour Lodge Staff.....	44
Table 5.	Effects of Relocating the ILC Programme for the Endeavour Lodge Programme.....	46
Table 6.	Comparison of ILC and Endeavour Lodge Programme Components.....	49
Table 7.	Mean Group Total Scores for the REHAB and ABS Subscales Over Time.....	53
Table 8.	Individual Client General Functioning Total Scores, at Hospital and Community Measures.....	60
Table 9.	Individual Client Maladaptive Behaviour Total Scores, at Hospital and Community Measures.....	63
Table 10.	Summary of Changes in Client's Functioning on the REHAB and ABS Subscales from Hospital to Community Measure.....	66
Table 11.	Ward Atmosphere Subscale Raw and Standard Scores for Endeavour Lodge Staff Group.....	68

## LIST OF FIGURES

Figure 1.	Model of the relationship between programme and personal factors and patients' outcomes (from Moos, 1996).....	19
Figure 2.	Group means of REHAB General Functioning subscale Total Scores.....	55
Figure 3.	Group means of ABS General Functioning subscale Total Scores.....	56
Figure 4.	Group means of REHAB Deviant Behaviour subscale Total Scores.....	57
Figure 5.	Group means of ABS Maladaptive Behaviour subscale Total Scores.....	58
Figure 6.	Client Total Scores on the REHAB General Functioning scale, at Hospital and Community measures.....	61
Figure 7.	Client Total Scores on the ABS General Functioning scale, at Hospital and Community measures.....	61
Figure 8.	Client Total Scores on the REHAB Deviant Behaviour scale, at Hospital and Community measures.....	64
Figure 9.	Client Total Scores on the ABS Maladaptive Behaviour scale, at Hospital and Community measures.....	64
Figure 10.	Profile of WAS Form-R subscale standard scores, from Endeavour Lodge staff.....	69
Figure 11.	Comparison of WAS Form-R staff means for programmes in the United States and the United Kingdom, with Endeavour Lodge.....	71

## CHAPTER ONE

### Introduction

#### Overview of the Introduction

The following masters thesis outlines a study undertaken in August of 1997 which involved the assessment of a group of chronically mentally ill patients. The progress of this “long-stay” hospital group has been monitored over time following their relocation from Lake Alice Hospital, which was closed in 1992.

A specialist treatment facility- the Intensive Learning Centre (ILC)- was implemented for the ongoing treatment and care of this “special needs” group, and began operation on the hospital grounds in October of 1993. In accordance with the long-term plan, the programme was relocated from the hospital grounds to a community setting, and experienced considerable change in terms of staff and institutional organisation during the period between it’s original implementation and current operation.

The present study was designed to assess the residents’ current adaptive functioning, to determine effects of relocation of the programme to the community, and to assess the influence of the prevailing social climate or therapeutic milieu on client outcomes.

The following Introduction section is designed then, to provide the reader with some background information and history in order to place the findings of the current study in context. As such this section first outlines some general background regarding the process of deinstitutionalisation, and the reprovision of care for the mentally ill that has resulted (1.2). The client group from the current study will then be characterised in terms of particular psychiatric characteristics which distinguish them from other groups of mentally ill (1.3).

Some background history will be provided regarding the traditional approach to care and treatment of long-term patients in psychiatric inpatient settings. A brief outline of how

the process of deinstitutionalisation both here in New Zealand and abroad, has subsequently changed the nature of treatment and care utilised for many of these clients, will be provided (1.4). Current research which focuses on the identification of factors that mediate the relationship between effective treatment programmes and client outcomes, will also be discussed. In particular the influence of Ward Atmosphere or the prevailing therapeutic milieu of treatment programmes will be looked at in some detail (1.5).

The latter part of the Introduction is dedicated to background on the original Intensive Learning Centre (1.6), and to issues related to the relocation and maintenance of innovative therapeutic and rehabilitative treatment programmes (1.7). Finally the specific objectives and aims of the current research conducted at Endeavour Lodge will be outlined in more detail (1.8).

### **Deinstitutionalisation**

The process of deinstitutionalising mentally ill from psychiatric hospitals and relocating them in the community has been in place in New Zealand since the 1950's (Haines & Abbott, 1986). New Zealand preceded much of the world in this initiative, although in the period since this time the process has progressed more rapidly in parts of Europe, Great Britain and the United States. However, with the steady increase of community-based care and services since the early 1970's (Mason, Ryan & Bennett, 1988), coupled with the continuing programme of psychiatric hospital closure, deinstitutionalisation is now reaching an advanced stage in New Zealand as well.

As deinstitutionalisation has gathered momentum, increasing attention has turned toward evaluating it's effectiveness. Findings suggest that for the majority of clients the transition of care from large psychiatric hospitals to care in the community has been largely successful (Trieman, 1997). Many clients now enjoy a higher quality of life and greater freedom, while they receive the treatment they require on an outpatient basis (Trieman & Leff, 1996). However, some clients have not done as well as others. Typically the acute patient has done better than the chronic patient, who respond quickly

to psychotropic medication and are thereby able to return home to families and jobs (Shadish, Lurigo & Lewis, 1989).

In Britain it became apparent as early as the 1970's that a small percentage of clients found the transition too demanding, and were unable to remain living in the community following discharge from hospital. These clients typically had more serious and chronic disorders and began to accumulate in the acute treatment wards of general hospitals, in remaining psychiatric hospitals, in prisons, or became homeless and vagrant (Wykes & Wing, 1991; Wykes, 1982). Many of these clients became trapped in the "revolving door" type pattern of short term community tenure combined with frequent inpatient readmissions (Shepherd, King & Fowler, 1994; Wykes, 1982).

The development of a similar trend has been observed here in New Zealand. In a study conducted by Deane, Huzziff & Beaumont (1996), a group of long-stay chronically mentally ill was followed for a 2-year period after being transferred from a large psychiatric hospital to community placements. It was found that some 10 percent of the transferred clients while initially assessed as being suitable for community care, in fact did not cope well outside the hospital environment. This group had frequent readmissions to a psychiatric hospital and demonstrated poor adaptive functioning, with high levels of maladaptive behaviour and distress.

There is evidence to suggest however, that when long-term chronically ill are placed in appropriate supervised housing, community treatment is no less effective and in some instances is superior to inpatient treatment (Leff, Thornicroft, Coxhead & Crawford, 1994). In a study conducted by TAPS (Team for the Assessment of Psychiatric Services, London; Leff et al, 1994), a follow-up was conducted on a group of long-term chronically mentally ill patients one year after discharge from two large psychiatric hospitals in the London region. It was found that the clients showed neither improvement nor deterioration on either social or clinical variables, but were found to be living in far less restrictive settings, which they also significantly preferred over the hospital setting.

In short, the evidence for the effectiveness of deinstitutionalisation for the chronically mentally ill is equivocal, especially for those with histories of extended periods of hospitalisation. It is clear however, that one of the principal difficulties that has presented authorities in the move toward community care has been the provision of adequate services for these more seriously disabled and long-term of the chronically ill. Typically these clients exhibit challenging behaviours or functional deficits that often place too great a demand on conventional sheltered or supported accommodation, and therefore preclude them from community placement (Trieman & Leff, 1996). Much recent work therefore has focussed on the identification and characterisation of this group and their particular needs, in an effort to determine how best to provide the treatment and care they require.

### **The “Difficult-To-Place” Mentally Ill**

It has been a common experience that as psychiatric hospitals have entered final closure programmes, the less disabled clients for whom community placements are easier to find, have tended to be transferred first (Trieman & Leff, 1996). Consequently, as the process has continued there has been a concentration of more chronic and severely disabled clients remaining in many psychiatric hospitals, as there often exist few facilities appropriate to their needs in the community (Trieman & Leff, 1996; ILC Project Team, 1993; Royal College of Psychiatrists, 1993). In addition to this residual hospital group, a new group of clients have been accumulating in these hospitals prior to closure because no one else will take them. This group of clients includes those that have found the transition to community care too demanding, or have recently presented with disorders that prove non-responsive to modern pharmacotherapy and psychotherapeutic interventions (Wykes & Wing, 1991).

A large proportion of these “residual” and “new” hospital clients have spent considerable lengths of time in psychiatric settings. As such many have become “institutionalised”, and dependent on others for the demands of even basic self-care and daily living requirements. These groups often require ongoing close supervision and intensive therapy in order to maintain a stable level of functioning (Trieman et al., 1996; ILC Project Team, 1993; Royal College of Psychiatrists, 1993).

The TAPS team (London) collectively refers to these groups as the “difficult-to-place”. This term reflects the difficulty in treating, and finding accommodation for these clients outside of traditional inpatient settings, because of their severe and chronic disabilities (Leff et al, 1994). This difficult-to-place group includes both “new long-stay” (NLS), and “old long-stay” (OLS) clients. The NLS are those clients for whom the transition to community care was too demanding, and have been subsequently maintained in psychiatric inpatient settings, for as period greater than one, but less than five years. This is to distinguish them from the old long-stay clients, which are those who have resided in psychiatric hospitals for a period of greater than five years, and often have histories of long-term institutionalisation (Wykes & Wing, 1991).

Many other terms have been used to describe this group including “hard-to-place” (Bigelow et al., 1988), “challenging behaviour” or “special needs” (Trieman & Leff, 1996) in the description of these clients, but all are a reference to the difficulty of accommodating these clients in the community. A number of studies have been undertaken in an effort to identify the common problems that contribute to the difficulty in placing these clients into community care facilities. The Cane Hill Research Team (1991; reported in Trieman & Leff, 1996) referred to this group as the “hard-to-place”, and cited leading criteria that predicted difficulty into securing care for clients in the community as being socially unacceptable behaviour, dangerousness, being detained on section or a history of violence.

In a study conducted by Bigelow et al., (1988) a similar group of clients were identified, and the characteristics of this group of long-stay patients that had accumulated in an Oregon state hospital acute ward were examined. While these patients had stayed longer than therapeutically necessary and were gaining no further benefit from the services offered, they had not been transferred because there existed no facilities able to accommodate and treat this difficult group in the community. The typical “Hard-to-place” patient was identified as being “a schizophrenic male in his 30’s with either a medical or a drug problem. He has lost most social and self-care skills, is assaultive, behaves unacceptably, and is not cooperative with treatment”. Further characteristics such as poor compliance with structure (shared by 12 percent), being assaultive (62

percent), starting fires (32 percent), and having little or no self-care skills (80 percent) were identified as making this group highly undesirable for existing community placements.

In a study by Trieman and Leff (1996), 13 problem behaviours were identified as posing a direct impediment to community placement. Among the most common problem areas making a client “difficult-to-place” were aggressiveness, non-compliance with medication and inappropriate sexual behaviour. The remainder included incontinence, fire risk or setting, suicide risk, substance abuse, stealing, urinating/ defecating in public, begging, bulimia/ polydipsia and poor orientation/ absconding.

### **Treatment and Care of the “Difficult-to-Place”**

Traditional psychiatric inpatient treatment of the long-stay mentally ill post WWII typically consisted of client management, administration of psychotropic medication and basic custodial nursing care, and beyond that therapeutic needs were seldom met (ILC Project Team, 1993; O’Driscoll, 1993; Royal College of Psychiatrists, 1993; Wykes & Wing, 1991). Treatment programmes were not often proactive and as a result particular episodes of problem behaviour or deteriorations in functioning were attended to as they arose. Further, programmes where they existed were seldom individualised and as such were not tailored to target the specific and varying needs of each client.

In the larger psychiatric hospitals the more serious and chronic cases also often received lower priority in terms of the limited staff input, as the newer and acute admissions were seen as producing a greater likelihood of return for effort made (Wykes & Wing, 1982). Garety (1991) believed these back wards for the long-stay mentally ill to be actively debilitating, not just socially and physically impoverished. This lack of social stimulation was seen as actively contributing to the ongoing disability of patients (O’Driscoll, 1993).

This approach was reinforced by the pervading medical model, where mental disorder was viewed as an illness which had to be managed until “cured”. Patients were encouraged to adopt the “sick” role, and nursing staff would commonly carry out even

basic care requirements for the clients, such as bathing and dressing, often because it was easier and faster to do so. Over time this relinquishing of responsibility and insulation from the stressors of everyday life contributed to clients becoming passive and unmotivated, and to an atrophy of basic self-care and life skills ultimately contributing to dependency.

Many of the major mental illnesses are now recognised as being chronic in nature, with periods of remission and exacerbation expected throughout the individual's life (Lieberman & Phipps, 1987). As a consequence there has been a move toward recognising the need for rehabilitation and management of the illness, rather than inpatient treatment aimed at effecting a medical based "cure". This management requires assistance in the development of life, social and job related skills, and the coordination of a broad range of accommodation, welfare, and psychiatric support services (Lieberman et al., 1987). With the running down and closure of the large psychiatric hospitals, the question then arises of how to approach the ongoing provision of care for the difficult-to-place. This includes the need for safe and secure accommodation, and treatment oriented toward alleviating long-term disabilities, whilst maximising their rights to control their own lifestyles (Wooff, 1991).

### *The Development of Moral Treatment*

A combination of a shift in societal values following the conclusion of the world war two, and a critical re-evaluation of the validity of the medical model of mental illness, brought about renewed concern for the moral and humane treatment of the mentally ill. Increasingly researchers began to propose the importance of the quality of the treatment environment as a pivotal factor in the course and outcome of clients' mental illness. Ironically, the very first specialist treatment facilities for the chronically mentally ill a century and a half prior to this, were based upon this understanding.

York Retreat established in 1796 for instance emphasised the importance of maintaining a small homely environment, where clients were treated with respect and courtesy. The importance of the therapeutic relationship between the "guests" and their "attendants" was also stressed, and treatments were individually tailored to match the needs of each

resident. However, this “moral treatment” approach fell into decline as the number of mentally ill being referred for care increased, and the large institutions of the last century and a half began to emerge.

*The “Ward-in-a-House” Model for the “Difficult-to-Place”.*

In an effort to design a rehabilitation oriented treatment environment for the accumulating new long-stay population gathering in many regions of Britain since the early 1970’s, the concept of the hospital hostel or “ward-in-a-house” was proposed. With the wide-spread non-acceptance of the more seriously disabled mentally ill patients by private community based housing trusts and sheltered accommodation (Shepherd, 1995; Wykes, 1982), it was apparent that the responsibility for the continued care of this group fell with the mental health system. At this stage psychiatric hospitals and the psychiatric wards of general hospitals had been providing accommodation and varying degrees of treatment for those clients that no one else would take. This was often because of challenging behaviours, and the intensive staff input required to provide for them a safe and secure environment (Wykes & Wing, 1991).

In an effort to develop specialist treatment and accommodation outside of the hospital environment, the model of the hospital hostel or ward-in-a-house was proposed by Bennett (1980). The ward-in-a-house was intended to combine the best features of high quality hospital care (e.g. good staffing levels, well-trained professionals, highly individualised programmes) with the best features of community-based care (e.g. small “non-institutional” appearance, easily accessible to the community). The first of these hostels was established at Maudsley Hospital, London, in 1977, and since this time this model of care provision has been increasingly adopted in the provision of treatment and care for this difficult group. Shepherd (1995) outlines the four basic principles of treatment and care employed in the ward-in-a-house model-

1. *Individualised care*- clear, simple care programmes, negotiated with the resident and based on in vivo assessment and training

2. *Focus on functional abilities, not psychopathology*- while not ignoring symptomatic treatment where this is possible, an emphasis on practical aspects of living and working together.
3. *Importance of 'quality' as well as 'quantity' in staff-resident interactions*- regular and consistent staff training in an attempt to create and maintain a 'low EE' atmosphere
4. *Teamwork and continuity*- regular team reviews of resident's care plans and group training and support sessions to improve cohesiveness.

#### *Outcomes of "Ward-in-a-house" Programmes.*

It is evident from the majority of evaluative studies of hospital hostels that a wide variation in outcomes is observed among ward-in-a-house and hospital hostel type programmes. Characteristically clients are observed to fall into one of three broad categories over time (Shepherd, 1995; Young, 1991). First, there is a group that improves sufficiently to enable transfer to less restrictive conventional community accommodation. Next there are those that are observed to make little progress requiring ongoing continuous nursing care. Finally there is a smaller number who deteriorate and depending on the local service structure and the unit itself often need to be transferred because of unmanageable violent or psychotic behaviour. Bridges, et al., (1991) note that even in the case of those who are observed to make little progress, this environment appears to be preventing or slowing down the rate of deterioration. Further, they argue that at the very least this environment appears to provide a better quality of life than was available in the large psychiatric hospitals.

Evaluative studies have characteristically demonstrated that these programmes have been effective in effecting improvements in social functioning and in the reduction of aggressive behaviour in particular (Shepherd, 1995; Young, 1991; Wykes, 1982). They have been found however, to be less effective in producing consistent and significant improvements in areas of general functioning such as self-care and living skills (Shepherd, 1995; Young, 1991; Wykes, 1982).

### *The Development of Psychotherapeutic Treatments for the Chronically Mentally Ill*

Over the last thirty years a wide range of specialised therapeutic interventions have been developed that have been demonstrated as effective in ameliorating the behavioural and functional deficits and excesses that often preclude the more seriously mentally ill from community placements (Lieberman et al, 1987). In conjunction with the administration of psychotropic medications, these approaches often utilise behaviour therapy at their core, and have been incorporated into many programmes that now adopt the more actively rehabilitative approach to the treatment and care of the difficult-to-place (Young, 1991; Peniston, 1988).

Behaviour modification has been widely demonstrated as effective in the treatment of the chronically mentally ill (Peniston, 1988; Paul & Lentz, 1977). In terms of rehabilitation particularly orientated toward relocating clients to less restrictive settings, these strategies have been demonstrated as effective in the reduction or elimination of maladaptive behaviours (Peniston, 1988; Paul & Lentz, 1977). The presence of these behaviours has been noted as often precluding acceptance into conventional community placements (Leff & Trieman, 1997; Trieman, 1997; Trieman & Leff, 1996). Behaviour modification has also been demonstrated as effective in effecting the acquisition of basic living and self-care skills, which are often observed to be inadequate in those chronically mentally ill who have had long periods of hospitalisation (Lieberman et al., 1987).

Social skills training has also been cited as an important treatment in the rehabilitation process with the chronically mentally ill (Lieberman et al., 1987), and inadequate social skills have been implicated in illness course, and both social and clinical outcomes (O'Driscoll, 1993; Garety, 1991; Paul & Lentz, 1977). Contingent therapies have also been demonstrated to effect the development of social skills in this group (Lieberman et al., 1987).

### **Factors Mediating Treatment Effectiveness**

Psychotherapeutic research has for the last thirty 30 years focussed principally on the development and refinement of interventions designed to treat a wide range of problems

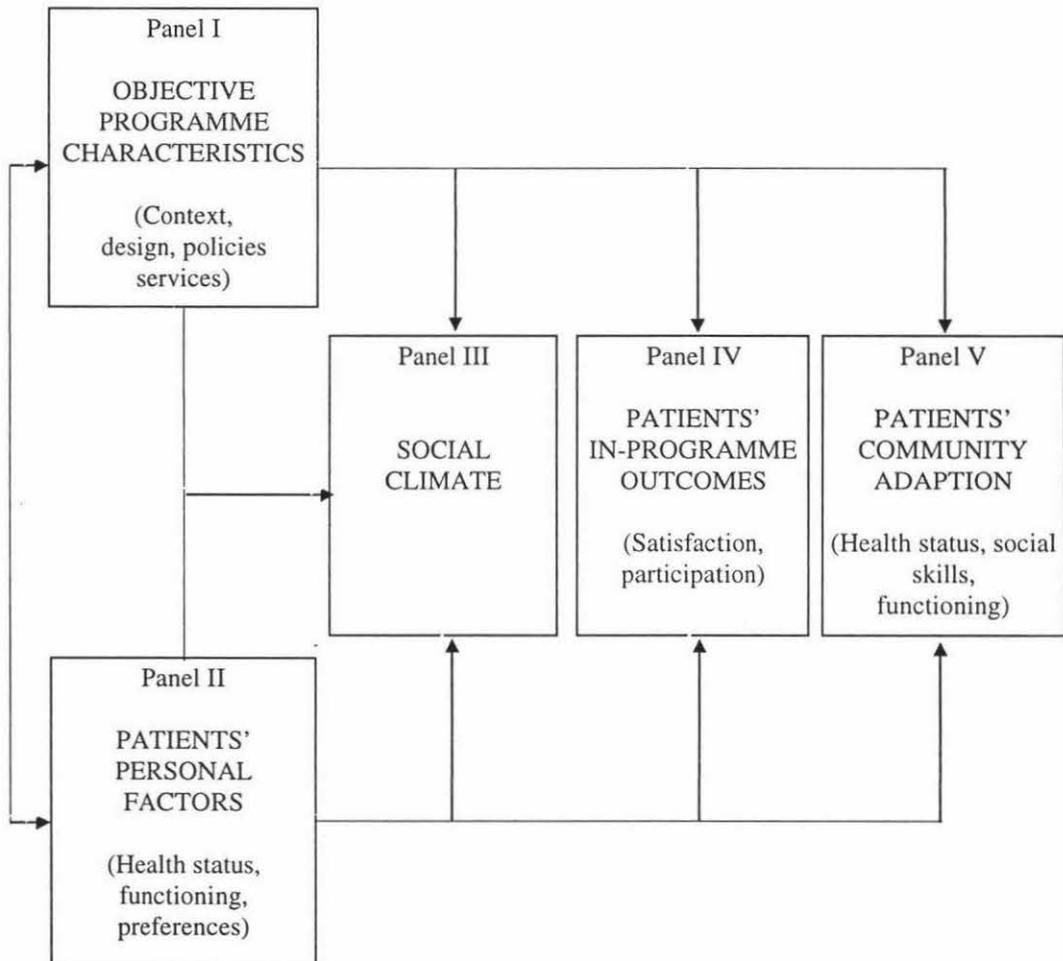
(Reimers et al., 1987). More recent attention however, has turned toward the identification of factors that mediate the relationship between these empirically demonstrated treatments, and illness outcome. The effects of patient characteristics (Bigelow, Cutler, Moore & McComb, 1988), treatment acceptability and integrity (Miltenberger, 1991; Reimers et al., 1987), and the influence of treatment milieu or Ward Atmosphere (Moos, 1997, 1996; Squier, 1990; Pfeiffer, 1990; Friis, 1986) have all generated considerable research.

Of particular interest to the present study is the role of the prevailing ward atmosphere or therapeutic milieu in illness outcome. In terms of evaluating the influence of this factor in a particular treatment setting, Pfeiffer (1990) contends that the absence of formal characterisation of the prevailing social climate or therapeutic milieu represents a methodological shortcoming in many evaluative studies of psychiatric inpatient programmes. "We already know that inpatient treatment is helpful in a great many instances. However, the field would benefit from more refined, specific, and focussed investigations that examine the essential components of change in psychiatric patients and explore patient-treatment interactions that influence therapeutic effects", (Pfeiffer, 1990, p. 1318).

Squier (1994, pg. 319) in a review reports a number of studies demonstrating the importance of Ward Atmosphere in producing treatment benefit in hospitalised psychiatric patients. Gunderson (1983) found that successful treatment outcome was related to frequent staff-patient interaction, mutual involvement in decision making, and a shared expectation of improvement. Ellsworth (1983) concluded that the most significant factor in post-discharge recovery was a ward atmosphere in which staff were receptive and accessible to patients, and strongly expected them to recover. Collins et al., (1985) found that successful community adjustment was produced by egalitarian patient-staff interaction practices, such as encouraging patients to call staff by their first names, de-emphasising routine, and facilitating the expression of emotion.

In Fig. 1, Moos (1997, 1996) proposes a conceptual model representing the relationship of mutual influence that exists between treatment programmes and their patients. The model demonstrates how the connection between the objective characteristics of the

programme (Panel I), patients' personal characteristics (Panel II), and patients' adaption in the community, is mediated by the programmes' social climate (Panel III) and the patients' in-programme outcomes (Panel IV).



**Figure 1.** Model of the relationship between programme and personal factors and patients' outcomes (from Moos, 1996).

In the evaluation of an inpatient treatment environment Moos (1997) proposes that the measurement and characterisation of the therapeutic milieu is essential. It allows the identification of aspects that of the programme or environment that may play some mediating role between effective treatments and illness outcome. It also allows the identification of aspects of the treatment environment that are consistent with and facilitative of treatment goals and programme philosophies, and those that might be

impeding or contrary to them. Additionally, it can assist in determining if the structure of the therapeutic milieu is well matched or congruent, with the current client group.

## **Lake Alice Hospital and the ILC Programme**

### *Programme Description*

Lake Alice Psychiatric Hospital was opened near Marton New Zealand in 1950, and was designed to cater for the chronically mentally ill population drawn from the Manawatu, Hawkes Bay, Taranaki and Wanganui regions. The hospital expanded over the next thirty years to reach it's peak of 365 patients by 1981, but numbers began to recede after this time as clients were relocated to sheltered or supported accommodation in the community in accordance with government deinstitutionalisation policy.

In November 1992 a final hospital closure plan was put in place, and the majority of remaining clients were relocated to community placements over the following year. However, a small residual group were identified as requiring intensive and specialised input to enable them to sustain life outside the hospital environment (Manawatu-Wanganui Area Health Board, 1992). These clients had been identified as having an intractable chronic psychiatric illness which manifested in acute behaviours that would necessitate ongoing safe care, or would make placement in existing community facilities untenable (ILC Project Team, 1993).

As such a Project Team consisting of a Senior Clinical Psychologist, Psychiatric Nursing Consultants and a Community Consultant Psychiatrist, was established to develop a service for this existing group, and an anticipated ongoing group of new clients annually. The final report from the Project Team for the development of the Intensive Learning Service indicated that management of these clients would be centred on treatment rather than long-term accommodation and care. As such clients would be encouraged to develop their full potential through the therapeutic input of staff involved (M-WAHB, 1992). Although potential clients would only be those detained under compulsory inpatient treatment orders (Mental Health Compulsory Assessment and Treatment Act, 1992), it was also recognised that the provisions of the act stipulated that

delivery of care required clients to be treated in the least restrictive environment possible.

The pilot programme named the Intensive Learning Centre (ILC) was opened on the grounds of Lake Alice Hospital in October of 1993, accommodating the residual group of long-stay clients who were unsuitable for placement in existing community facilities. It operated from within the Therapeutic Community model, emphasising productive activity and work and incorporating behaviour therapy at its core (ILC Project Team, 1993). This involved the development of individualised treatment plans that targeted the specific needs of each client, and placed particular emphasis on those behaviours that were likely to preclude community placement. These behaviours included shouting, yelling and screaming, violence toward others, eating difficulties and a lack of basic living skills such as dressing and washing, communication difficulties, and amotivational behaviour.

The ILC had two principle aims: (a) to provide a long-term intensive therapy (up to 18 months) aimed at developing a client's potential and level of independence, and (b) to work towards, through treatment therapy, the placement of the client for short/long periods of time in community run accommodation at an appropriate level of care. (ILC Project Team, 1993). It was envisaged that this would also help reduce the cost to Mental Health Services even if only on an intermittent basis.

*Evaluation of the ILC Programme, (Hall, 1995).*

As the ILC project was an innovative programme, there was a strong desire by the planning team (ILC Project Team, 1993) to assess its effectiveness following implementation. To this end an approach was made to the Psychology Department of Massey University, to undertake an evaluation of the programme and its success in meeting its stated objectives.

The study that ensued (Hall, 1995) had three major aims. Firstly, to evaluate the effectiveness of the ILC in bringing about change in the areas of general functioning and maladaptive behaviour in the "hard-to-place" clients. Particular emphasis was placed on

assessing the programme's stated goal of successfully preparing them for eventual community placement. The second aim was to compare the general functioning and maladaptive behaviour of the 15 ILC clients to those of a comparison group of 26 clients that had been moved to community placements 18 months previously. Additionally the study also looked to provide recommendations based on the findings regarding the continuance of the ILC programme.

Two informant driven measures, the Rehabilitation Evaluation Hall and Baker (REHAB) Baker & Hall (1983), and the Adaptive Behaviour Scale (ABS) Nihira et al., (1975), were used to assess behavioural change in the ILC and comparison group. Both scales are comprised of two subscales independently assessing general functioning and maladaptive behaviour. The use of both measures in tandem afforded greater validity of results than the use of a single measure, and this approach of the use of multiple outcome measures is consistent with the methodological recommendations of Bellack (1989) and Pfeiffer (1990). The REHAB and the ABS were both administered at baseline, with the REHAB being re-administered at both the 5 and 10- month follow-up, and the ABS at the 10- month follow-up.

Results indicated that there was a short-term significant improvement in general functioning at the 5- month period, but that this improvement was not maintained through to the 10- month period. It was found that there was no significant change over time for maladaptive behaviour, but a subscale analysis of the ABS did reveal that improvement had occurred in a small number of specific behaviours that were not tapped by the REHAB measure. These included untrustworthy behaviour, self-abusive behaviour and withdrawal.

Although a consistent level of improvement was not indicated over the 10- month period, it was found that a number of the ILC clients were functioning at levels comparable to those of community based comparison group. The comparison group demonstrated higher levels of functioning in the areas of social activity, self-care, community skills, antisocial behaviour, withdrawal and inappropriate behaviours. However, the ILC group displayed similar levels of functioning in areas such as

independent functioning, economic and domestic activity, violence, self-injury and verbal aggression.

Given the lengthy periods of hospitalisation accumulated by many of the ILC clients, the initial aim of preparing the current group of old long-stay clients for community placement in the short-term was possibly too optimistic. A number of this group had high levels of disability and dependency that will necessitate longer term treatment and care. However, consistent with the original ILC plan, the programme will have an ongoing role in treating “new recruits” of difficult-to-place clients expected to eventually replace the current group as they move on to psychogeriatric care (ILC Project Team, 1993). These new clients will be younger and will have had shorter histories of psychiatric hospitalisation, and as such the programme will be in a better position to fulfil its original aim of preparing this ongoing group of seriously mentally ill for community placement.

### **Relocation and Maintenance of Innovative Programmes**

Consistent with the original long term plan of the ILC, and the closure plan of Lake Alice Hospital, the ILC programme was relocated to the Castle Cliff area of Wanganui, bearing the new name Endeavour Lodge on 21st of September 1995.

Lieberman et al., (1987) have noted that innovative programmes while often initially effective can fail if special provision is not made to ensure the ongoing maintenance of the programme. This is of particular relevance to programmes such as the present study of Endeavour Lodge, where it has been transferred and key personnel responsible for its development no longer oversee the continued running of the programme. This can result in the loss of expertise and ongoing supervision of direct-care staff (Lieberman et al., 1987).

Moos (1997) notes the need for continued administrative support in order to maintain therapeutic community oriented programmes. Moos also points out that staff turnover can also impact on the nature and success of a programme, where incoming staff may not share the same philosophy or approach to treatment. In the context of a private

organisation there is may be more opportunity to ensure the recruitment of staff with similar orientation, but there may be less opportunity to ensure this in an institutional context.

### **Aims of the Current Research**

The central motivation for the current research was to contribute to the understanding of outcomes for long-stay psychiatric hospital patients, following changes to the provision of care they have received as a result of deinstitutionalisation. There exists in the literature considerable research documenting outcomes for higher functioning chronically and acutely mentally ill clients. However, there is a relative paucity of information examining the effects of deinstitutionalisation on patients that have previously spent extended periods of time in large psychiatric institutions. There is a notable shortage of this information in New Zealand in particular, where the closure of psychiatric hospitals has progressed only relatively recently.

Additionally, it was hoped to document the development and progress of what was an initially effective treatment programme for this difficult-to-place group, following its relocation from a hospital to a community setting. This was of particular importance with respect to identifying consequences for client outcomes, resulting from changes to treatment programmes specially implemented for them, as has been outlined previously by Liberman et al., (1987). Finally, in accordance with recent research into factors that have been identified as playing a mediating role between effective therapeutic interventions and client outcomes, a formal characterisation of the therapeutic milieu or ward atmosphere was undertaken.

As a result the current study had three principal objectives. The first was to assess the current adaptive functioning of the original ILC residents following 2 years in their new community setting, which would also provide an additional measurement to illustrate trends of change over time. The second was to make a comparison between the original ILC and current Endeavour Lodge programmes in order to determine how the programme has changed over time. The third was to assess the features of the prevailing Ward Atmosphere or therapeutic milieu/ social climate of the current Endeavour Lodge

programme, that may be playing a mediating role between therapeutic objectives and client outcomes. It was intended that results of the formal characterisation might assist in the identification of aspects of the treatment environment that were consistent with and facilitative of treatment goals and programme philosophies, and those that might be impeding or contrary to them. It was also intended to determine if the structure of the therapeutic milieu was congruent with the current client group.

The specific aims of the current study were the following:

1. To evaluate the current adjustment and level of functioning of the patients following transfer from the Intensive Learning Centre at Lake Alice Hospital, to the centre's new community-based site at Castle Cliff, Wanganui.
2. To compile a description of all current treatments and procedures, both formal and informal, that are being utilised in the rehabilitation and daily care of the Endeavour Lodge inpatients.
3. To determine if any modifications to the programme were required following its transfer, to allow it to operate effectively in the community.
4. To make a formal characterisation of the prevailing ward atmosphere of Endeavour Lodge.

## CHAPTER TWO

### Method

#### **Ethical Issues**

The present study presented some significant ethical issues principally centred around assuring the ethical treatment of a mentally ill participant group, who it was felt were capable of providing informed consent of only a limited nature due to the severity of their illness.

In recognition of this fact the research project was designed and developed in an effort to minimise the likelihood of harm, and the demands placed on this group. Specifically, active participation by the residents would not be required, as ratings of current functioning would be obtained from staff observations of the residents. Secondly, it was recognised that these measures had been taken for research and routine hospital assessment purposes in the past, and no harm had come to the residents, and their confidentiality had been preserved on these prior occasions.

Ethical approval of the research project was sought both from the Massey University Human Ethics Committee (see Appendix D), and the Manawatu-Whanganui Ethics Committee (Appendix E). In each of these applications the design precautions undertaken to protect this group were stressed, and the benefit of the research for the further development of treatments and services for this group were noted.

The District Health Inspector was the Legal Guardian for the majority of the Endeavour Lodge clients, thus, the Manawatu-Whanganui Human Ethics Committee requested the principal researcher (RD) meet with her, and be guided by her in the appropriate manner with which to obtain consent. The District Inspector was satisfied that the research project presented minimal demands on the residents, little likelihood of harm and was in their best interests. It was also her opinion that the majority of the clients were incapable of fully informed consent, and further that few of the clients had family or friends still

acting as guardians. On this basis the District Inspector gave consent for the study on behalf of the Endeavour Lodge resident group.

Full informed consent was obtained from the participating staff group, having been provided with an Information Sheet and a Consent Form.

## **Design**

### *Assessment of Client Functioning*

The overall approach adopted for client assessment and the use of particular adaptive functioning measures were pre-determined, in order that the data from the previous research with this programme and client group could be utilised (Hall, 1995). However the approach used was consistent with the methodological recommendations of Pfeiffer (1990) and Bellack (1989) who advocate the use of multiple outcome measures of client functioning taken over multiple time periods. Subsequent analysis was based on these measures taken at the different time points, which afforded a longitudinal view of change over time and the ability to look at changes in functioning both before and after community transfer (pre-post test design).

Unfortunately the small client group size meant that a meaningful between groups comparison could not be made. However, the small group size did afford the opportunity to look at individuals in the group more closely, enabling the collection of more detailed descriptive information about them. It was felt that this approach would yield a more meaningful and social ecologically valid depiction of outcomes for the Endeavour group, by identifying any stratification of groups displaying similar patterns of change.

### *Characterisation of the Therapeutic Milieu*

The Ward Atmosphere Scale (Moos, 1996) was employed to make a formal characterisation (description and quantification) of the prevailing therapeutic milieu of Endeavour Lodge. The administration of this self-report questionnaire provides cross-sectional data in the form of staff and/or client perceptions of the structure of a

programme's milieu, represented by scores across ten aspects of the treatment environment

This cross-sectional characterisation is useful in identifying salient aspects of the treatment environment that are consistent with and facilitative of treatment goals and programme philosophies, and those that might be impeding or contrary to them (Moos, 1997, 1996). It is also possible to determine if the structure of the milieu is congruent with the particular client group. Description and quantification of a programme's ward atmosphere also allows comparisons to be made with other programmes, and established norms.

Additionally, the Ward Atmosphere analysis was intended to satisfy methodological recommendations, regarding evaluative/ outcome research involving psychiatric treatment programmes. Pfeiffer (1990) contends that the absence of formal characterisation of the prevailing social climate or therapeutic milieu represents a methodological shortcoming in many evaluative studies of psychiatric inpatient programmes. "We already know that inpatient treatment is helpful in a great many instances. However, the field would benefit from more refined, specific, and focussed investigations that examine the essential components of change in psychiatric patients and explore patient-treatment interactions that influence therapeutic effects", (Pfeiffer, 1990, p. 1318).

### ***Programme Relocation and Development***

The greater part of the remainder of the study was more exploratory in nature, designed to elicit information about the structure of care and treatment at Endeavour Lodge, and effects of transferring the programme to its new community based site. As a result descriptive data was gathered of treatment approaches used, programme goals and objectives and the programme philosophies of both the ILC and Endeavour programmes, so that programme comparisons (pre and post relocation) could be made.

This programme description was central to a number of related aims of the current research. Firstly, the description was intended to enable a comparison of the current

Endeavour and original ILC programmes, in order to provide some insight into how the programme has changed over time, and following relocation. Secondly, it would also allow comparisons with other similar programmes in the UK and USA, which is becoming an increasingly common approach for the treatment of this difficult-to-place group. Thirdly, it was intended to satisfy methodological considerations, which are attendant to any outcome research involving treatment programmes, as outlined in Pfeiffer (1990). Finally, the programme description was intended to provide some context for the findings from the assessment of client functioning, and Ward Atmosphere analysis.

Semi-structured interviews were also conducted with key staff members; the programme coordinator, Occupational Therapist, and 2 psychiatric nurses who had been with the programme continuously since its inception. Descriptive data was gathered with the aid of pre-prepared question lists from the interviews. This included information regarding programme strengths and weaknesses, and impacts on the various aspects of the prevailing therapeutic milieu that may have been affected by the various changes that the ILC/ Endeavour programme has experienced since its inception (eg. staff changes, programme developments, physical relocation to new site). It was felt that these data may provide both some context rich information, and would also serve as an alternate/ corroborative source of data to the Ward Atmosphere analysis. As a result conclusions drawn from the self-report scale could be compared for consistency with information gathered from staff from the semi-interviews.

## **Instruments**

### ***The Rehabilitation Evaluation Hall and Baker (REHAB)***

The REHAB is a 23 item scale which was designed to assess deviant and general behaviours. The REHAB consists of a 7 item Deviant Behaviour (DB) subscale, and a 16 item General Behaviour (GB) subscale. The latter scale is further divided into 5 factors- social activity, speech skills, disturbed speech, self care and community skills. The REHAB was designed for use with those who have a chronic or disabling psychiatric handicap and are attending a residential or day care institutional setting. The REHAB is administered by trained direct care staff. Baker and Hall (1988) report

acceptable reliability and validity for the REHAB, and that it is sensitive to change. Inter-rater reliabilities gained ranged from 0.61 to 0.92. Further studies have established support for the criterion validity (Foreman & Baker, 1986), and inter-rater reliability (Carson, Coupar, Gill & Titman, 1988), with Kavanagh (1992) stating that the REHAB is one of the best scales for informant driven assessment.

*The AAMD Adaptive Behaviour Scale (ABS)*

The ABS is comprised of two parts providing ratings over 21 domains. Part one assesses skills and behaviours which are associated with personal independence. The factors measured in this part one are independent functioning, physical development, economic activity, language development, numbers and time, domestic and vocational activity, self direction, responsibility and socialisation. Part two assesses maladaptive behaviour. The dimensions measured are violent and destructive behaviour, antisocial, rebellious and untrustworthy behaviour, withdrawal, stereotyped behaviour, inappropriate interpersonal manners, unacceptable vocal and eccentric habits, self abusive behaviour, hyperactive tendencies, sexually aberrant behaviour, psychological disturbances, and the use of medications. Bortner (1978) notes that the ABS has inter rater reliability's ranging from 0.71 to 0.93 for Part 1, and 0.37 to 0.77 for Part 2. Both the REHAB and ABS have been used extensively for assessment and research purposes with chronically mentally ill groups.

*The Ward Atmosphere Scale - Real Form (WAS-R)*

The Ward Atmosphere Scale (Moos, 1996) is a 100 item self-report scale designed for use with both patients and staff of a wide range of treatment facilities, including psychiatric institutions. The WAS has been used widely in the description of therapeutic treatment programmes, facilitating comparisons between programmes and characterising the treatment approach adopted in a particular setting. The WAS has been used widely in programme evaluation and development (Moos, 1997; 1996).

The WAS is used to characterise therapeutic programmes in terms of 3 basic dimensions- Relationships, Personal Growth Dimensions and System Maintenance. Subsumed under these three basic dimensions are 10 subscales that look different

aspects of the treatment environment. The three Relationship subscales assess participants perceptions of levels of Involvement, Support and Spontaneity in a programme. The Personal Growth Dimension looks at levels of Autonomy, Practical Orientation, Personal Problems Orientation and the facility for expression of Anger and Aggression. Subsumed under System Maintenance are the level of Order and Organisation, Programme Clarity and Staff Control. Table 1, outlines explanations of the 10 WAS sub-scale dimensions, and was reproduced from Moos (1996).

Moos (1996) reports low to moderate subscale intercorrelations with an average of 0.25, which indicate the measurement of relatively distinct treatment programme characteristics. Moos also reports adequate test-retest reliability and high profile stability. Profile stability over long periods of time were found to be very high (pp 35).

Table 1

Descriptions of WAS Subscale Dimensions

<b>Relationship Dimensions</b>	
<b>1. Involvement</b>	how active and energetic patients are in the programme
<b>2. Support</b>	how much patients help and support each other and how supportive the staff are toward the patients
<b>3. Spontaneity</b>	how much the programme encourages the open expression of feelings by patients and staff.
<b>Personal Growth Dimensions</b>	
<b>4. Autonomy</b>	how self-sufficient and independent patients are in making their own decisions
<b>5. Practical Orientation</b>	the extent to which patients learn practical skills and are prepared for release from the programme
<b>6. Personal Problems Orientation</b>	the extent to which patients seek to understand their feelings and personal problems
<b>7. Anger and Aggression</b>	the extent to which patients argue with other patients and staff, become openly angry, and display other aggressive behaviour
<b>System Maintenance Dimensions</b>	
<b>8. Order and Organisation</b>	how important order and organisation are in the programme
<b>9. Programme Clarity</b>	the extent to which patients know what to expect in their day-to-day routine and the explicitness of programme rules and procedures
<b>10. Staff Control</b>	the extent to which the staff use measures to keep patients under necessary controls

Further detail regarding the training and administration of these measures is provided in the "Procedures" section.

## Participants

The participants were 10 of the original 12 ILC clients that had transferred with the programme to its new location, and the 17 staff of Endeavour Lodge, Castle Cliff, Wanganui. One resident had been transferred temporarily to receive treatment for a medical condition prior to data collection and as such was not included in the present study. The other had been transferred permanently because of unmanageable violent behaviour and as such was also unavailable for the present study. The ten remaining residents were being detained under compulsory inpatient treatment orders of the Mental Health Compulsory Assessment and Treatment Act, 1992- nine under Section 34(4), and one client under Section 30.

The resident group was comprised of 7 males and 3 females, with 2 residents being identified as Maori and 8 as European. Their ages ranged from 33 to 58 with a mean of 46.20 years ( $SD= 7.66$ ). A breakdown of age revealed that one client was in the 30- 39 age group, with six of the ten occupying the 40-49 year old group. Three of the residents were 50 years of age and over.

Full psychiatric histories and lengths of hospitalisation in facilities other than Lake Alice Hospital were not available for all of the residents, as different staff members had been responsible for compiling case histories for each of the clients over time. This made it difficult to accurately gauge the client's chronicity of illness in terms of accumulated years of psychiatric institutionalisation. However, first admission dates to Lake Alice Hospital for this client group ranged from 1966 to 1992 rendering a mean residency period of 18.40 years ( $SD= 8.34$ ).

A breakdown of residency periods at Lake Alice Hospital revealed that two of the clients had been resident for a period of 5- 10 years, four had admissions of 10- 20 years, and 3 of the 10 residents, had resided with Lake Alice for a period of between 20 and 30 years. A single client having been admitted in 1966 had been with the hospital for 31 years at the time of the present study. As a number of the clients were reported to have previously spent time in, or had been transferred from other psychiatric hospitals, this mean figure of 18.40 years was thought to be a conservative measure of chronicity.

As all of the residents had been institutionalised for a period of longer than one year, they each met the criteria of “long-stay” chronically mentally ill, (O’Driscoll & Leff, 1993; Wykes & Wing, 1991). Further, as the minimum residency period at LAH was 5 years, each of the clients more specifically met the criteria for the designation of “old” long-stay. This is commonly used to refer to clients that have been hospitalised for a period of 5 years or longer, despite modern drug and psychotherapeutic treatments, and the move toward deinstitutionalisation (Wykes & Wing, 1991).

Medical records were reviewed in order to acquire the most recent diagnosis of the Endeavour residents. The most common diagnostic category was that of chronic schizophrenia which was shared by 5 clients. Two further clients had dual diagnoses of chronic schizophrenia and mental retardation. Two clients were diagnosed with schizoaffective disorder and the diagnosis of one was not available. Chronic schizophrenic disorders therefore, accounted for 90% of the Endeavour resident group.

Of the 17 staff of Endeavour Lodge, 11 volunteered to participate in the staff section of the study. This staff group included registered nurses, activity officers and an occupational therapist. Three of the group were male and 8 were female. Periods of service with Endeavour Lodge ranged from 1 week to 4 years with an average period of 17 months ( $SD= 17.3$ ). Two staff from this group had transferred with the original ILC programme from LAH.

## **Setting**

Endeavour Lodge currently occupies modest sized grounds in the Castle Cliff area of Wanganui. The section is enclosed on three sides by shoulder-high fences, and is open to the road beyond the grounds to the front of the building. The surrounding area is a residential district, within close proximity to shops and a tavern. The residential area borders on a light industrial area on one side, and the seaside on the other.

The unit itself is a locked facility, and is a fairly expansive building incorporating three wings of individual rooms for the residents, which enclose a large grass courtyard on three sides. Each wing has its own lounge area, in addition to the main lounge. This

layout allows male and female residents to have their own living areas, and also allows potentially violent or particularly disruptive clients to be accommodated in a separate wing. Residents are therefore able to spend time in the main lounge with others, or to spend time by themselves in their own lounge area or room, as they desire. Each wing also has its own bathroom and toilet facilities.

Located centrally in the unit, is the main lounge with television and adjacent smoking room, a well-equipped kitchen with serving window and the main staff office. Across from the lounge and kitchen is the dining room, which is large and northerly facing. It makes the most of the sunlight with large French doors and picture windows, and looks out onto the central courtyard. Outside of meal times this is a popular alternative for sitting in the sun and reading, and listening to the piano which is kept here. The staff room is located at the head of the wing accommodating the more disruptive clients, and is adjacent to a fourth wing that is utilised for storage and includes the locked medication room. At the opposite end of the building there is also a recreation room that has a table tennis and snooker table.

The unit also has its own van which comfortably seats eight people, and is used for outings, taking residents to appointments and collecting supplies.

### **Procedure**

The principal researcher (RD), spent a three week period at Endeavour Lodge in order to provide training and supervision in the rating administration. During this time staff interviews were also conducted, records relevant to the study were reviewed, and first-hand observations of the programme and its operation were made.

### ***REHAB and ABS Training and Administration***

Staff training in the use of measures such as the REHAB and ABS used in this study, is an important factor in assuring reliable results are obtained (Hall & Baker, 1983). This is particularly the case in the administration of the REHAB scale, where rater judgements of client functioning are the basis for rating.

Two training sessions were carried out before the ratings were undertaken. The first was conducted one week prior to the rating period. In this session raters were given copies of both scales and any supplemental material (eg. raters guides) that would be required for the subsequent rating, so that they could take away and read in their own time. This was intended to give the raters time to familiarise themselves with the scales, and an opportunity to ask the researcher any questions that may have arisen during this period. It was also intended that this would also help orient them toward the kinds of behaviours that they would be called upon to observe during the observation week prior to rating.

Additionally during this first session the purpose of the ratings and their relevance to the study were explained. The schedule of the observation period was also outlined, and some specific requirements of raters during the observation period and subsequent behaviour ratings were discussed. A general overview of both scales was conducted, and the different types of rating items were reviewed. Of particular focus were the speech items of the REHAB General Scale, where the possibility for confusion is pointed out in the Users Manual. In a mock rating practice session, raters were asked to consider the process of rating a client that was selected by the researcher. Raters demonstrated where they would rate this client on different scale items. Where there existed some discrepancy or difference of opinion during this exercise, the issue was further explored in an effort to identify sources of the variances.

Consistent with the training manual (Hall & Baker, 1983), the following points were stressed following the first training session: (a) that, ratings must be based on Observed Behaviour for the particular week rated, not for what the patient has been like in the past, even if the patient's behaviour is not typical in the rated week; (b) that, raters should obtain and use information from staff on the other shifts during the rated week, particularly for instances of Deviant behaviour; (c) that, the ratings are in comparison to what is Normal in the Community, not in comparison to hospital/ hostel standards; and, (d) that raters must try to be Objective, taking into account adaptations they may have made to particular patients. Raters must be objective in rating a patient with a physical handicap (e.g. from a stroke or amputation), so that they make a rating of actual performance, not "potential" performance. While stressing objectivity, [rating trainers

should] encourage the use of the “Please add any comments” section if raters feel the need to qualify their ratings.

Following the observation week and immediately prior to the rating of the clients by the rating staff, the points above were again reiterated.

Ratings were conducted by the direct-care staff in closest contact with the Endeavour Lodge residents, following a one week observation period. Consistent with REHAB rating guidelines, two separate raters provided independent ratings for each client in order to improve the overall rating reliability. Ratings of clients functioning as measured by the ABS were carried out for the same observation period. Table 1. outlines the schedule of rating administrations from baseline through to the present rating, conducted with the same client group.

Table 2

Schedule of administration of REHAB and ABS ratings of ILC and Endeavour Lodge clients

Baseline ILC (Hospital)	ILC (Hospital)	ILC (Hospital)	Endeavour (Community)
October 1993	February 1994	August 1994	August 1997
REHAB	REHAB	REHAB	REHAB
ABS	-	ABS	ABS

***Administration of the Ward Atmosphere Scale (WAS)***

All staff were provided with a copy of the Ward Atmosphere Scale questionnaire (Moos, 1996; Appendix C), with an attached information sheet and consent form. Staff members that volunteered to participate returned their questionnaires in sealed envelopes, which were provided to ensure confidentiality.

### *Semi-Structured Staff Interviews*

Semi-structured staff interviews were undertaken, utilising lists of prepared questions. The unit manger or team coordinator, occupational therapist, and activity officer and a psychiatric nurse were interviewed in an effort to gather comparative information of the two programmes (the ILC and Endeavour Lodge). These questions also sought to gather information regarding modifications to the programme that were required following it's transfer from the hospital location in order to facilitate it's effective operation in the community, and problems facing the programme in it's current operation.

### *Record Review*

A comprehensive record review was undertaken in an effort to gather the necessary client and programme information. This included Central Regional Health Authority Service Descriptions (CRHA, 1996), ILC (ILC Project Team, 1993) and Endeavour Lodge (Endeavour Lodge, 1997) operating manuals and additional material, and programme descriptions from previous research (Hall ,1995). Pfeiffer (1990) stresses the importance of collecting comprehensive client information in order to satisfy the requirements of a sound methodological approach, in clinical research. This includes complete demographic information, current diagnoses and criteria by which these diagnoses were made.

## CHAPTER THREE

### Results

#### **The Endeavour Lodge Programme**

Based on interviews with staff, a review of Endeavour Lodge operating manuals and observations made in vivo by the primary researcher (RD), the following description of the Endeavour Lodge programme was compiled.

Consistent with the Ward-in-a-house and Hospital Hostel models (Shepherd, 1995; Young, 1991; Wykes & Wing, 1982; Bennett, 1980), the Endeavour Lodge programme combines a small scale domestic style environment located in a community setting, with 24 hour nursing care. An atmosphere is maintained that attempts to normalise the environment by de-emphasising institutional routine, orienting residents away from the traditional sick role, and encouraging them to take an increasing role in social interaction and self-care. Cooking and washing facilities are available which allow residents to develop and practice living skills. Regular outings (appointments and community group meetings) are arranged to facilitate the development of skills necessary in the community.

The management of the Endeavour Lodge residents is centred around individually formulated *lifestyle* or *care plans*. These plans are designed to address the daily physical care, medical, spiritual/cultural and rehabilitative/treatment needs of each client. A plan of each resident's week (*weekly schedule*) provides an outline for the routine to be followed for each day. This includes the activities of daily living (ADL's), meal times, administration of medications, resident planning time (*R.P.T*), group activities with the occupational therapist, weekly outings, and times for leisure activity and hobbies.

Within the overall care plan, individual *treatment plans* are designed in response to particular problems of self-care, behaviour, social interaction, and medical illness. The identified problems are prioritised in terms of severity, and the most severe are targeted first for intervention. Each problem is outlined on its own treatment plan sheet,

identifying the resident, *key-worker*, the problem and its antecedents, the objective of treatment and a list of the specific interventions to be employed to effect change in the problem. The effectiveness of treatments plans for each client are evaluated at bi-weekly *client planning team* (C.P.T) meetings. The consulting Psychiatrist is a member of the C.P.T and is responsible for prescription of medication, and is present during the monthly treatment evaluation meetings.

As outlined in the general principles of treatment procedures (CRHA, 1996), treatment is a 24 hour process which includes assessment, planning, intervention and evaluation. Treatment is proactive not reactive, and is consistent with the principles of behavioural psychology, psychiatry and therapeutic communities. With this in mind consistency of intervention is stressed, along with insuring that objectivity and therapeutic boundaries are maintained at all times. In order to insure the provision of effective professional treatment all staff engage in individual approved supervision on a fortnightly basis. It is also stressed that while medication is an integral part of treatment it is not the focus of treatment in the programme.

Each resident is allocated a *key worker*, who is assisted by a *co-worker*, and an *allocated worker*. The key worker is responsible for the co-ordination and supervision of the treatment planning process for their client. This involves taking overall responsibility for the planning of care and ensuring that treatment plans reflect current assessment of their client. They are also responsible for evaluating and updating treatment plans for bi-weekly and monthly reviews, and for ensuring that the interventions in the treatment plan are being implemented by the co-worker and allocated worker. The key-worker also attends to the financial and day-to-day needs of the client, and provides liaison with family members and other support network members.

The *R.P.T* or resident planning time is a meeting conducted each morning between the residents and a staff member- usually the O.T. This meeting is an opportunity for each resident to have some input into the activities that they would like to undertake for the day, and to plan future activities together. It also provides a forum in which the residents can raise issues for which they have some concern, and these can then be discussed and a solution sought.

The occupational therapist organises and runs a group programme of activities, which deal with self-awareness, awareness of others, social interaction, creative expression, conversation, living skills, wellness education, physical recreation and community awareness. Typically the weekly schedule of group activities incorporates one or two sessions daily, each of 2 hours duration. Participation is voluntary although residents are actively encouraged by the staff to attend. The researcher (RD) observed that the majority of the clients attended these sessions (8 of 10), with only one or two clients leaving sessions on a couple of occasions.

The occupational therapist also conducts 6- monthly functional assessments of each client, covering competency in activities of daily living and self-care, quality of social interaction, and maladaptive behaviour.

## Effects of Relocation

Semi-structured interviews and general discussions were held with the staff of Endeavour Lodge in an effort to determine their perceptions of the various effects of relocating the ILC programme to its new community setting. Information was also gathered regarding changes to the programme and operating procedures that were required in order to ensure continued effective and safe operation in the community. Information was also gained from operating manuals in order to supplement staff perceptions of the changes made to the Endeavour programme since relocation to the community.

### *Effects on Endeavour Lodge Residents*

Table 3

#### Effects of Relocating the ILC Programme for Endeavour Residents

---

## EFFECTS OF PROGRAMME RELOCATION

(on Endeavour Lodge Residents)

---

### *Physical Environment*

---

**Positive Outcomes** Endeavour Lodge is an expansive building providing room for walking freely around inside. Residents are accommodated in three wings of individual rooms, each wing with its own separate lounge. This allows residents to take time out on their own from the main lounge and other residents as they desire. Staff report that when the weather is poor, there is more room to move about inside than there was in the old hospital villas.

**Negative Outcomes** The grounds of Endeavour however are smaller and more physically restrictive than the expansive grounds of Lake Alice Hospital. For reasons of community and client safety Endeavour Lodge is also a locked facility, and clients must be accompanied by staff when leaving the building. The

isolated site of Lake Alice Hospital afforded residents the opportunity to wander extensive grounds with some freedom, and did not necessitate the direct supervision of a staff member. This provided a primary source of exercise for many, and the opportunity for patients to distance themselves from staff and other patients as they desired.

---

*Social Environment*

---

Positive Outcomes Moving to the new Endeavour Lodge site removed the stigma that was associated with living in the psychiatric hospital environment. Staff reported that residents were happy to be located in the community and away from the hospital. Staff also reported that offers to visit the old site have been strenuously declined.

Negative Outcomes Due to the comparatively restrictive physical environment of Endeavour, residents have less opportunity to distance themselves from staff and other residents, and to spend time undisturbed. This was found to be particularly problematic at Endeavour Lodge where the client group encompasses a wide range of client functioning, with a mixture of disruptive and aggressive clients with those who are not. Staff felt that the disruptive and lower functioning clients often disturbed the other residents, and as such had a detrimental effect on the maintenance of a therapeutic milieu.

---

*Proximity to Community*

---

Positive Outcomes Greater opportunity for participation in normal activities associated with life in a community (eg., visits to public library, shopping, appointments, recreational pursuits such as horse riding, and visits to the local schizophrenia fellowship). Staff reported that some clients express satisfaction with being in community location.

Negative Outcomes Staff reports and observations by the researcher (RD), suggested that for some clients the proximity to the community served to intensify their

perception of compulsory confinement. These clients had to reconcile their awareness of community proximity, with their containment in a locked facility.

*b) Effects on Endeavour Lodge Staff*

Table 4

Effects of Relocating the ILC Programme for Endeavour Staff

---

EFFECTS OF PROGRAMME RELOCATION	
(on Endeavour Lodge Staff)	

---

<i>Physical Environment</i>	
-----------------------------	--

---

Positive Outcomes	Continuing efforts were being made to improve the home-like appearance of Endeavour Lodge. Working in an environment where it was possible to provide this home-like milieu for the residents appeared (to RD-researcher) to make a positive contribution to staff morale.
Negative Outcomes	Staff reported that the expansive building of Endeavour Lodge makes the close supervision of all clients difficult.

---

<i>Social Environment</i>	
---------------------------	--

---

Positive Outcomes	The humane, rehabilitatively oriented and non-institutional milieu maintained at Endeavour was observed (by RD-researcher) to make a positive contribution to staff morale.
Negative Outcomes	The move to the new community location from the hospital site has resulted in access to a smaller body of staff. Staff reported feeling somewhat isolated, with less support and comradery than was present in the large hospital environment.

The relocation to a community location has resulted in a degree of institutional isolation. One significant outcome of this has been the loss of access to additional staff for emergencies. Discussions with staff revealed that this has proved to be particularly problematic during violent episodes, where staff feel less safe as a result. This appeared (to the researcher) to represent a significant safety issue for staff and other residents. Staff also indicated that this had a detrimental effect on staff morale and on the unit milieu.

---

*Proximity to Community*

---

- |                   |   |
|-------------------|---|
| Positive Outcomes | Staff having increased ability to undertake personal treatment initiatives that involve access to community facilities and locations etc. (eg. One staff member took interested clients out fishing on his boat. Principle attention in treatment of this group has been focussed on motivating their clients (activation) so that contingent therapies might later be employed. Activities of this nature have proven to be very popular with some of this traditionally hospital accommodated long-stay group). |
| Negative Outcomes | Greater need for close supervision of clients, and requirement to advise residents that they must be accompanied at all times when leaving the Endeavour Lodge grounds, due to community proximity.   |

*c) Effects on the Endeavour Lodge Programme*

Table 5

Effects of Relocating the ILC Programme for the Endeavour Lodge Programme

---

<p>EFFECTS OF PROGRAMME RELOCATION (on Endeavour Lodge Treatment Programme)</p>	
<hr/> <p><i>Physical Environment</i></p> <hr/>	
<p>Positive Outcomes</p>	<p>The physical surroundings of Endeavour Lodge are more consistent with a normative home-like environment. Staff reported that this contributed to a more rehabilitatively oriented treatment milieu, and indicated that this style of environment is consistent with Endeavour treatment principles. A home-like non-institutional living environment was felt by staff to facilitate the provision of a higher quality of life, to assist both in the de-emphasis of identification with and dependence on institutional life, and also in the preparation for eventual community living.</p>
<hr/> <p><i>Social Environment</i></p> <hr/>	
<p>Positive Outcomes</p>	<p>Opportunity for social interaction in a more home-like, less institutional environment.</p>
<p>Negative Outcomes</p>	<p>More enclosed environment offers less opportunity for residents to spend time alone and uninterrupted.</p>
<hr/> <p><i>Proximity to Community</i></p> <hr/>	
<p>Positive Outcomes</p>	<p>Proximity to community has allowed the provision of access to a broader range of typical life choices and activities in the community, in improved the correspondence between the programme environment and it's operating philosophy.</p>

Negative Outcomes More constrained physical environment intensifies the problem of accommodating particularly disruptive or violent residents, with those who are not. This has an impact on the therapeutic milieu.

Changes that have been required Need for the development of strategies and procedures specifically designed to ensure public and client safety in the community. This has included procedures for the prevention of AWOL's (absconding), and identification of possible deviant client behaviours, such as urination in public. There has been an ongoing need for the development of protocols and procedures specifically tailored for attend to problems of increased community interaction.

---

*Institutional Isolation*

---

Positive Outcomes Recent development sees a further development of this theme of self-reliance, with individual units under mental health/ continuing care being asked to assume greater administrative and operating independence. Each unit will be responsible for their own fiscal/ business, quality and development plans. This could result in more self-determination, both in terms of the treatment approach adopted, and more flexibility in use of and access to funding.

Negative Outcomes Moving from a psychiatric hospital environment has resulted in reduced access to psychiatrist consultations/ assessments. Staff reported that with more frequent consultations they would be in a better position to respond sensitively to changing client medication requirements. Staff felt that increased psychiatric consultations would therefore have a significant impact on client improvement.

Reduced access to experienced and expert supervision in the use of the behavioural techniques originally employed in the ILC programme. The researcher (RD) felt that this possibly resulted in the programme being

less effective in the amelioration of some specific maladaptive behaviours and functional deficits that might respond well to behavioural intervention (eg., urination in public).

Changes that have been required

Necessity for the development of new protocols and procedures for monitoring and transferring suicidal clients to acute care, as the programme is an inappropriate environment to ensure safety of such clients. A similar situation was found in Bridges, Goldberg, Hyde, Lowson, Sterling and Farger (1991).

### **ILC and Endeavour Lodge Programme Comparison**

Semi-structured interviews and general discussions were held (by RD) with those staff of Endeavour Lodge that had been with the original ILC programme and had transferred with it to its new location (n=2), or with those that had had some association with both programmes (n=4). Operating manuals from both programmes were reviewed by the researcher (RD), as were descriptions of the ILC programme from previous research (Hall, Deane & Beaumont, 1996; Hall, 1995). The staff interviews and record review afforded comparisons of programme philosophy, primary objectives, expectations for client improvement/ rehabilitation and treatment approaches utilised. Table 6 summarises the comparison between the two programmes, (before and after relocation) across some of the more important programme components.

Table 6

Comparison of ILC and Endeavour Lodge Programme Components

	ILC	Endeavour Lodge
Expectations of client improvement	Eventual community placement even if only for short periods. 18 month treatment period expected	Community placement now thought unlikely for majority of current clients, therefore greater emphasis on improvement of quality of life and facilitation of as normative a lifestyle as possible within current surroundings.
Programme Philosophy	“The ILC is a “can do” centre, that clients with a psychiatric disability are able to live as ordinary a life as possible. The service will promote client autonomy and quality of life.”	“Endeavour Lodge’s philosophy can be a modified “can do” which recognises the need for individualised treatment plans which focus on patient abilities and accepts the need for normalisation. Patients will be treated with dignity and respect and intervention and interaction with patients will be purposeful, meaningful and goal directed.”
Primary Focus (Objective)	“That all clients in the centre can successfully be located in an appropriate community setting.”	To provide ongoing care, and facilitating access to as typical a range of experiences and choices as possible, while continuing to emphasise the development of each client’s fullest potential.

Care Approach	individualised lifestyle/ care plan and key- worker	individualised lifestyle/ care plan and key-worker
Treatment Approach	Formal and comprehensive use of behavioural interventions, to effect improvement in maladaptive behaviour and general functioning.	Interventions still based on behavioural strategies, however less formally (rigorously) applied in terms of consistency and specificity.
Staffing	High staffing levels, incorporating a multi-disciplinary team, including specialists in behavioural interventions.	High staffing levels, incorporating a multi-disciplinary team, but with reduced access to personnel with specific expertise in behavioural interventions.
Staff Supervision	Access to large body of specialists trained in behavioural techniques (1 hour supervision fortnightly)	Reduced access to specialists trained in behavioural techniques (community oriented supervision fortnightly)

The first point that was apparent from the programme comparison was that the programme had indeed changed in a number of key areas over time, and particularly following it's relocation to the community. The move to the community coincided with changes in staff both at the unit leadership level, and at the institutional administration level directly responsible for the programme. The original staff responsible for the design and implementation of the programme, had no further role in the continued operation of the ILC following it's relocation from Lake Alice Hospital, where it resumed operation as Endeavour Lodge. As a result there was a loss of advocacy for the maintenance of original treatment prescriptions (components), and qualified supervision for their continued use.

Interviews with Endeavour Lodge/ ILC staff, and a comparative review of operating manuals indicated that there had also been a change in expectations for client improvement (outcome) in the period following relocation. The ILC programme envisaged an 18-month treatment period resulting in community placements for short or long periods of time (ILC Project Team, 1993). As a result the objective of treatment was concerned with the active preparation of clients for eventual release. This included the acquisition of required social and general living skills, and the reduction of maladaptive or deviant behaviours. This was effected using treatments consistent with the principles of behaviour modification and therapeutic communities (ILC Project Team, 1993).

At the time of the present Endeavour Lodge study, sufficient client improvement was no longer expected likely for the majority of the current clients, to facilitate release from the programme in the foreseeable future. As a result the major objective of the programme had modified to the provision of a normalised living environment, while facilitating access to as wide a range of typical life experiences as possible (CRHA, 1996). Individualised *care* or *treatment plans* were still the focus of treatment however, designed to improve the client's social and general living skills, and reduce maladaptive behaviours on an ongoing basis.

The general approach to treatment utilised at Endeavour at the time of the present study, still loosely resembled techniques more comprehensively and systematically used in the ILC programme. However interventions were often not specific enough, nor consistently applied by staff not directly responsible for the particular client, to constitute formal behaviour modification strategies. The responsibility for the type of intervention and treatment approach used, rested largely with the key-worker responsible for each client. Positive reinforcement for appropriate behaviour however, was most commonly used.

Regular reviews of the effectiveness of interventions used with each client at Endeavour, and day to day progress of each client was reported in nursing shift notes to provide some basis for evaluation. However, the monitoring of client behaviour did not appear to be conducted with any systematic empirical basis. Staff report however, that

the ILC by comparison made extensive use of charts plotting changes in the incidence of targeted client behaviours, in the monitoring of client progress and therapeutic efficacy.

### **Pre-Post Analysis of Group Adaptive Functioning**

For the purposes of tracking group change at each of the 4 rating periods from baseline to the current community-based measure, complete data for only 9 of the original 12 Endeavour residents was available. One client had been transferred permanently for unmanageably aggressive behaviour, and another temporarily for treatment of a medical condition. One further client had joined the ILC programme after it started and so baseline ratings had not been gathered. This allowed pre-post within subject comparisons for the ABS and REHAB measures for nine clients. All analyses were carried out on SPSS for Windows 6.1.3 (Norusis, 1995).

In order to assess group change over time multivariate analysis of variance (MANOVA) was initially considered as the preferred method of analysis, consistent with the multivariate nature of the data. However, the small sample size and large degree of variability among clients in the sample, meant that the assumption of normally distributed data required for this test could not be met. As a result non-parametric analyses were conducted to assess overall group change over time.

Two-tailed levels of significance were employed in all analyses, as there was uncertainty about the direction of change in functioning to be expected. An alpha level of 0.05 was selected for the statistical tests, incurring the concomitant risk of Type-1 error. However, this level of significance was selected over a smaller one in an effort to assist the detection of change in the small sample size. The two-tailed tests utilised throughout also diminished the ability to detect significant change.

Due to the high degree of variability in functioning demonstrated in the client group and the relatively small sample size, it was felt that the likelihood of identifying significant statistical change across that period was diminished. With this in mind it was decided that a supplementary descriptive analysis of trends of the clients subscale mean total scores for the REHAB and ABS subscales would also be conducted. Mean scores of

general and maladaptive functioning for the group on the two measures taken from the present study, were compared with the baseline and previous hospital measures of Hall (1995) to establish descriptive trends of change over time.

For convenience and consistency the alternatively titled “Deviant” (REHAB) and “Maladaptive” (ABS) subscales shall be collectively referred to as Maladaptive Behaviour throughout the remainder of the Results and Discussion sections. “General Functioning” will be used to refer to the broad domain of adaptive functioning which is similarly termed by both the REHAB and ABS measures.

Table 7 provides a comparison of Group Mean Total Scores for each sampling period from baseline-hospital to the present community measure, across both the ABS and REHAB General and Maladaptive Functioning subscales.

Table 7

Mean Group Total Scores for the REHAB and ABS Subscales Over Time

Time	REHAB				ABS			
	General Functioning		Deviant Behaviour		General Functioning		Maladaptive Behaviour	
	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD
ILC (Baseline)	92.11	40.03	3.39	2.04	194.00	43.40	68.89	31.20
ILC (5- month)	72.10	39.11	3.35	3.16	-	-	-	-
ILC (10- month)	75.62	32.55	2.75	1.50	185.60	51.45	57.10	28.08
Endeavour (Aug 1997)	80.75	33.93	2.50	1.33	168.80	40.27	51.30	29.25

*General Functioning: Non-parametric Analysis (REHAB and ABS)*

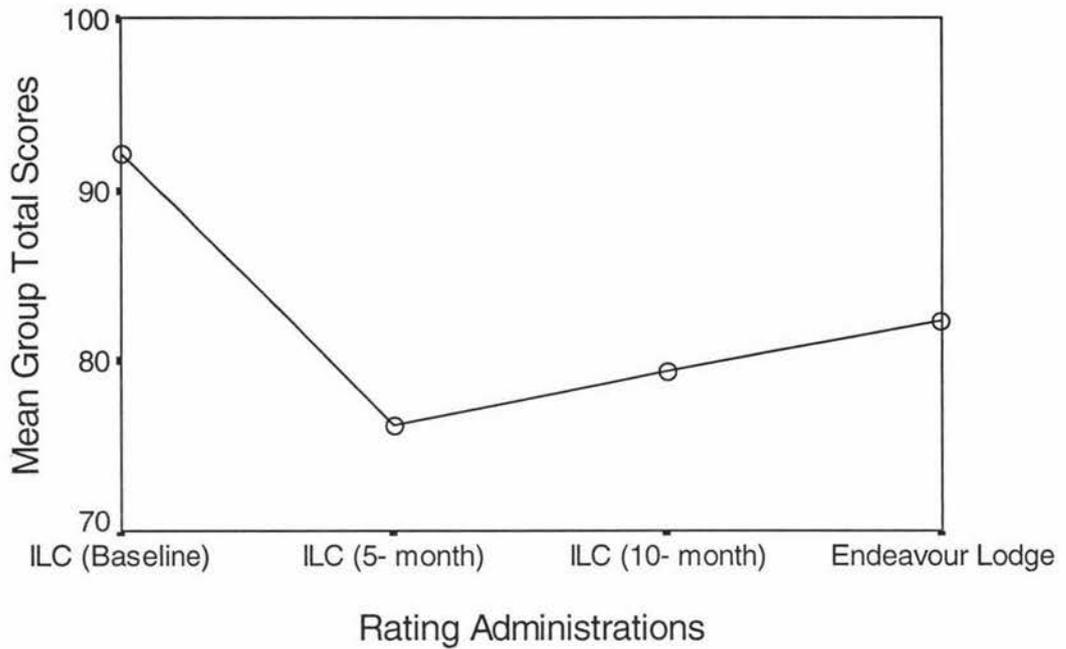
A Friedman Two-way Analysis of Variance by Ranks was used to determine if there had been change in general functioning measured by the REHAB general functioning subscale over the four rating periods (ILC (Baseline), ILC (5- month), ILC (10- month), Endeavour Lodge (Aug 1997)). There was a significant difference over time measured where  $\chi^2$  (df = 3, n = 9) = 7.88,  $p < 0.05$ .

A Wilcoxon Matched-Pairs Signed-Ranks Test was used to determine between which time period(s) significant change was measured. It was found that there was a significant change in General functioning measured by the REHAB subscale between baseline and the first hospital measure ILC (5- month), ( $z = -2.5471$ ,  $p < 0.0109$ ,  $n = 9$ ). No significant change was found between any of the other time periods.

A Friedman Two-way Analysis of Variance by Ranks of the General functioning subscale of the ABS, revealed no significant change over the four ratings from baseline to community measure,  $\chi^2$  (df = 3, n = 9) = 2.89,  $p < 0.05$ .

*General Functioning: Trends of Mean Total Scores Over Time*

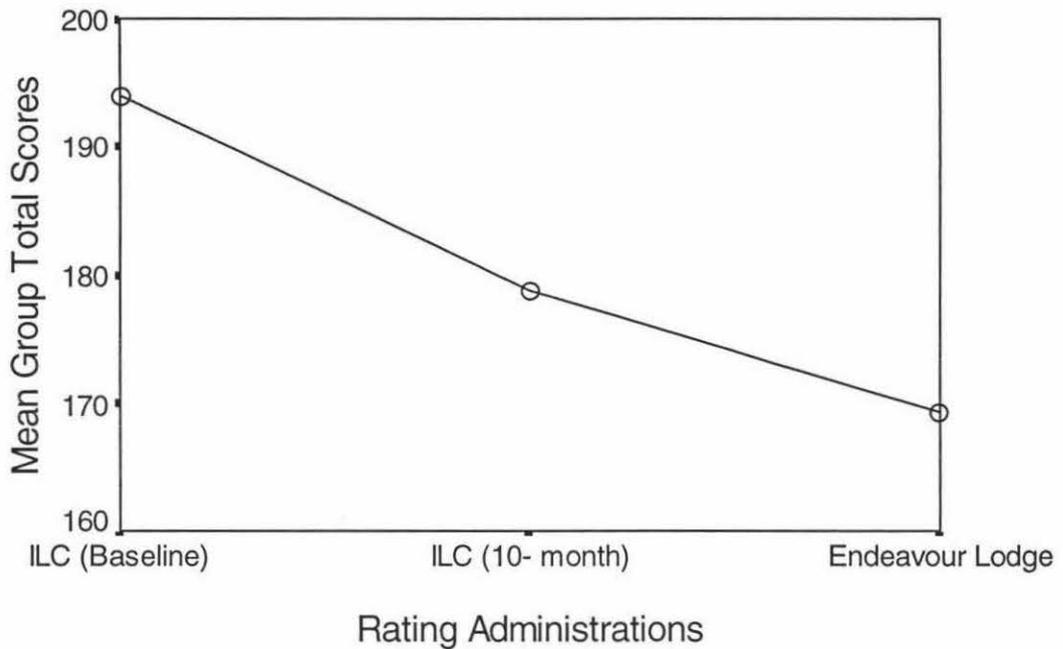
Figure 2. reveals an initial improvement in functioning from baseline to the 5- month measure. Following this there is a consistent trend of deterioration in general functioning from the 5- month measure, through the 10- month to the current Endeavour measure. The present community rating demonstrates however, that as a group general functioning is still at a higher level than at the initial baseline measure (11% improved).



Note. Lower scores indicate more adaptive functioning.

Figure 2. Group means of REHAB General Functioning subscale Total Scores.

Figure 3. depicts a consistent pattern of deterioration in general functioning as measured by the general functioning sub-scale of the ABS. It is also apparent that the general functioning of the group taken as a whole is at a lower level than at baseline. Further, other than the initial improvement between baseline and the first hospital measure on the REHAB, the two measures demonstrate the same consistent trend of deterioration in general functioning.



Note. Higher scores indicate more adaptive functioning.

Figure 3. Group means of ABS General Functioning subscale Total Scores.

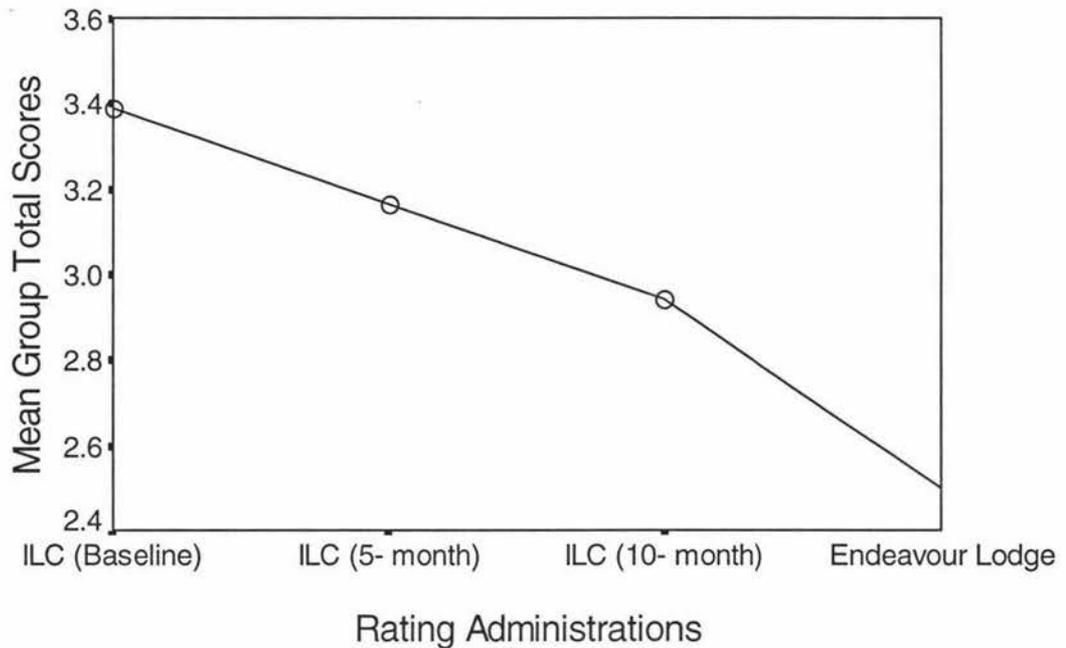
***Maladaptive Behaviour: Non-parametric Analysis (REHAB and ABS)***

A Friedman Two-way Analysis of Variance by Ranks was used to determine if there had been change in maladaptive behaviour measured by the REHAB Deviant Behaviour subscale over time between the four rating periods (ILC (Baseline), ILC (5- month), ILC (10- month), Endeavour Lodge (Aug 1997)). No significant change over time was discovered,  $\chi^2 = (df=3, n = 9) = 5.45, p > 0.05$ .

A Friedman Two-way Analysis of Variance by Ranks was also used to determine if significant change had occurred in maladaptive behaviour as measured by the ABS subscale. No significant change was found over time from baseline to the present community measure,  $\chi^2 = (df = 3, n = 9) = 2.89, p > 0.05$ .

*Maladaptive Behaviour: Trends of Mean Total Scores Over time*

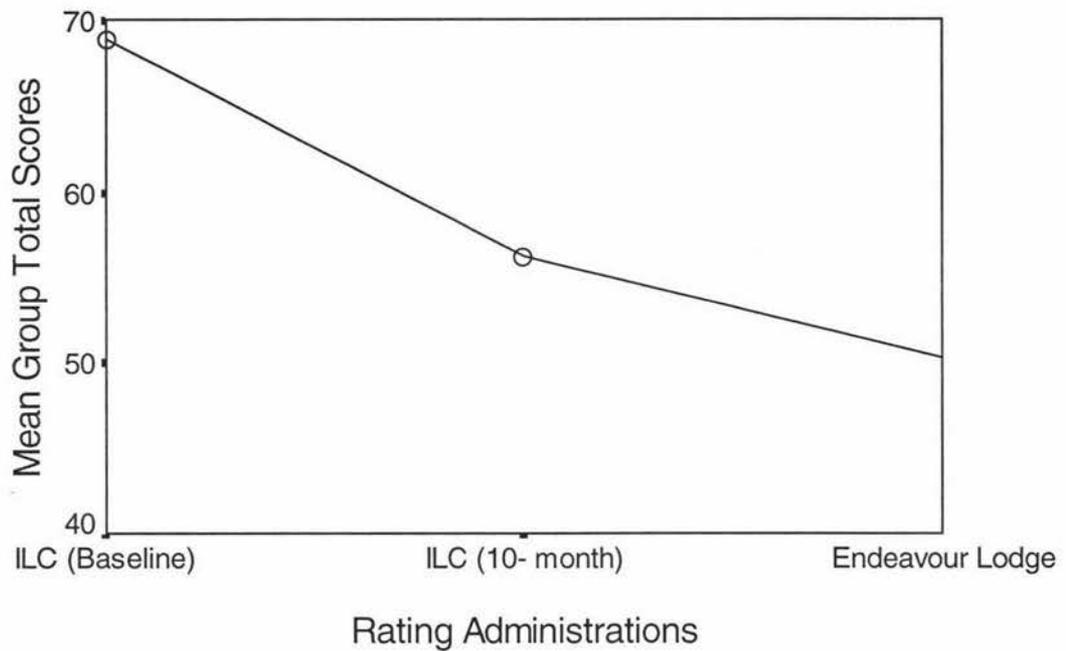
The group mean total scores plotted in Figure 4., depict a consistent trend of overall reduction in maladaptive behaviour.



Note: Lower scores indicate lower levels of deviant behaviour.

Figure 4. Group means of REHAB Deviant Behaviour subscale Total Scores.

Figure 5., depicts the same trend evident in the REHAB Deviant subscale of a consistent reduction in maladaptive behaviour for the group as a whole over the time period from baseline to the current community measure.



Note. Lower scores indicate lower levels of maladaptive behaviour.

Figure 5. Group means of ABS Maladaptive Behaviour subscale Total Scores.

### **Pre-Post Analysis of Individual Adaptive Functioning**

Due to the small sample size it was felt an opportunity presented itself to look at trends of individual change in some depth. As such a detailed descriptive analysis was conducted, entailing the comparison of individual changes on both the General Functioning and Maladaptive Behaviour subscales of the REHAB and ABS measures, between the final hospital (ILC, 10- month) and current community (Endeavour Lodge) rating periods (pre-post design). For consistency and convenience “hospital” will be used to refer to the last ILC measure (10- month, 1994), and “community” to the present rating at Endeavour Lodge, throughout the remainder of the Results and Discussion section.

Data for 10 of the 12 Endeavour clients that ratings had been gathered for at the hospital measure, were available for the purposes of determining changes in adaptive functioning between the hospital and community measures. Since the last hospital measure one client had been transferred to another facility in the local continuing care service. This was the result of unmanageable aggressive behaviour. The second client who was

unable to participate had been temporarily transferred in order to receive specialist treatment for a serious medical condition.

Tables 8 and 9 provide a comparison of Total Scores for each client at the hospital and community measures, across the ABS and REHAB General and Maladaptive Functioning subscales. With respect to general functioning, *lower* scores on the REHAB scale represent higher levels of functioning, while *higher* scores on the ABS scale correspond to higher levels of functioning. Across the Maladaptive Behaviour scales, *lower* scores on both the ABS and REHAB measures correspond to lower levels of maladaptive behaviour. As two independent raters were employed to rate each client on the REHAB measure consistent with the manual's rating procedures, total scores reported here for this measure represent the average score across these two ratings.

*General Functioning*

Table 8.

Individual Client General Functioning Total Scores, at Hospital and Community Measures

Client	REHAB			ABS		
	General Functioning			General Functioning		
	Hospital	Community	(Δ)	Hospital	Community	(Δ)
01	56.25	57.50	-	228.00	181.00	-
02	131.50	120.50	+	100.00	122.00	+
03	100.00	117.00	-	158.00	167.00	+
04	93.50	117.00	-	184.00	103.00	-
05	58.00	46.00	+	183.00	237.00	+
06	41.00	66.50	-	246.00	164.00	-
07	119.50	122.50	-	105.00	143.00	+
08	57.00	57.00	0	201.00	172.00	-
09	51.00	60.00	-	239.00	181.00	-
10	48.50	43.00	+	212.00	218.00	+

Note.

- = Deterioration in General

0 = No change in General Functioning

Functioning

+ = Improvement in General Functioning

Figures (6 & 7) represent each client's total score on the General Functioning scale of the REHAB and ABS measures, at both Hospital and Community measures.

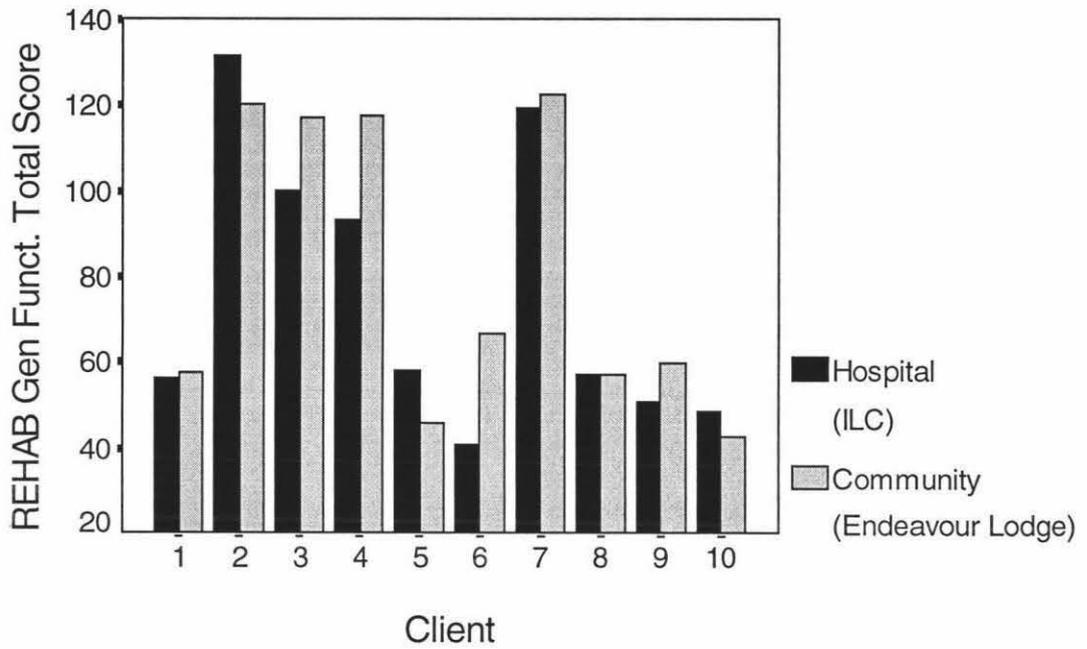


Figure 6. Client Total Scores on the REHAB General Functioning scale, at Hospital and Community measures.

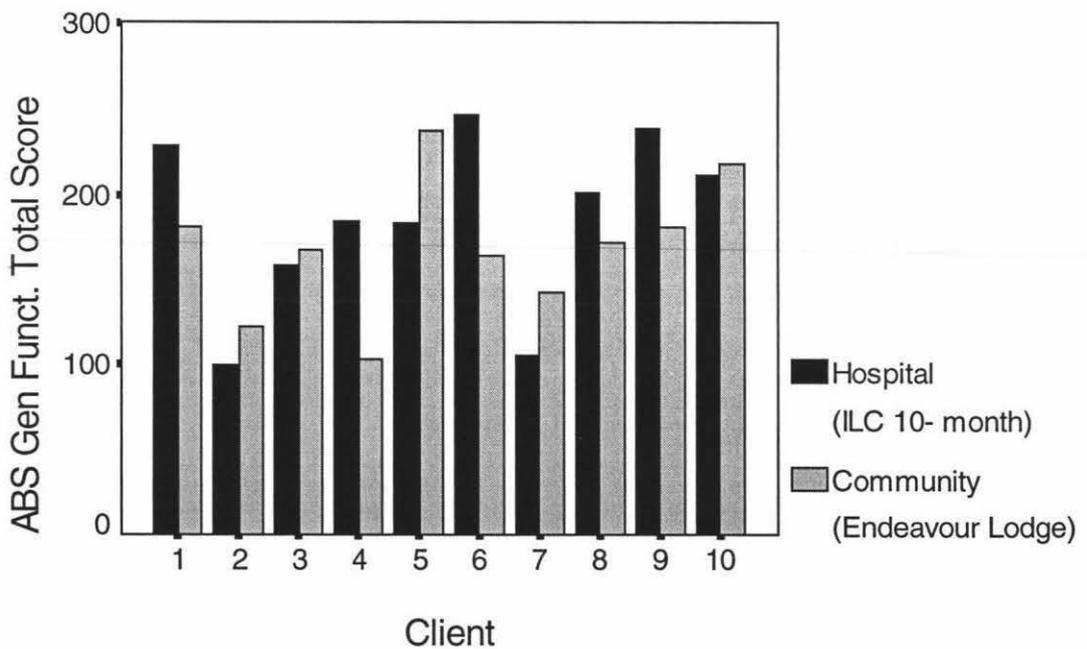


Figure 7. Client Total Scores on the ABS General Functioning scale, at Hospital and Community measures.

Scores obtained on both the REHAB (Figure 6) and the ABS (Figure 7) measures of General functioning, demonstrate a considerable degree of variability between client levels of functioning. On the REHAB scale a maximum score of 144 corresponds to the most disabled level of functioning on the scale. A score of "0" corresponds to behaviour considered normal in the community, and as such it can be seen that 4 out of 10 of the clients are in the severely disabled end of the scale. Comparatively, the other six clients demonstrate higher levels of adaptive functioning, and in fact have similar scores to many clients currently residing in trust and sheltered housing in the community, (see, Hall, Deane & Beaumont, 1996). The same variability is demonstrated by the ABS scale where higher scores represent higher levels of functioning, with obtained scores ranging from 100 to 246.

There is also considerable variability evident in outcomes by both scales. At a descriptive level, scores obtained on the REHAB indicate that approximately 1/3 of the clients demonstrated some improvement between the two measurement points (clients 2, 5 & 10). Two further clients maintained their previous levels of functioning (clients 1 & 8), while the remaining 1/2 deteriorated over the same period (clients 3, 4, 6, 7, & 9). Scores on the ABS indicated that 1/2 the clients had demonstrated some degree of improvement, while the other 1/2 had deteriorated. These findings are consistent with those of Shepherd (1995), and Young (1991) where similar client groups and treatment programmes were assessed. This will be explored in the Discussion.

The two scales also demonstrate an agreement about the direction of change for 7 out of 10 of the clients (see Table 8), where two of these disagreements are based on no change being detected over the period between the last hospital and current measure on the REHAB scale.

*Maladaptive Behaviour*

Table 9

Individual Client Maladaptive Behaviour Total Scores, at Hospital and Community Measures

Client	REHAB Deviant Behaviour			ABS Maladaptive Behaviour		
	Hospital	Community	( $\Delta$ )	Hospital	Community	( $\Delta$ )
01	2.50	1.50	+	42.00	36.00	+
02	6.00	5.50	+	74.00	119.00	-
03	1.50	3.50	-	44.00	72.00	-
04	3.50	1.50	+	30.00	24.00	+
05	3.00	2.00	+	71.00	51.00	+
06	1.00	2.50	-	64.00	60.00	+
07	1.50	2.00	-	41.00	56.00	-
08	3.50	2.00	+	122.00	46.00	+
09	3.50	3.50	0	26.00	16.00	+
10	1.50	1.00	+	57.00	33.00	+

Note.

- = Exacerbation of Maladaptive Behaviour    0 = No change in Maladaptive Behaviour

+ = Reduction of Maladaptive Behaviour

Figures 8 and 9 represent each client's total score on the Maladaptive Behaviour scales of the REHAB and ABS measures, at both Hospital and Community measures.

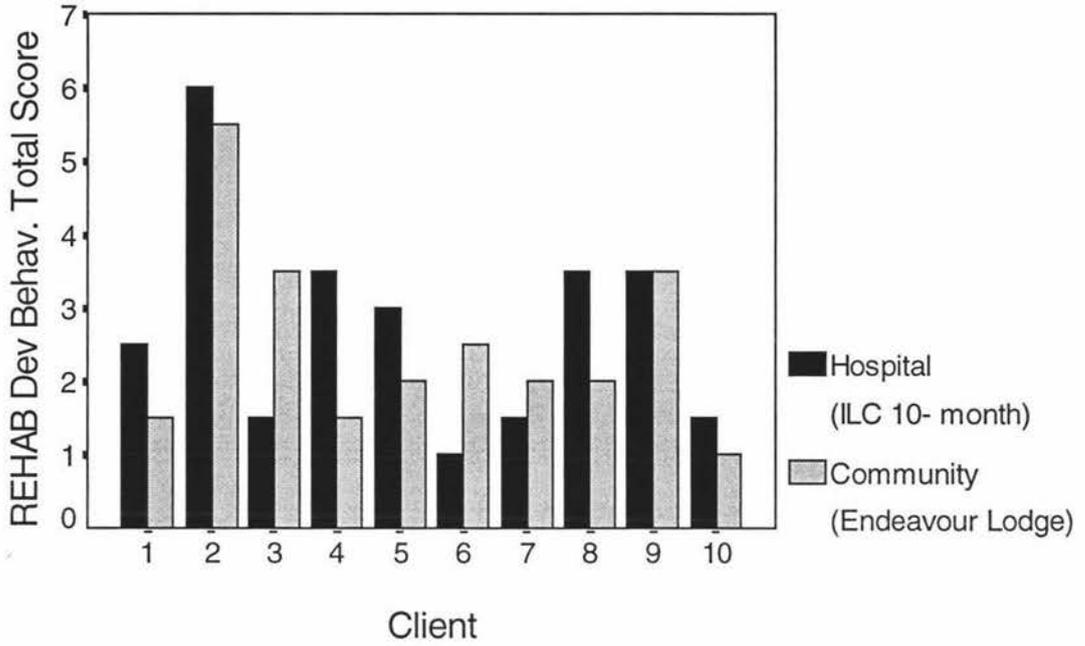


Figure 8. Client Total Scores on the REHAB Deviant Behaviour scale, at Hospital and Community measures.

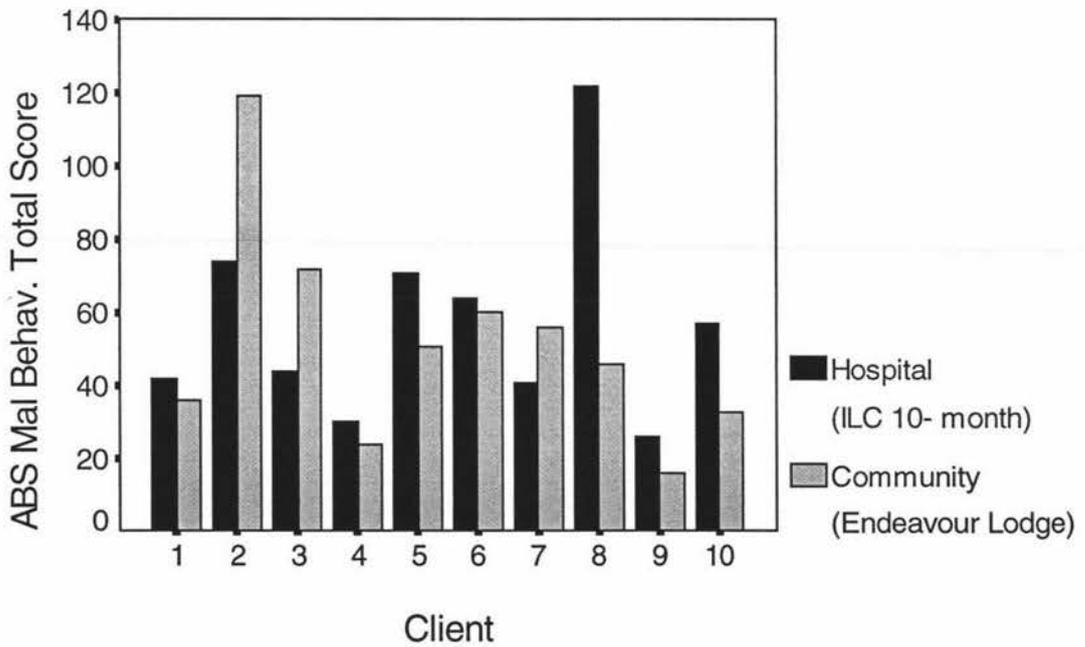


Figure 9. Client Total Scores on the ABS Maladaptive Behaviour scale, at Hospital and Community measures.

Scores obtained from both the REHAB (Figure 8) and the ABS (Figure 9) measures of Maladaptive Behaviour, demonstrate the same considerable variability between the client's levels of functioning, that was evident in the measures of general functioning. In this case scores on the REHAB scale indicate that over the period between the last hospital and current measure, 6 of the 10 clients have improved in terms of reductions in maladaptive behaviour. A further client maintained their previous level of maladaptive behaviour, while 4 of the 10 deteriorated over the same period.

Scores obtained on the ABS scale, indicate that 7 out of 10 of the clients demonstrated a reduction in maladaptive behaviour over the pre-post measurement period. The remaining 3 clients demonstrated an increase in maladaptive behaviour from the last hospital to the current measure. Of particular note here are clients 2 and 8 who demonstrated comparatively extreme changes in maladaptive behaviour over this period. Client 8 demonstrated a significant improvement in maladaptive behaviour, and client 2 demonstrated a marked deterioration in maladaptive behaviour.

The agreement about the direction of change detected by the two Maladaptive Behaviour scales (see Table 9) demonstrates a similar trend to the general functioning scales. In this case the two scales agree about the direction of change for 7 of the 10 clients, with one of the disagreements being based on no change being detected by the REHAB scale over the measurement period.

*Summary of Changes in Scores of Adaptive Functioning*

Table 10

Summary of Changes in Client's Functioning on the REHAB and ABS Subscales from Hospital to Community Measure.

Client	GENERAL FUNCTIONING		MALADAPTIVE BEHAVIOUR	
	REHAB	ABS	REHAB	ABS
1	-	-	+	+
2	+	+	+	-
3	-	+	-	-
4	-	-	+	+
5	+	+	+	+
6	-	-	-	+
7	-	+	-	-
8	0	-	+	+
9	-	-	0	+
10	+	+	+	+

Note.

+ = Improvement in functioning

- = Deterioration in functioning

0 = No change in functioning

Table 10 provides a comparison of the direction of change in each clients general functioning and maladaptive behaviour scores as measured by the four REHAB and ABS sub-scales, from the last hospital measure to the current measure. The high degree of agreement between the two measures across each sub-scale and each client, enable us to conclude with some confidence that the observed differences (changes in functioning) over time are due to actual changes in client functioning, and not merely due to the effects of sampling procedure variances.

It is apparent that 2 of the 10 clients (clients "5" and "10") have demonstrated improvement across all of the four sub-scales. From a descriptive point of view, this

provides some confidence in concluding that these clients have improved in overall adaptive functioning over the period between the 2 measures. Client “2”, demonstrated improvement over three of the four subscales. Thus, it could be concluded that 30% of the clients demonstrated a general improvement in functioning, which was characterised by improvements in adaptive functioning and reductions in deviant behaviour. In contrast there are no clients that demonstrated deterioration in functioning over all of the subscales. However, scores for 3 of the 10 clients (clients “3”, “6” and “7”) indicate deterioration between the hospital and community measures on three of the four subscales.

The remaining four clients either demonstrated no change in one subscale of general or maladaptive functioning, or improvement across half of the subscales administered. Looked at more closely, however, a consistent pattern of behaviour change was been identified by the subscale scores. Clients “1” and “4” showed deteriorations across both of the general functioning measures, while demonstrating a similarly consistent pattern of reduction in maladaptive behaviour. If the “no change” scores of clients “8” and “9” are disregarded, then the same pattern of deterioration in general functioning, but reduction in maladaptive behaviour is observed.

These findings are consistent with the overall group trends, obtained from the analysis of mean group total subscale scores (see figures 2-5). The group taken as a whole demonstrated consistent trends of deterioration in general functioning, coupled with a reduction in maladaptive behaviour over the four rating administrations.

### **Ward Atmosphere Analysis**

The Ward Atmosphere Scale (Moos, 1996) was employed to make a formal characterisation of the prevailing therapeutic milieu of Endeavour Lodge, in order to satisfy two principal objectives. Firstly, the Ward Atmosphere Scale was utilised to identify aspects of the treatment environment that were consistent with and facilitative of treatment goals and programme philosophies, and those that might be impeding or contrary to them. Additionally, it was used to determine if the structure of the therapeutic milieu was well matched with the current client group. As Suggested by

Moos (1997, 1996) assessment of the nature and quality of the social climate can be valuable in identifying areas suggestive of programme development.

Table 11, represents the mean raw and standard scores for the ten Ward Atmosphere subscales, gained from the 11 Endeavour Lodge staff participants. The ten subscales are subsumed under three basic Ward Atmosphere dimensions; Relationship Dimensions, Personal Growth Dimensions and System Maintenance Dimensions (see Table 1).

Table 11

Ward Atmosphere Subscale Raw and Standard Scores for Endeavour Lodge Staff Group

Subscale	i	s	sp	a	po	ppo	aa	oo	pc	sc
Raw Scores (mean)	4.7	5.2	5.5	4.5	4.9	3.3	4.4	6.1	7.1	2.0
Standard Scores (mean)	36	29	49	36	20	32	34	50	53	37

Note.

i = Involvement

s = Support

sp = Spontaneity

a = Autonomy

po = Practical Orientation

ppo = Personal Problems  
Orientation

aa = Anger and Aggression

oo = Order and Organisation

pc = Programme Clarity

sc = Staff Control

Figure 10, represents the profile of standard scores for the ten Ward Atmosphere subscales gained from the Endeavour Lodge staff participant group. (For descriptions of the Ward Atmosphere subscales see Table 1).

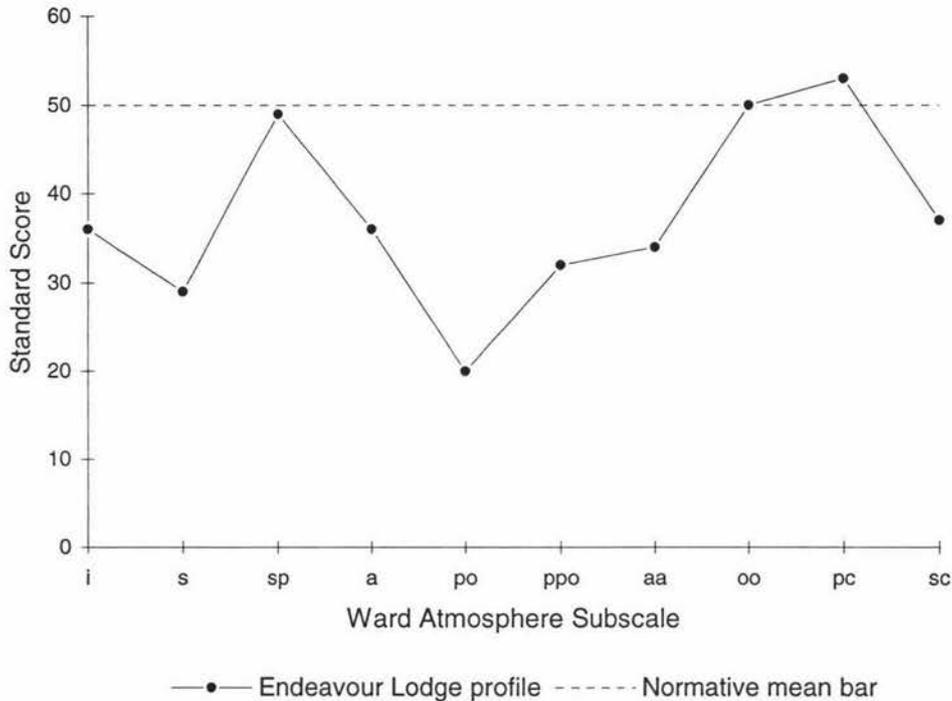


Figure 10. Profile of WAS Form-R subscale standard scores, from Endeavour Lodge staff.

Spontaneity (s), programme clarity (pc), and order and organisation (oo) stand out as comparatively prominent aspects of the Endeavour Programme, but feature only moderately with respect to established norms (Normative mean bar). In contrast staff perception of the programme as having very low practical orientation (po) is also apparent from the subscale profile. The remaining aspects of the social climate were rated only as comparatively moderate features of the Endeavour programme with the other subscales, but stand as moderately low against the normative mean.

Grouping the subscales together under the three WAS programme dimensions (see Table 1), the Endeavour results indicate considerably more emphasis on system maintenance dimensions or programme structure (oo, pc, sc), than on personal growth dimensions (a, po, ppo, aa). The one exception to this general finding is that the level of staff control (sc) was rated moderately low and of a comparable level to those of the UK and USA norms (see Figure 11). This finding is of particular note given the severe disability of the Endeavour group. The implication is that despite the severe disability of

the Endeavour group, the staff exert no more control over the residents than is typical across the broadest range of psychiatric settings.

The emphasis on programme structure outlined in the Endeavour Lodge operating manual and the Central Regional Health Authority Extended Hospital Care- Service Description (CRHA, 1996), is bourn out by the Endeavour WAS profile. This emphasis on structure is primarily oriented toward the involvement of clients in meaningful daily activity, and this is consistent with the principles of the therapeutic community originally prescribed as part of the ILC programme (ILC Project Team, 1993).

With the structured nature of the programme in mind, a perception of relatively high practical orientation might also be expected. *Practical Orientation* is concerned with the extent to which patients learn practical skills and are prepared for release from the programme, however this aspect of the programme was perceived to feature very poorly. This may reflect the heterogeneous nature of the group, where a number of the residents were severely impaired, while others were of a level comparable to those living in less restrictive settings such as trusts and sheltered housing (see Hall et al., 1996). It was noted by the researcher (RD) that individual treatment plans were oriented toward the acquisition of practical skills in anticipation of release from the programme, for those clients of higher functioning. However this emphasis was not appropriate for the greater proportion of the Endeavour residents.

In order to place the profile of staff perception of Endeavour Lodge Ward Atmosphere characteristics in context, Figure 11, provides a comparison with normative profiles from the United Kingdom and the United States (from Moos, 1997). The American normative sample was composed from 160 programmes in 44 hospitals drawn from 16 states. It included programmes in university and teaching hospitals, community and private hospitals, Veteran Affairs medical centres and state hospitals. The U.K sample was composed from 36 programmes drawn from 8 hospitals. This included psychiatric programmes in general medical hospitals, university teaching hospitals, and psychiatric hospitals in both urban and rural settings. The UK/ USA comparative profile (Figure 11) was generated from a sub-sample of 36 programmes matched for unit size and staffing ratios, drawn from these normative profiles.

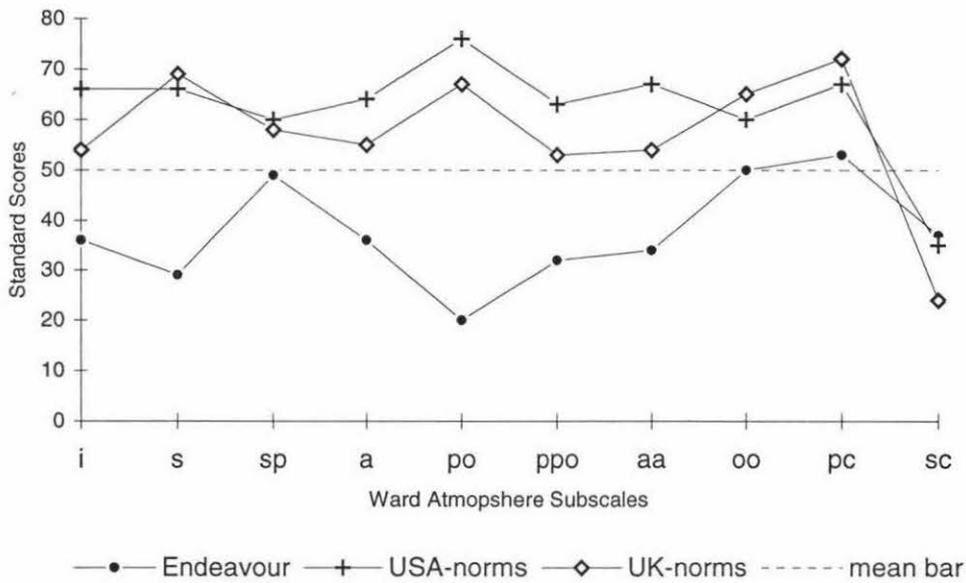


Figure 11. Comparison of WAS Form-R staff means for programmes in the United States and the United Kingdom, with Endeavour Lodge.

The first and most salient feature demonstrated by Figure 11, is the overall lower rating of the Endeavour profile with those of the U.K and U.S.A normative profiles. The Northern Hemisphere profiles have been generated from normative samples representing a wide range of psychiatric facilities and broad patient sample. In contrast the Endeavour Lodge programme is a specific treatment facility, designed for the treatment and care of the most severely disabled, and long-term of institutionalised clients. As such it is not unexpected that staff would rate the Endeavour programme with a lower emphasis on a number of aspects of treatment environment, which would be commensurate with the capabilities and specific needs of the Endeavour resident group.

Grouping the subscales together under the three WAS programme dimensions (see Table 1), the UK/ USA normative profiles demonstrated a more balanced emphasis between Personal Growth and System Maintenance dimensions than the Endeavour profile. The results from Endeavour Lodge indicate considerably more emphasis on the system maintenance dimensions or programme structure (oo, pc, sc), than on personal

growth dimensions (a, po, ppo, aa). Of particular note is the contrast in perceived practical orientation (po) between the UK/ USA profiles and that of Endeavour. Practical orientation of the UK/ USA programmes is rated as a relatively prominent feature, where the opposite is true of the Endeavour programme.

Because of the serious level of impairment of the resident group, the Endeavour programme was less concerned with the preparation of residents for release from the programme than was evident from the UK/ USA normative profiles. Instead it was more oriented toward promoting the acquisition of basic living skills (ADL's), and de-emphasising reliance on institutional routine, whilst providing appropriate psychotherapeutic medications and nursing care.

The nature of these findings were consistent with those of Moos (1997, p 170). Moos notes that "residents" mental impairment and diagnoses are often perceived as major constraints to the treatment climate. Consistent with this idea, it was found that programmes with more mentally impaired residents were less supportive and well organised and less oriented toward skills development and self-understanding (Timko & Moos, 1996, in Moos, 1997). Moreover, programmes with a higher proportion of psychotic patients were less involving and supportive and less oriented toward autonomy and practical and personal problem orientation" (Friis, 1986).

Across the system maintenance dimension of the profile (oo, pc & sc), ratings from the UK/ USA indicate a markedly lower emphasis on staff control, respective to the other elements. This is the only feature of the profiles where staff have rated the Endeavour programme higher, and by contrast rates moderately strongly as a feature of the social climate of the programme. Again this finding is consistent with those of Friis (1986), where it was found that a higher level of staff control was found in programmes that catered for more seriously impaired, less independent clients.

## CHAPTER FOUR

### Discussion

#### **Effects of Relocation and Programme Development**

One of the principal objectives of the research was to make a comprehensive description of the Endeavour Lodge programme in its current location and operation. This programme description was central to a number of related aims of the current study. First, the description was intended to enable a comparison of the current Endeavour and original ILC programmes, in order to provide some insight into how the programme has changed over time, and following relocation. Secondly, it would also allow comparisons with other similar programmes in the UK and USA, which is increasingly becoming the facility of choice for the treatment of this difficult-to-place group. Thirdly, it was intended to satisfy methodological considerations, which are attendant to any outcome research involving treatment programmes, as outlined in Pfeiffer (1990). Finally, the programme description would place in context the findings from the assessment of client functioning, and Ward Atmosphere analysis.

Information relating to the structure of both the Endeavour and ILC programmes, and regarding their differences and similarities was gathered from a number of sources. Semi-structured interviews were conducted with relevant staff, including those who had been with the programme from its inception (ILC and Endeavour Lodge, n=2). The researcher (RD) reviewed operating manuals from both programmes, as well as descriptions of the ILC programme from previous research (Hall, Deane & Beaumont, 1996; Hall, 1995). Observations of the Endeavour programme were also conducted in vivo by the researcher (RD) over a three-week period.

The first conclusion suggested by the comparison of the two programmes was that the programme had indeed changed in a number of key areas over time, and particularly following its relocation to the community. As noted in the Results section, relocation of the ILC programme coincided with the loss of input from a number of key staff. These

staff included those directly responsible for the development and implementation of the programme, and those with skill and expertise in the use of behaviour modification techniques. As a result there was a corresponding loss of advocacy for the maintenance of original treatment prescriptions (components), and qualified supervision for their continued use.

Lieberman et al., (1987) notes that staff and institutional changes can often result in the loss of experience and expertise, which can result in the disuse of techniques originally prescribed as part of initially effective innovative programmes. A similar result was indicated in the present study, where Endeavour Lodge appeared to be less actively oriented toward the use of behavioural modification interventions. Specific reference was made in the original ILC operating manual to the fact that treatment would be consistent with the principles of behaviour modification (Endeavour Lodge, 1997). In the current Central Regional Health Authority Extended Hospital Care- Service Description (CRHA, 1996), reference to the use of "behavioural psychology" was still evident, although this prescription had not been incorporated into the new Endeavour Lodge operating manual. Systematic empirical monitoring of client progress that was a feature of the original ILC programme was no longer in use at Endeavour Lodge. This close monitoring appeared to have been replaced by nursing shift notes that had no formal empirical basis. Behaviourally based interventions were used at Endeavour (predominantly positive reinforcement), also appeared to be less well specified or consistently applied than in the ILC programme.

Lieberman argues that if behavioural programmes are to be developed and maintained as originally prescribed, then design and implementation must incorporate the role of an ongoing advocate or "champion" (Lieberman et al., 1987, pg. 122). This person would be highly skilled in the use of behavioural techniques, and would be able to teach and supervise their use on an ongoing basis. This person would also be able to provide education regarding the efficacy of behaviour therapy, in an effort to better inform those in a direct-care role with clients. Previous research has indicated resistance to behavioural techniques in many direct-care staff (Miltenberger, 1990; Reimers, Wacker & Koepl, 1987). Foxx, Bremer, Shultz, Valdez & Johndrow (1996) demonstrate that

education is an effective way of improving acceptability of these treatments, and that this can have a significant effect on client outcome (Miltenberger, 1990).

Relocation of the ILC programme also appeared to have resulted in a degree of isolation from the administering local Health Authority, and this appeared to have had a number of important consequences. Each of the effects of this isolation were related to a reduced access to the broad range of skills, and large number of additional staff that are associated with large hospital institutions. The first of note was the reduced access to additional staff for emergency situations. At the time of the present study new procedures and protocols were being developed as a result, in order to deal with the significant safety issues. This included violent client episodes, and the monitoring and acute treatment of suicidal clients involved. Additionally relocation from the hospital environment had resulted in reduced access to consulting psychiatrists. Staff felt that with increased psychiatric consultations they would be in a better position to respond more sensitively to changing client medication needs, and as a result could have a significant impact on client outcome.

As a result of a comparison with many similar programmes in the United Kingdom, it was evident that Endeavour Lodge fitted closely with the "Hospital hostel" or "Ward-in-a-house" model of care (Shepherd, 1995; Young, 1991; Wykes & Wing, 1982; Bennett, 1980). In the United Kingdom particularly this is becoming an increasingly common facility for the difficult-to-place mentally ill, who are not suitable for conventional sheltered housing placements following hospital closure. Trieman & Leff (1996, pg. 766) argue that "... hospital hostels should be considered a facility of first choice for most DTP patients..."

Young (1991) outlines the diversity of approaches adopted to *treatment*, while highlighting the similarities that typify these programmes in terms of *accommodation* and *care*. Some programmes utilise behaviour therapy and formal token economies, while others focus more on regimes of positive reinforcement and social milieu therapy (Young, 1991). However, the same combination of the best features of high quality hospital care (e.g. good staffing levels, well-trained professionals, highly individualised programmes) with the best features of community-based care (e.g. small "non-

institutional” appearance, easily accessible to the community), characterises the ward-in-a-house.

The classification of the Endeavour Lodge programme as a hospital hostel or ward-in-a-house, is not only an accurate reflection of it’s current operation and particular client base, but also has significant predictive and comparative utility. This designation makes relevant an accumulating body of literature which includes outcome studies, recommendations for programme development, and evaluations of prognoses for clinical sub-groups. The next section will look at the outcomes for the current Endeavour Lodge client group, and how these compare with other ward-in-a-house programmes.

### **Client Outcomes**

Another objective of the current research involved replication of part of a previous study by Hall (1995). Two behavioural measurement scales were administered in order to ascertain the current adaptive, and maladaptive behavioural functioning of this group of long-stay psychiatric patients. The additional measurement point resulting from the administration of these scales was intended to extend identifiable trends of behaviour change over the period since baseline. Additionally it was intended to highlight changes in functioning between the last hospital-based (ILC) measure and the current measure, following the relocation of the treatment programme to a community setting (Endeavour Lodge).

In terms of group outcomes, the only significant change was in general functioning measured by the REHAB in the period between baseline (ILC) and the 5-month follow-up. Significant group change was not detected, for either general functioning or maladaptive behaviour, between any of the other measurement periods, by either the REHAB or ABS. It was noted however, that due to the variability of outcomes for the group, and the low power of the tests resulting from the small sample size (n=10), the likelihood of detecting measurable change in group functioning was diminished. As a result it was decided to conduct a supplementary pre-post descriptive analysis of mean

group total scores for each of the General Functioning and Maladaptive Behaviour subscales of the REHAB and ABS.

In contrast to the results of non-parametric tests, the descriptive analysis of mean group total scores did identify meaningful and consistent trends of change over time. In terms of general functioning, the REHAB showed an initial improvement in the period between baseline and the 5- month follow-up, consistent with non-parametric tests. Following this, results from the REHAB and ABS were in agreement demonstrating a sustained deterioration in general functioning through to the present community measure. In terms of maladaptive behaviour the picture was more straightforward. Both the REHAB and the ABS confirmed a consistent and sustained trend of improvement in maladaptive behaviour for the group, over the period between baseline and the current community measure.

While the small sample size diminished the likelihood of detecting statistically significant group change, it did however present an opportunity to look at individual changes in functioning in more detail. It was felt that this approach would yield a more meaningful and social ecologically valid depiction of outcomes for the Endeavour group, by identifying any stratification of groups displaying similar patterns of change.

From the summary of individual changes in functioning (see Table 10), it could be concluded that 3 of the 10 clients demonstrated a general improvement in functioning. This was characterised by both improvements in general functioning and reductions in maladaptive behaviour. A further 4 clients demonstrated a more mixed pattern of change between the last hospital (ILC) and current measure, with improvement identified over half the subscales and deterioration on the other half.

Interestingly, this group did demonstrate a consistent pattern of change in that, the improvements were observed as a reduction in maladaptive behaviour (3 clients), or at least a maintenance of the previous level of behaviour (1 client). The deteriorations were observed as a decline in general functioning (3 clients), or a maintenance of the previous level of functioning (1 client). The remaining group of 3 clients deteriorated in overall functioning, characterised by both lower scores of general functioning and increases in

maladaptive behaviour. However, no client demonstrated deterioration over all four subscales, including the members of this latter group.

Non-parametric testing indicated little identifiable change for the Endeavour group from baseline (ILC) and the two subsequent follow-ups (5- and 10- month), through to the current community measure (Endeavour Lodge). However, the descriptive analysis suggest that some consistent and meaningful patterns of group change had taken place over the period since the implementation of the ILC programme.

Similarly, results of the more in-depth analysis of individual changes in functioning indicated meaningful patterns of change over time. Outcomes for individuals were observed to fall into three observable categories: those that improved in overall functioning; those that had at least maintained their previous level of functioning; and those that deteriorated over the period between the last ILC and present community measure. The limitation of these descriptive supplemental analyses, is that they do not provide a clear indication of the clinical significance of the identified changes in behaviour.

In order therefore, to better place the Endeavour Lodge client outcomes into perspective, some illustration is provided by a comparison with similar difficult-to-place groups in other programmes. In the last section it was proposed that Endeavour Lodge at the time of the present study, fitted the model of the hospital hostel or ward-in-a-house. If this assertion is taken to be accurate then it is possible to determine how the outcomes of the current client group compare with similar groups in other ward-in-a-house studies

Outcomes for a range of ward-in-a-house or hospital hostel programmes have been reported in Shepherd (1995; 1991), Shepherd, King & Fowler (1994), Young (1991), Wykes and Wing (1982), and Wykes (1982). Summarising outcomes for these programmes demonstrate that they are significantly more effective in improving social functioning and maintaining activity levels than traditional hospital wards (Shepherd, 1995).

Additionally hospital hostels have been demonstrated as being effective in reducing aggressive behaviour, but are less able to effect improvements in areas of general functioning, such as self-care and living skills (Shepherd, 1995; Young, 1991). The consistent trend of improvement in maladaptive behaviour, contrasted with the deterioration in general functioning of the Endeavour group, is consistent with this finding.

In terms of individual outcomes, clients in hospital hostels are observed to fall into one of three basic categories. First, there is a group that improves sufficiently to enable transfer to less restrictive conventional community accommodation (anywhere up to 50%). Next there are those that are observed to make little progress requiring ongoing continuous nursing care. Finally there is a smaller number (10%) who deteriorate and depending on the local service structure and the unit itself often need to be transferred because of unmanageable violent or aggressive behaviour (Shepherd, 1995).

Outcomes for the Endeavour group fell fairly evenly into three groups: those that improved since the last hospital (ILC) measure, those that maintained their previous level of functioning and those that deteriorated. Since the inception of the ILC programme, only one client has had to be transferred for unmanageably violent behaviour. A short time subsequent to the current study, one of the current clients was being prepared for transfer to a community placement. Bridges, et al., (1991) note that even in the case of those who are observed to make little progress, this environment appears to be preventing or slowing down the rate of deterioration. Additionally, they noted that at the very least, this environment appears to provide a better quality of life than was available in the large psychiatric hospitals.

The Endeavour Lodge outcomes are particularly noteworthy in that the client group probably represents the more severely disabled end of the difficult-to-place spectrum. The larger proportion (2/3 or more; Trieman & Leff, 1996) of the difficult-to-place group for which outcomes in ward-in-a-house programmes are reported are the new long-stay. This group is characterised by periods of hospitalisation of more than one, but less than five years. The Endeavour Lodge resident group however, would all be categorised as old long-stay. Old long-stay patients are those who have been

institutionalised for a period of greater than five years, and in the Endeavour Lodge group the mean period of previous psychiatric institutionalisation was 18.40 years. The implication of this is that while the Endeavour group represent the most disabled end of the difficult-to-place client spectrum, their outcomes are comparable to those reported typically for less disabled clients.

### **The Therapeutic Milieu**

The third objective of the current study, was to make a formal characterisation (description and quantification) of the Ward Atmosphere, or therapeutic milieu of Endeavour Lodge. Moos (1997) contends that treatments are not isolated in their affect on client outcome, but instead are influenced by, and in turn influence, the nature of the therapeutic environment in which they are delivered. A growing appreciation of the more complex relationship between different components of treatment programmes, has prompted recommendations in reviews of outcome evaluation methodology. Pfeiffer (1990) for instance, argues that the absence of a formal characterisation of the treatment environment represents a methodological shortcoming in many evaluative/ outcome studies.

As a result, the current assessment of the quality of the prevailing therapeutic milieu was undertaken to fulfil a number of related objectives. First, it was employed to identify aspects of the milieu that were consistent with and facilitative of treatment objectives and philosophies, and those that may have been be contrary to or impeding them. Secondly, it was used to determine if the structure of the therapeutic milieu was congruent with the needs of the Endeavour Lodge resident group. Lastly, the present measure was intended to serve as a first data point. The profile generated from this would permit comparisons to be made with other programmes both here and overseas, and allow subsequent measures to highlight changes in the treatment environment over time.

In order to locate the Endeavour profile in the context of the broad range of psychiatric programmes and clients, a comparison was made with normative profiles from the United Kingdom and United States (see Figure 11). The comparison yielded a number

of features of particular note. The first was the substantial contrast between the UK/ USA and Endeavour profiles, across the Personal Growth dimension. This dimension assesses the strength of performance expectations for client's levels of autonomy, ability to learn practical skills in preparation for release, capacity to comprehend their personal problems and feelings, and their level of anger and aggression.

In the Endeavour group the scores across this dimension ranged from moderately, to very low. In contrast the UK/ USA normative profiles indicated these aspects as moderately high, to very highly prominent features of programmes typically. The most substantial contrast between the profiles was in the extent to which the clients learned practical skills and were prepared for release from the programme (Practical Orientation). This was a highly prominent feature of the UK/ USA profiles, indicating a strong emphasis on skills acquisition and preparation for release. In the Endeavour programme however, this was a feature of very low emphasis, which was consistent with the limited expectations for improvement and release the majority of current clients.

What this finding further reinforced was the identification of the Endeavour resident group at the more severely disabled end of the psychiatric spectrum. Given this, it was interesting to find that the level of staff control rated comparably with those of the UK/ USA normative profiles. The implication of this finding is that despite the severe disability of the Endeavour group, the staff exert no more control over the residents than is typical across the broadest range of psychiatric settings. The moderately low level of staff control was consonant with the identification from the Endeavour profile, of only a moderate emphasis on order and organisation and programme clarity. The picture of the Endeavour programme that emerged from this, was one that was consistent with the programme's philosophy and principal objectives. As such the identified milieu was consistent with the programme's de-emphasis of institutional routine, provision of a more normative home-like environment, and the encouragement of residents to assume an increasing level of independence.

However, this environment has not proven conducive to all clients. One client was transferred permanently due to unmanageably aggressive and violent behaviour. Two

further clients, who had intractable and chronic psychotic conditions, were consistently disruptive or aggressive and presented a continuing challenge to the programme. In an evaluation of 35 short-term wards, Friis (1986) found that differential milieus were indicated for psychotic and non-psychotic clients. He found that psychotic patients benefited from an environment characterised by high levels of Support, Practical Orientation and programme Order and Organisation. Each of these elements by contrast were moderate to low in the Endeavour Lodge programme. Moos (1997) states that more disturbed clients prefer more structure and less emphasis on performance. "Overly active stimulation and strong demands for independent functioning can lead to an exacerbation of symptoms and relapse among impaired clients who are pushed to the limit of their abilities", (Moos, 1997).

The heterogeneity of the client group represents one of the most significant problems of the Endeavour Lodge programme. Shepherd (1995) notes that specialist facilities implemented to cater for residual difficult-to-place hospital populations, are often faced with a heterogeneous group, which can vary widely in terms of clinical diagnosis and levels of functioning. Staff at Endeavour Lodge catered for these more disturbed clients by accommodating them in wings away from the other clients, and by not placing upon them expectations of participation or performance that were too high. However, these clients were noted by the researcher to be periodically disruptive, aggressive and violent, and presented an ever-present threat to the safety of the other residents and staff. This appeared to have a detrimental effect on the unit, which surely detracted from the potential therapeutic value of the Endeavour Lodge environment.

## **Conclusion**

### ***Implications of Findings***

As outlined in the Introduction, a central motivation for the current research was to contribute to knowledge concerning outcomes for the difficult-to-place, following changes to the provision of care they receive resulting from deinstitutionalisation. This was considered especially pertinent as much less work relevant to the New Zealand context has been carried out with this group, than in the UK, Europe and the USA. Therefore the major implications that can be drawn from the findings of the current

study, centre principally around outcomes for the Endeavour Lodge resident group, and are the following:

1. That the most difficult-to-place of the long-stay chronically mentally ill, who remain in psychiatric hospitals prior to closure due to the severity of their disability, can be successfully accommodated outside of the hospital environment. It is also possible to facilitate an environment that provides a higher quality of life than traditional hospital wards, while maximising the client's opportunities for personal choice and independence. In the present study the Endeavour programme has been able to successfully maintain 11 of the 12 original ILC clients, despite the severity of disabilities and incidents of abusive and aggressive behaviour.
2. Although Trieman (1997) remarks that a great deal of improvement cannot be expected for this group, the present findings suggest that we can expect some improvement in functioning in this setting. In particular facilities of the kind of the Endeavour programme can be expected to bring about improvements in maladaptive and deviant behaviour. A proportion of clients can also be expected to improve in functioning sufficiently that they can be transferred to less restrictive surroundings. For those that remain such environments are seen to be allowing clients to maintain a stable level of functioning in a less restrictive setting. These findings are consistent with those of similar client groups in other ward-in-a-house type programmes (Shepherd, 1995; Young, 1991).
3. That this environment can also provide a suitable permanent home for the proportion of clients whom will require it, as outlined in Trieman (1997).
4. That results from client outcomes supported by the characterisation of the treatment milieu, suggest this environment may be too demanding (incongruent) for a small percentage of clients. These clients may have to be transferred to more secure surroundings, or be alternatively accommodated and treated in the same setting. These findings are consistent with those of Shepherd, (1995) and Young (1991).
5. That a proportion of future chronically mentally ill, who will present with challenging behavioural problems and serious mental illness, and who's condition will prove non-responsive to medication, will be able to be catered for in such a

facility. With less institutionalisation experience than those of current study, a significant proportion will be expected to make sufficient improvement to ultimately move back into the community.

### *Limitations of the Study and Recommendations for Future Research*

One of the major limitations of the present research was the degree to which descriptive analyses were required in order to obtain a meaningful picture of both client and programme change over time. In terms of *client* change, the small sample size and large variability in outcomes meant that the likelihood of detecting any statistically significant group change was low. However, supplemental descriptive group and individual analyses did give some indication of meaningful patterns of change over time, and following relocation of the programme to a community setting.

The limitation of this approach however, is that while patterns of changes in behaviour may be observed, it is difficult to determine how notable these changes are. This is a problem commonly encountered with outcome studies with this group, as the client numbers are characteristically small (see Young, 1991). As such future research in this area may benefit from the adoption of some alternative criterion for determining the significance of observed behavioural change. Determining the clinical significance of outcomes may well be a more ecologically valid approach to this problem, and is an area that would benefit from attention in subsequent research with this group.

Again, the use of a more descriptive approach in determining *programme* change over time, means that conclusions have to be interpreted with some caution. However as outlined in the Method, corroborating evidence was gathered from a number of alternate sources, so that they can't be dismissed out of hand either. No formal criterion could be employed in the programme comparison, although the programme approaches were well documented in operating manuals and elsewhere. This was in part the reason for the use of the Ward Atmosphere Scale in the current study, although there was no previous measure with which to make a pre-post comparison. As a result any future investigations will have the results from this formal characterisation of the Endeavour Lodge treatment environment, with which to make pre-post comparisons.

As the programme comparison indicated, the use of behavioural interventions that were part of the original ILC treatment prescription, were less in evidence in the current Endeavour programme. Discussions with staff revealed a wide range of attitudes toward behaviour modification, and knowledge about their effectiveness and use was generally limited. Miltenberger (1990) & Reimers et al., (1987), have noted that attitudes toward behaviour modification techniques are often negative among direct-care staff, but can be improved with education regarding their effectiveness (Miltenberger, 1990; Foxx et al., 1996). This can ultimately make a positive contribution to client improvement (Miltenberger, 1990), and as such would be a valuable area for any future research with this programme.

### *General Comment*

Suggestions for the Endeavour Lodge programme are based primarily around the likelihood that the client type that they cater for will change over time. As outlined in Wykes & Wing (1991) the numbers of old long-stay client group in the United Kingdom are declining over time due to old age and death. Ultimately the numbers of old long-stay will stabilise however, as “new recruits” from the new long-stay (NLS) population requiring extended care replace those dying from old age. However, as a result of the decline in numbers, the old long-stay will come to represent only a small proportion of the difficult-to-place clients of the future (Wykes & Wing, 1991).

There is every reason to believe the situation here in New Zealand will ultimately come to resemble that of that experienced in the UK, as the process of deinstitutionalisation continues. Newly presenting clients requiring long-term care will have spent less time in psychiatric hospitals, and as such will exhibit fewer of the additional disabilities brought about as a consequence of long-term institutionalisation. As outlined in (Wykes & Wing, 1991) this new long-stay client group will have in common many of the characteristics of the old long-stay group, and will share many of the same needs. A critical difference between the two groups as a result of the shorter periods of institutionalisation, will be the improved prognosis for release to less restrictive placements for the NLS. As outlined earlier, outcome studies for this group suggest that

up to half of these clients can be expected to improve sufficiently to allow transfer to less restrictive surroundings.

With the likelihood of a greater proportion of the future Endeavour group being comprised of the NLS, an evolution of philosophy, objectives and treatment orientations for Endeavour Lodge may be indicated. The emphasis of treatment will be able to move even more toward the active preparation of clients for release, and become less concerned with the issues of activation and motivation associated with the long-term institutionalised. As such the introduction of new interventions tailored to the needs of a changing client base may be required. It would follow that these treatments should be selected on the basis of demonstrated efficacy, as specialised programmes for the treatment of the difficult-to-place are increasingly required to demonstrate results.

Finally, specialised units like Endeavour Lodge are often expensive to run. Leff & Trieman (1997) notes that ward-in-a-house type units are characteristically less expensive than acute care facilities, but more expensive than traditional back wards of psychiatric hospitals. As Trieman also notes however, there will always be a small proportion of clients for whom some form of hospitalisation is the only solution. He contends that the ward-in-a-house should be seen as the facility of choice for the ongoing care and treatment of this group, and as a necessary part of the development of progressive mental health care (Leff & Trieman, 1997). It appears therefore that programmes such as Endeavour Lodge will have an ongoing role in the provision and development of comprehensive psychiatric services in New Zealand.

## REFERENCES

- Baker, R. & Hall, J.N. (1983). *Users manual for Rehabilitation Evaluation of Hall and Baker*. Aberdeen, Scotland: Vine Publishing.
- Baker, R. & Hall, J.N. (1988). REHAB: a new assessment instrument for chronic psychiatric patients. *Schizophrenia Bulletin*, 14(1), pp. 97-111.
- Bellack, A. S. (1989). Treatment outcome evaluation methodology with schizophrenics. *Advances in Behaviour Research and Therapy*, 11, 191-200.
- Bennett, D. H. (1980). The chronic psychiatric patient today. *Journal of the Royal Society of Medicine*, 73, 301-303.
- Bigelow, D.A., Cutler, D.L., Moore, L.T., & McComb, P. (1988). Characteristics of state hospital patients that are hard to place. *Hospital and Community Psychiatry*, 39(2), pp. 181-185.
- Bortner, M. (1978). AAMD Adaptive Behaviour Scale, 1974 Revision. *Mental Measurements Yearbook, Eighth edition*, 493-494.
- Bridges, K., Goldberg, D., Hyde, C., Lowson, K., Sterling, C., & Farger, B. (1991). Hostel Wards in the Manchester area (1982-1991). In Young, R. (ed.) *Residential Needs of the Severely Disabled Psychiatric Patients- The Case for Hospital Hostels*. HMSO: London.
- Carson, J., Coupar, A., Gill, J., & Titman, P. (1988). The inter-rater reliability of Hall and Baker's REHAB scale: a cross validation study. *British Journal of Clinical Psychology*, 27, 277-278.
- Central Regional Health Authority (1996). *Service Description: MH4.3 : Extended Hospital Care*.

- Deane, F.P., Huzziff, R., & Beaumont, G. (1995). Discharge Planning: Levels of care and behavioural functioning in long-term psychiatric inpatients transferred to community placements. *Community Mental Health in New Zealand*, vol. 9, no. 1, pp. 18-27.
- Endeavour Lodge (1997). *Endeavour Lodge Operating Manual*. Wanganui, NZ.: Author.
- Foreman, E. I., & Baker, R. (1986). A validity study of a new rating scale for psychiatric patients. *Acta Psychiatrica Scandinavica*. 73, 101-108.
- Foxx, R.M., Bremer, B. A., Shultz, C., Valdez, J., & Johndrow, C. (1996). Increasing treatment acceptability through video. *Behavioural Interventions*, vol 11, no. 4 171-180.
- Friis, S. (1986). Characteristics of a good ward atmosphere. *Acta Psychiatrica Scandinavica*. Vol 74, 469-473.
- Haines, H., & Abbott, M. (1986). The future of mental health services in New Zealand: Deinstitutionalisation. *Wellington, N.Z.: Government Printers*.
- Hall, M. (1995). *Evaluation of an inpatient programme aimed at preparing "hard-to-place" chronically mentally ill for the community*. MA Thesis, Massey University, 1995.
- Hall, M., Deane, F.P., & Beaumont, G. (1996). Evaluation of an inpatient program aimed at preparing "hard-to-place" chronically mentally ill for the community. *Behavioural Interventions*, 11(3), 163.1-14.
- ILC Project Team (1993). *Intensive Learning Centre DOERS Manual*. Palmerston North, N.Z.: Manawatu- Wanganui Area Health Board.

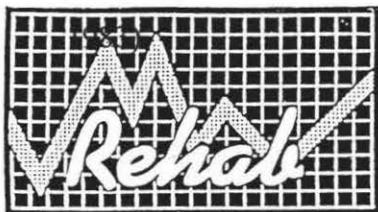
- Kavangh, D. J. (1992). *Schizophrenia an overview and practical handbook*. Chapman and Hall, London.
- Leff, J., Thornicroft, G., Coxhead, N., & Crawford, C. (1994). The TAPS Project 22: A five-year follow-up of long-stay psychiatric patients discharged to the community. *British Journal of Psychiatry*, 165 (suppl. 25), 13-17.
- Leff, J., & Trieman, N. (1997). Providing a comprehensive community psychiatric service. In Leff, J., (ed.) *Care in the Community: Illusion or Reality?*. John Wiley & Sons Ltd.
- Liberman, R. P., & Phipps, C. C. (1987). Innovative treatment and rehabilitation techniques for the chronically mentally ill. In Menniger, W. W., & Hannah, G., (eds.) *The Chronic Mental Patient / II*. American Psychiatric Press: Washington D.C.
- Manawatu- Wanganui Area Health Board (June, 1992). *Mental Health Strategic Planning Document 1991-1996: Implementation timetable for period 1992-1994*. Palmerston North, NZ: Author.
- Mason, K. H., Ryan, A. B., & Bennett, H. R. (1988). Psychiatric report of the committee of inquiry into procedures used in certain psychiatric hospitals in relation to admission, discharge, or release on leave of certain classes of patients. *Wellington, N.Z.: Government Printer*.
- Mental Health Compulsory Assessment and Treatment Act (1992). Wellington: Government Printing Office.
- Moos, R. H. (1996). *Ward Atmosphere Scale Manual (3rd ed)*. Palo Alto, Calif.: Mind Garden.
- Moos, R. H. (1997). *Evaluating treatment environments: The quality of psychiatric and substance abuse programs*. New Brunswick, NJ: Transaction.

- Miltenberger, R.G. (1990). Assessment of Treatment Acceptability: a review of the literature. *Topics in Early Childhood Special Education, 10*(3), 24-38.
- Nihira, K., Foster, R., Shellhaas, M., & Leland, H. (1974). *AAMD Adaptive behaviour scale, 1975 revision*. Washington USA: American Association on Mental Deficiency.
- Norusis, M. J. (1995). *SPSS for windows, version 6.1.3*. Chicago: SPSS Inc.
- O'Driscoll, C. (1993). Mental hospital closure- a literature review of outcome studies and evaluative techniques. In Leff, J (ed.) *British Journal of Psychiatry (suppl. 19)*, 7-17.
- O'Driscoll, C., & Leff, J. (1993). Design of the Research Study on the Long-Stay Patients. In Leff, J (ed.) *British Journal of Psychiatry (suppl. 19)*, 18-24.
- Paul, G.L., & Lentz, R.J. (1977). *Psychosocial treatment of chronic mental patients: Milieu versus social learning programs*. Cambridge, MA: Harvard University Press.
- Peniston, E.G. (1988). Evaluation of long term therapeutic efficacy of behaviour modification program with chronic male psychiatric inpatients. *Journal of Behaviour Therapy and Experimental Psychiatry, 19*, 95-101.
- Pfeiffer, S.I. (1990). An analysis of methodology in follow-up studies of adult inpatient psychiatric treatment. *Hospital and Community Psychiatry, 41*(12), 1315-1321.
- Reimers, T.M., Wacker, D.P., & Koeppl, G. (1987). Acceptability of behavioural interventions: a review of the literature. *School Psychology Review, 16*(2), 212-227.

- Royal College of Psychiatrists Working Party (1993). Facilities and services for patients who have chronic persisting severe disabilities resulting from mental illness. (Summary by T. Craig) *Psychiatric Bulletin*, 17, 567-568.
- Shadish, W.R., Lurigio, A.J., & Lewis, D.A. (1989). After deinstitutionalisation: The present and future of mental health long term care policy. *Journal of Social Issues*, 45, 1-15.
- Shepherd, G. (1995). The "Ward-in-a-house": Residential care for the severely disabled. *Community Mental Health Journal*, 31(1), 53-69.
- Shepherd, G., King, C. & Fowler, D. (1994). Outcomes in hospital hostels. *Psychiatric Bulletin*, 18, 609-612.
- Squier, Roger W. (1994). The relationship between ward atmosphere and staff attitude to treatment in psychiatric in-patient units. *British Journal of Medical Psychology*. Vol 67(4) 319-331.
- Timko, C., & Moos, R. (1996). *Determinants of social climate in residential psychiatric and substance abuse treatment programmes*. Palo Alto Calif.: Department of Veteran Affairs, Centre for Health Care Evaluation.
- Trieman, N. (1997). Patients that are too difficult to manage in the community. In Leff, J., (ed.) *Care in the Community: Illusion or Reality?*. John Wiley & Sons Ltd.
- Trieman, N., & Leff, J. (1996). Difficult to place patients in a psychiatric hospital closure programme: the TAPS project 24. *Psychological Medicine*, 26, 765-774.
- Trieman, N., & Leff, J. (1996). The TAPS Project 36: The most difficult to place long-stay psychiatric in-patients. *British Journal of Psychiatry*, 169, 289-292.
- Wooff, K. (1991). Introduction. In Young, R., (ed.) *Residential Needs of Severely Disabled Psychiatric Patients: The Case for Hospital Hostels*, HMSO: London.

- Wykes, T. (1982). A hostel-ward for "new" long-stay patients: an evaluative study of "ward in a house". In Wing, J. K., (ed.) Long term community care: experience in a London borough. *Psychological Medicine Monogr. Supplement 2*, 59-97.
- Wykes, T., & Wing, J.K. (1982). A ward in a house: Accommodation for "new" long-stay patients. *Acta Psychiatrica Scandinavica* 65, 315-330.
- Wykes, T., & Wing, J.K. (1991). "New " long-stay patients: the nature and size of the problem. In Young, R. (ed.) *Residential Needs of the Severely Disabled Psychiatric Patients- The Case for Hospital Hostels*. HMSO: London.
- Young, R. (1991). *Residential Needs of Severely Disabled Psychiatric Patients: The Case for Hospital Hostels*, HMSO: London.

**APPENDIX A: Rehabilitation Evaluation Hall and Baker scale (Hall & Baker,**



*R*ehabilitation  
*E*valuation  
*H*all  
*A*nd  
*B*aker

Patient/client/resident's name .....

Patient/client/resident's number .....

Date of birth ..... Sex .....

Ward/Unit .....

Rater's name .....

Date of rating .....

*This form is in two parts :*

*Part 1. is concerned with the patient/client/resident's difficult or embarrassing behaviour.*

*Part 2. (overleaf) is concerned with the patient/client/resident's general social and everyday behaviour.*

*You will indicate your answers to the questions in different ways in the two sections.*

*Please read the instructions for answering each part.*

**ASSESSMENT FORM**

**Part 1. Deviant Behaviour**

*Instructions*

These seven questions are all concerned with particular types of deviant, or embarrassing behaviour. Each question is followed by three possible answers. The answers show how often a type of behaviour happened. You answer each question by ticking the ONE box which best describes the patient's behaviour last week. Take account of any reports of incontinence, etc., which happened when you were not with the patient during the week.

Before you begin remember to :

1. Only consider the patient's behaviour over the LAST WEEK.
2. Tick only ONE box for each question.

*1. Was the patient incontinent?*

Incontinent of urine or faeces and urine more than once in the week.  Incontinent once in the week.  No incontinence.

*2. Was the patient physically violent?*

Violent (for example, hit someone, broke something) more than once in the week.  Violent once in the week.  No violence.

*3. Did the patient hurt or mutilate him/herself?*

Hurt self (for example, hit own face, cut self) more than once in the week.  Hurt self once in the week.  No self injury.

*4. Was the patient sexually offensive in any way?*

(Judge offensiveness as a stranger would)

Offensive more than once in a week.  Offensive once in the week.  No offensive behaviour.

*5. Did the patient leave the ward or hospital without arrangement?*

Patient left without arrangement for long period, or returned an hour or more late, more than once in the week.  Left without arrangement once in the week.  Present when wanted, returned as arranged.

Note that the next two questions are about behaviour that occurred once or more a DAY rather than once or more a WEEK.

*6. Did the patient shout or swear at others?*

Shouted or swore at others (for example, used aggressive tone of voice) more than once every day in the week.  Shouted or swore on average once a day, or on only some days in the week.  No shouting or swearing.

*7. Did the patient talk or laugh to himself/herself?*

Episodes of talking to self, or outbursts of laughing/giggling more than once every day in the week.  Talked or laughed to self on average once a day, or on only some days in the week.  Did not talk to self.

*Apart from the deviant behaviour that occurred last week, what else has occurred during the Last Year? Tick the box concerned and write alongside approximately when the behaviour occurred.*

*When did the behaviour last happen?*

1. Incontinence	<input type="checkbox"/>	_____
2. Violence	<input type="checkbox"/>	_____
3. Self mutilation	<input type="checkbox"/>	_____
4. Sexual offensiveness	<input type="checkbox"/>	_____
5. Absent without arrangement	<input type="checkbox"/>	_____
6. Shouting at others	<input type="checkbox"/>	_____
7. Talking to self	<input type="checkbox"/>	_____



R rehabilitation  
E education  
H all  
A and  
B other

## Part 2. General Behaviour

### Instructions

These sixteen questions are all concerned with the social and everyday behaviour of the patient. Each question is followed by a line. Next to each line are three statements. The statements range from the worst possible standard of behaviour at the left, to the standard of behaviour expected from 'normal' people at the right. You answer each question by putting a mark through the line at the point which best shows how the patient has been during the last week. YOU MAY MAKE YOUR MARK AT ANY POINT ON THE LINE.

Before you begin remember to:

1. Use the standard of ordinary life outside the hospital.
2. Only consider the patient's behaviour over the LAST WEEK.
3. Make your rating by putting a mark THROUGH the line.

### 8. How well did the patient get on with others On the ward or unit?

Very poor relationship with other patients. Solitary and withdrawn.

Got on with some patients part of the time.

Got on well with other patients.

### 9. How much did the patient mix with others Off the ward or unit?

Did not mix socially outside the ward.

Went to hospital socials and mixed, or went to see patients on other wards.

Mixed socially outside hospital.

### 10. What did the patient do with his/her spare time?

Ignored all activities around him/her. Showed no interest in anything.

Occasionally joined in games and activities. Occasional interest in news and events.

Joined in activities willingly. Had definite interests. Read papers and magazines.

### 11. How active was the patient?

Sat or lay most of the time in one place, without moving.

Periods of inactivity, but otherwise moved reasonably normally.

Normal amount and speed of activity.

### 12. How many words did the patient use when he/she spoke?

Mute, or occasional sounds.

Spoke in short sentences only.

Talked for a normal length of time.

### 13. How much did the patient initiate conversation?

If mute, tick this box.

Patient never started off a conversation him/herself.

Occasionally started a conversation.

Started conversations with staff and patients.

### 14. How sensible was the patient's speech?

If mute, tick this box.

Bizarre, delusional or jumbled speech. Impossible to make sense of what was said.

Talked some nonsense and some sense.

Spoke sensibly and to the point.

### 15. How clearly did the patient speak?

If mute, tick this box.

Speech unclear. Impossible to make out what was being said.

Speech partly unclear, but could be mainly understood.

Speech was easily heard and understood.

### 16. How good were the patient's table manners?

Bad table manners. Spilt food all over front, used fingers, scooped food. (If staff fed patient rate here)

A bit messy. Spilt some food on self.

Ate normally. Did not spill food. Would not have stood out in a cafe.

Copyright © Baker & Hall 1983

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means.

### 17. How well did the patient wash and care for him/herself?

Did not wash (or shave). Face, hands and hair were dirty and untidy. (If staff washed or shaved patient rate here)

Attempts to wash (or shave) were not very regular or of good quality. A bit dirty.

Patient kept face, hands and hair clean and tidy throughout the day.

### 18. How well did the patient dress him/herself?

If not known, tick box.

Made a mess of dressing. Buttons undone, clothes disarranged, items of clothing missing. (If staff dressed patient rate here).

Dressed self, but usually poor in one or two ways.

Neatly dressed self. Fit to be seen in public.

### 19. How well did the patient look after his/her own things?

If not known, tick box.

Bed unmade, clothes anyhow around bed area/bedroom. (If staff made patient's bed rate here).

Made bed untidily. Clothes not put away properly. Bedroom/bed area looked a bit untidy.

Bed made reasonably well. Clothes laid away neatly. Bedroom/bed area kept neat.

### 20. How much prompting or help did the patient need to do things for him/herself?

Cared for self and did things only if constantly supervised, or tasks had to be done by staff.

Patient did things with some prompting.

Did things without being told.

### 21. How well did the patient manage money?

Poor use of money. Failed to use it, lost it, spent it all as soon as he/she got it. (If patient had no money, or if it was looked after by staff, rate here).

Spent some money on simple purchases.

Used money correctly for various goods or services. Budgeted money over the week.

### 22. Did the patient use public facilities outside hospital?

Never left hospital.

Visited local shops or park outside hospital.

Used several facilities, for example, buses, cafes, library.

## Overall Rating

### 23. How good was the patient's general everyday behaviour last week?

Taking everything into account, very poor socially and at doing things for self.

Several problems were present which would affect the patient's ability to live outside hospital.

Taking everything into account, as good socially and a looking after self as needed to live outside hospital.

In answering the questions so far you have considered the patient's behaviour during the last week. On the whole, was the patient's behaviour during the week:

- better than usual
- about the same as usual
- worse than usual

Please add any comments that you wish to make about the patient's behaviour:

---



---



---



---



The second type of item asks you to check ALL statements which apply to the person. For example:

<b>[4] Table Manners</b> (Check ALL statements which apply)		8-number checked =
Swallows food without chewing	<input type="checkbox"/>	<b>6</b>
Chews food with mouth open	<input checked="" type="checkbox"/>	
Drops food on table or floor	<input type="checkbox"/>	
Uses napkin incorrectly or not at all	<input checked="" type="checkbox"/>	
Talks with mouth full	<input type="checkbox"/>	
Takes food off others' plates	<input type="checkbox"/>	
Eats too fast or too slow	<input type="checkbox"/>	
Plays in food with fingers	<input type="checkbox"/>	
<b>None of the above</b> <input type="checkbox"/>		
Does not apply, e.g., because he or she is completely dependent on others. (If checked, enter "0" in the circle to the right.)	<input type="checkbox"/>	

In the example above, the second and fourth items are checked to indicate that the person "chews food with mouth open" and "uses napkin incorrectly." In scoring, the number of items checked, 2, is subtracted from 8, and the item score, 6, is entered in the circle to the right. Most items do not, however, require this subtraction; instead, the number checked can be directly entered as the score. The statement "None of the above," which is included for administrative purposes only, is not to be counted in scoring here.

Some items may deal with behaviors that are clearly against local regulations, (e.g., use of the telephone), or behaviors that are not possible for a person to perform because the opportunity does not exist, (e.g., eating in restaurants is not possible for someone who is bedridden). In these instances, you must still complete your rating. Give the person credit for the item if you feel absolutely certain that he or she can and would perform the behavior without additional training had he or she the opportunity to do so. Write "AR" for "Against Regulations" or "HNO" for "Has No Opportunity" next to the rating made in these cases. These notations will not affect the eventual scoring of that item, but will contribute to the understanding and interpretation of the person's adaptive behavior and environment.

Please observe the following general rules in completing the Scale:

1. In items which specify "with help" or "with assistance" for completion of task, these mean with *direct physical assistance*.
2. Give the person credit for an item even if he or she needs verbal prompting or reminding to complete the task unless the item definitely states "*without prompting*" or "*without reminder*."

This Scale is prepared for general use. Therefore, some of the items may not be appropriate for your specific setting, but please do try to complete all of them.

## PART ONE

### I. INDEPENDENT FUNCTIONING

#### A. Eating

**[1] Use of Table Utensils** (Circle only ONE)

- |  |   |   |
|--|---|---|
| Uses knife and fork correctly and neatly               | 6 | ○ |
| Uses table knife for cutting or spreading              | 5 |   |
| Feeds self with spoon and fork - neatly                | 4 |   |
| Feeds self with spoon and fork - considerable spilling | 3 |   |
| Feeds self with spoon - neatly                         | 2 |   |
| Feeds self with spoon - considerable spilling          | 1 |   |
| Feeds self with fingers or must be fed                 | 0 |   |

**[2] Eating in Public** (Circle only ONE)

- |   |   |   |
|---|---|---|
| Orders complete meals in restaurants            | 3 | ○ |
| Orders simple meals like hamburgers or hot dogs | 2 |   |
| Orders soft drinks at soda fountain or canteen  | 1 |   |
| Does not order at public eating places          | 0 |   |

**[3] Drinking** (Circle only ONE)

- |   |   |   |
|---|---|---|
| Drinks without spilling, holding glass in one hand          | 3 | ○ |
| Drinks from cup or glass unassisted - neatly                | 2 |   |
| Drinks from cup or glass unassisted - considerable spilling | 1 |   |
| Does not drink from cup or glass unassisted                 | 0 |   |

**[4] Table Manners** (Check ALL statements which apply)

- |  |       |   |
|--|-------|---|
| Swallows food without chewing  | _____ | ○ |
| Chews food with mouth open   | _____ |   |
| Drops food on table or floor   | _____ |   |
| Uses napkin incorrectly or not at all  | _____ |   |
| Talks with mouth full  | _____ |   |
| Takes food off others' plates  | _____ |   |
| Eats too fast or too slow  | _____ |   |
| Plays in food with fingers   | _____ |   |
| None of the above  | _____ |   |
| Does not apply, e.g., because he or she is bedfast, and/or has liquid food only. (If checked, enter "0" in the circle to the right.) | _____ |   |

8-number checked =

A. Eating → ADD 1-4 → △

#### B. Toilet Use

**[5] Toilet Training** (Circle only ONE)

- |  |   |   |
|--|---|---|
| Never has toilet accidents                       | 4 | ○ |
| Never has toilet accidents during the day        | 3 |   |
| Occasionally has toilet accidents during the day | 2 |   |
| Frequently has toilet accidents during the day   | 1 |   |
| Is not toilet trained at all                     | 0 |   |

**[6] Self-Care at Toilet**

(Check ALL statements which apply)

- |   |       |   |
|---|-------|---|
| Lowers pants at the toilet without help | _____ | ○ |
| Sits on toilet seat without help        | _____ |   |
| Uses toilet tissue appropriately        | _____ |   |
| Flushes toilet after use                | _____ |   |
| Puts on clothes without help            | _____ |   |
| Washes hands without help               | _____ |   |
| None of the above                       | _____ |   |

B. Toilet Use → ADD 5-6 → △

#### C. Cleanliness

**[7] Washing Hands and Face**

(Check ALL statements which apply)

- |                                  |       |   |
|----------------------------------|-------|---|
| Washes hands with soap           | _____ | ○ |
| Washes face with soap            | _____ |   |
| Washes hands and face with water | _____ |   |
| Dries hands and face             | _____ |   |
| None of the above                | _____ |   |

**[8] Bathing** (Circle only ONE)

- |   |   |   |
|---|---|---|
| Prepares and completes bathing unaided                        | 6 | ○ |
| Washes and dries self completely without prompting or helping | 5 |   |
| Washes and dries self reasonably well with prompting          | 4 |   |
| Washes and dries self with help                               | 3 |   |
| Attempts to soap and wash self                                | 2 |   |
| Cooperates when being washed and dried by others              | 1 |   |
| Makes no attempt to wash or dry self                          | 0 |   |

**[9] Personal Hygiene**

(Check ALL statements which apply)

- |  |       |   |
|--|-------|---|
| Has strong underarm odor   | _____ | ○ |
| Does not change underwear regularly by self  | _____ |   |
| Skin is often dirty if not assisted  | _____ |   |
| Does not keep nails clean by self  | _____ |   |
| None of the above  | _____ |   |
| Does not apply, e.g., because he or she is completely dependent on others. (If checked, enter "0" in the circle to the right.) | _____ |   |

**[10] Tooth Brushing** (Circle only ONE)

- |  |   |   |
|--|---|---|
| Applies toothpaste and brushes teeth with up and down motion | 5 | ○ |
| Applies toothpaste and brushes teeth                         | 4 |   |
| Brushes teeth without help, but cannot apply toothpaste      | 3 |   |
| Brushes teeth with supervision                               | 2 |   |
| Cooperates in having teeth brushed                           | 1 |   |
| Makes no attempt to brush teeth                              | 0 |   |

**[11] Menstruation** (Circle only ONE)  
(For males, Circle "no menstruation")

- No menstruation 5
- Cares for self completely for menstruation without assistance or reminder 5
- Cares for self reasonably well during menstruation 4
- Helps in changing pads during menstruation 3
- Indicates pad needs changing during menstruation 2
- Indicates that menstruation had begun 1
- Will not care for self or seek help during menstruation 0

C. Cleanliness → **ADD** 7-11

**D. Appearance**

**[12] Posture** (Check ALL statements which apply)

- Mouth hangs open \_\_\_\_\_
- Head hangs down \_\_\_\_\_
- Stomach sticks out because of posture \_\_\_\_\_
- Shoulders slumped forward and back bent \_\_\_\_\_
- Walks with toes out or toes in \_\_\_\_\_
- Walks with feet far apart \_\_\_\_\_
- Shuffles, drags, or stamps feet when walking \_\_\_\_\_
- Walks on tiptoes \_\_\_\_\_
- None of the above \_\_\_\_\_
- Does not apply, e.g., because he or she is bedfast or non-ambulatory (If checked, enter "0" in the circle to the right.) \_\_\_\_\_

**[13] Clothing** (Check ALL statements which apply)

- Clothes do not fit properly if not assisted \_\_\_\_\_
- Wears torn or unpressed clothing if not prompted \_\_\_\_\_
- Rewears dirty or soiled clothing if not prompted \_\_\_\_\_
- Wears clashing color combinations if not prompted \_\_\_\_\_
- Does not know the difference between work shoes and dress shoes \_\_\_\_\_
- Does not choose different clothing for formal and informal occasions \_\_\_\_\_
- Does not wear special clothing for different weather conditions (raincoat, overshoes, etc.) \_\_\_\_\_
- None of the above \_\_\_\_\_
- Does not apply, e.g., because he or she is completely dependent on others (If checked, enter "0" in the circle to the right.) \_\_\_\_\_

D. Appearance → **ADD** 12-13

**E. Care of Clothing**

**[14] Care of Clothing**  
(Check ALL statements which apply)

- Wipes and polishes shoes when needed \_\_\_\_\_
  - Puts clothes in drawer or chest neatly \_\_\_\_\_
  - Sends clothes to laundry without being reminded \_\_\_\_\_
  - Hangs up clothes without being reminded \_\_\_\_\_
  - None of the above \_\_\_\_\_
- E. Care of Clothing → **ENTER** 14

**F. Dressing and Undressing**

**[15] Dressing** (Circle only ONE)

- Completely dresses self 5
- Completely dresses self with verbal prompting only 4
- Dresses self by pulling or putting on all clothes with verbal prompting and by fastening (zipping, buttoning, snapping) them with help 3
- Dresses self with help in pulling or putting on most clothes and fastening them 2
- Cooperates when dressed by extending arms or legs 1
- Must be dressed completely 0

**[16] Undressing at Appropriate Times**  
(Circle only ONE)

- Completely undresses self 5
- Completely undresses self with verbal prompting only 4
- Undresses self by unfastening (unzipping, unbuttoning, unsnapping) clothes with help and pulling or taking them off with verbal prompting 3
- Undresses self with help in unfastening and pulling or taking off most clothes 2
- Cooperates when undressed by extending arms or legs 1
- Must be completely undressed 0

**[17] Shoes** (Check ALL statements with apply)

- Puts on shoes correctly without assistance \_\_\_\_\_
- Ties shoe laces without assistance \_\_\_\_\_
- Unties shoe laces without assistance \_\_\_\_\_
- Removes shoes without assistance \_\_\_\_\_
- None of the above \_\_\_\_\_

F. Dressing and Undressing → **ADD** 15-17

**G. Travel**

**[18] Sense of Direction** (Circle only ONE)

- Goes a few blocks from hospital or school ground, or several blocks from home without getting lost 3
- Goes around hospital ground or a few blocks from home without getting lost 2
- Goes around cottage, ward, or home alone 1
- Gets lost whenever leaving own living area 0

**[19] Public Transportation**

(Check ALL statements which apply)

- Rides on train, long-distance bus or plane independently \_\_\_\_\_
- Rides in taxi independently \_\_\_\_\_
- Rides subway or city bus for unfamiliar journeys independently \_\_\_\_\_
- Rides subway or city bus for familiar journeys independently \_\_\_\_\_
- None of the above \_\_\_\_\_

G. Travel  $\xrightarrow{\text{ADD 18-19}}$  

**H. Other Independent Functioning**

**[20] Telephone** (Check ALL statements which apply)

- Uses telephone directory \_\_\_\_\_
- Uses pay telephone \_\_\_\_\_
- Makes telephone calls from private telephone \_\_\_\_\_
- Answers telephone appropriately \_\_\_\_\_
- Takes telephone messages \_\_\_\_\_
- None of the above \_\_\_\_\_

**[21] Miscellaneous Independent Functioning**  
(Check ALL statements which apply)

- Prepares own bed at night \_\_\_\_\_
- Goes to bed unassisted, e.g., getting in bed, covering with blanket, etc. \_\_\_\_\_
- Has ordinary control of appetite, eats moderately \_\_\_\_\_
- Knows postage rates, buys stamps from Post Office \_\_\_\_\_
- Looks after personal health, e.g., changes wet clothing \_\_\_\_\_
- Deals with simple injuries, e.g., cuts, burns \_\_\_\_\_
- Knows how and where to obtain a doctor's or dentist's help \_\_\_\_\_
- Knows about welfare facilities in the community \_\_\_\_\_
- None of the above \_\_\_\_\_

H. Other Independent Functioning  $\xrightarrow{\text{ADD 20-21}}$  

I. INDEPENDENT FUNCTIONING  $\xrightarrow{\text{ADD TRIANGLES A-H}}$  

**II. PHYSICAL DEVELOPMENT**

**A. Sensory Development**  
(Observable functioning ability)

**[22] Vision** (With glasses, if used)  
(Circle only ONE)

- No difficulty in seeing \_\_\_\_\_ 3
- Some difficulty in seeing \_\_\_\_\_ 2
- Great difficulty in seeing \_\_\_\_\_ 1
- No vision at all \_\_\_\_\_ 0

**[23] Hearing** (With hearing aid, if used)  
(Circle only ONE)

- No difficulty in hearing \_\_\_\_\_ 3
- Some difficulty in hearing \_\_\_\_\_ 2
- Great difficulty in hearing \_\_\_\_\_ 1
- No hearing at all \_\_\_\_\_ 0

A. Sensory Development  $\xrightarrow{\text{ADD 22-23}}$  

**B. Motor Development**

**[24] Body Balance** (Circle only ONE)

- Stands on "tiptoe" for ten seconds if asked \_\_\_\_\_ 5
- Stands on one foot for two seconds if asked \_\_\_\_\_ 4
- Stands without support \_\_\_\_\_ 3
- Stands with support \_\_\_\_\_ 2
- Sits without support \_\_\_\_\_ 1
- Can do none of the above \_\_\_\_\_ 0

**[25] Walking and Running**  
(Check ALL statements which apply)

- Walks alone \_\_\_\_\_
- Walks up and down stairs alone \_\_\_\_\_
- Walks down stairs by alternating feet \_\_\_\_\_
- Runs without falling often \_\_\_\_\_
- Hops, skips or jumps \_\_\_\_\_
- None of the above \_\_\_\_\_

**[26] Control of Hands**  
(Check ALL statements which apply)

- Catches a ball \_\_\_\_\_
- Throws a ball overhand \_\_\_\_\_
- Lifts cup or glass \_\_\_\_\_
- Grasps with thumb and finger \_\_\_\_\_
- None of the above \_\_\_\_\_

[27] **Limb Function**

(Check ALL statements which apply)

- Has effective use of right arm
- Has effective use of left arm
- Has effective use of right leg
- Has effective use of left leg
- None of the above

B. Motor Development  $\xrightarrow[\text{24-27}]{\text{ADD}}$  

II. PHYSICAL DEVELOPMENT  $\xrightarrow[\text{TRIANGLES A-B}]{\text{ADD}}$  

III. ECONOMIC ACTIVITY

A. Money Handling and Budgeting

[28] **Money Handling** (Circle only ONE)

- Uses banking facilities independently 4
- Makes change correctly but does not use banking facilities 3
- Adds coins of various denominations, up to one dollar 2
- Uses money, but does not make change correctly 1
- Does not use money 0

[29] **Budgeting**

(Check ALL statements which apply)

- Saves money or tokens for a particular purpose
- Budgets fares, meals, etc.
- Spends money with some planning
- Controls own major expenditures
- None of the above

A. Money Handling and Budgeting  $\xrightarrow[\text{28-29}]{\text{ADD}}$  

B. Shopping Skills

[30] **Errands** (Circle only ONE)

- Goes to several shops and specifies different items 4
- Goes to one shop and specifies one item 3
- Goes on errands for simple purchasing without a note 2
- Goes on errands for simple purchasing with a note 1
- Cannot be sent on errands 0

[31] **Purchasing** (Circle only ONE)

- Buys all own clothing 5
- Buys own clothing accessories 4
- Makes minor purchases without help (candy, soft drinks, etc.) 3
- Does shopping with slight supervision 2
- Does shopping with close supervision 1
- Does no shopping 0

B. Shopping Skills  $\xrightarrow[\text{30-31}]{\text{ADD}}$  

III. ECONOMIC ACTIVITY  $\xrightarrow[\text{TRIANGLES A-B}]{\text{ADD}}$  

IV. LANGUAGE DEVELOPMENT

A. Expression

[32] **Writing** (Circle only ONE)

- Writes sensible and understandable letters 5
- Writes short notes and memos 4
- Writes or prints forty words 3
- Writes or prints ten words 2
- Writes or prints own name 1
- Cannot write or print any words 0

[33] **Preverbal Expression**

(Check ALL statements which apply)

- Nods head or smiles to express happiness
- Indicates hunger
- Indicates wants by pointing or vocal noises
- Chuckles or laughs when happy
- Expresses pleasure or anger by vocal noises
- Is able to say at least a few words (Enter "6" if checked, regardless of other items.)
- None of the above

[34] **Articulation** (Check ALL statements which apply--if no speech, check "None" and enter "0" in the circle)

- Speech is low, weak, whispered or difficult to hear 4-number checked =
- Speech is slowed, deliberate, or labored
- Speech is hurried, accelerated, or pushed
- Speaks with blocking, halting, or other irregular interruptions
- None of the above

[35] **Sentences** (Circle only ONE)

Sometimes uses complex sentences containing "because," "but," etc  
 Asks questions using words such as "why," "how," "what," etc.  
 Speaks in simple sentences  
 Speaks in primitive phrases only, or is non-verbal

3

2

1

0

[36] **Word Usage** (Circle only ONE)

Talks about action when describing pictures  
 Names people or objects when describing pictures  
 Names familiar objects  
 Asks for things by their appropriate names  
 Is non-verbal or nearly non-verbal

4

3

2

1

0

A. Expression  $\xrightarrow{\text{ADD 32-36}}$

**B. Comprehension**

[37] **Reading** (Circle only ONE)

Reads books suitable for children nine years or older  
 Reads books suitable for children seven years old  
 Reads simple stories or comics  
 Reads various signs, e.g., "NO PARKING," "ONE WAY," "MEN," "WOMEN," etc.  
 Recognizes ten or more words by sight  
 Recognizes fewer than ten words or none at all

5

4

3

2

1

0

[38] **Complex Instructions**  
 (Check ALL statements which apply)

Understands instructions containing prepositions, e.g., "on," "in," "behind," "under," etc  
 Understands instructions referring to the order in which things must be done, e.g., "first do—then do—"  
 Understands instructions requiring a decision: "If—, do this, but if not, do—"  
 None of the above

B. Comprehension  $\xrightarrow{\text{ADD 37-38}}$

**C. Social Language Development**

[39] **Conversation**  
 (Check ALL statements which apply)

Uses phrases such as "please," and "thank you"  
 Is sociable and talks during meals  
 Talks to others about sports, family, group activities, etc  
 None of the above

[40] **Miscellaneous Language Development**  
 (Check ALL statements which apply)

Can be reasoned with  
 Obviously responds when talked to  
 Talks sensibly  
 Reads books, newspapers, magazines for enjoyment  
 Repeats a story with little or no difficulty  
 Fills in the main items on application form reasonably well  
 None of the above

C. Social Language Development  $\xrightarrow{\text{ADD 39-40}}$

IV. LANGUAGE DEVELOPMENT  $\xrightarrow{\text{ADD TRIANGLES A-C}}$

**V. NUMBERS AND TIME**

[41] **Numbers** (Circle only ONE)

Does simple addition and subtraction  
 Counts ten or more objects  
 Mechanically counts to ten  
 Counts two objects by saying "one . two"  
 Discriminates between "one" and "many" or "a lot"  
 Has no understanding of numbers

5

4

3

2

1

0

[42] **Time** (Check ALL statements which apply)

- Tells time by clock or watch correctly to the minute \_\_\_\_\_
- Understands time intervals, e.g., between "3:30" and "4:30" \_\_\_\_\_
- Understands time equivalents, e.g., "9:15" is the same as "quarter past nine" \_\_\_\_\_
- Associates time on clock with various actions and events \_\_\_\_\_
- None of the above \_\_\_\_\_



[43] **Time Concept**

(Check ALL statements which apply)

- Names the days of the week \_\_\_\_\_
- Refers correctly to "morning" and "afternoon" \_\_\_\_\_
- Understands difference between day-week, minute-hour, month-year, etc. \_\_\_\_\_
- None of the above \_\_\_\_\_



V. NUMBERS AND TIME  $\xrightarrow[\text{41-43}]{\text{ADD}}$

VI. DOMESTIC ACTIVITY

A. Cleaning

[44] **Room Cleaning** (Circle only ONE)

- Cleans room well, e.g., sweeping, dusting and tidying \_\_\_\_\_ 2
- Cleans room but not thoroughly \_\_\_\_\_ 1
- Does not clean room at all \_\_\_\_\_ 0



[45] **Laundry** (Check ALL statements which apply)

- Washes clothing \_\_\_\_\_
- Dries clothing \_\_\_\_\_
- Folds clothing \_\_\_\_\_
- Irons clothing when appropriate \_\_\_\_\_
- None of the above \_\_\_\_\_



A. Cleaning  $\xrightarrow[\text{44-45}]{\text{ADD}}$

B. Kitchen

[46] **Table Setting** (Circle only ONE)

- Places all eating utensils, as well as napkins, salt, pepper, sugar, etc., in positions learned \_\_\_\_\_ 3
- Places plates, glasses, and utensils in positions learned \_\_\_\_\_ 2
- Places silver, plates, cups, etc., on the table \_\_\_\_\_ 1
- Does not set table at all \_\_\_\_\_ 0



[47] **Food Preparation** (Circle only ONE)

- Prepares an adequate complete meal (may use canned or frozen food) \_\_\_\_\_ 3
- Mixes and cooks simple food, e.g., fries eggs, makes pancakes, cooks TV dinners, etc. \_\_\_\_\_ 2
- Prepares simple foods requiring no mixing or cooking, e.g., sandwiches, cold cereal, etc. \_\_\_\_\_ 1
- Does not prepare food at all \_\_\_\_\_ 0



[48] **Table Clearing** (Circle only ONE)

- Clears table of breakable dishes and glassware \_\_\_\_\_ 2
- Clears table of unbreakable dishes and silverware \_\_\_\_\_ 1
- Does not clear table at all \_\_\_\_\_ 0



B. Kitchen  $\xrightarrow[\text{46-48}]{\text{ADD}}$

C. Other Domestic Activities

[49] **General Domestic Activity**

(Check ALL statements which apply)

- Washes dishes well \_\_\_\_\_
- Makes bed neatly \_\_\_\_\_
- Helps with household chores when asked \_\_\_\_\_
- Does household tasks routinely \_\_\_\_\_
- None of the above \_\_\_\_\_



C. Other Domestic Activities  $\xrightarrow[\text{49}]{\text{ENTER}}$

VI. DOMESTIC ACTIVITY  $\xrightarrow[\text{TRIANGLES A-C}]{\text{ADD}}$

VII. VOCATIONAL ACTIVITY

[50] **Job Complexity** (Circle only ONE)

- Performs a job requiring use of tools or machinery, e.g., shop work, sewing, etc. \_\_\_\_\_ 2
- Performs simple work, e.g., simple gardening, mopping floors, emptying trash, etc. \_\_\_\_\_ 1
- Performs no work at all \_\_\_\_\_ 0



[51] **Job Performance**

(Check ALL statements which apply)  
 (If "0" is circled in item 50, check "None of the above" and enter "0" in the circle.)

- Endangers others because of carelessness \_\_\_\_\_ 4-number checked =
- Does not take care of tools \_\_\_\_\_
- Is a very slow worker \_\_\_\_\_
- Does sloppy, inaccurate work \_\_\_\_\_
- None of the above \_\_\_\_\_

[52] **Work Habits**

(Check ALL statements which apply)  
 (If "0" is circled in item 50, check "None of the above" and enter "0" in the circle.)

- Is late from work without good reason \_\_\_\_\_ 5-number checked =
- Is often absent from work \_\_\_\_\_
- Does not complete jobs without constant encouragement \_\_\_\_\_
- Leaves work station without permission \_\_\_\_\_
- Crumbles or gripes about work \_\_\_\_\_
- None of the above \_\_\_\_\_

VII. VOCATIONAL ACTIVITY  $\xrightarrow[\text{50-52}]{\text{ADD}}$

VIII. SELF-DIRECTION

A. Initiative

[53] **Initiative** (Circle only ONE)

- Initiates most of own activities, e.g., tasks, games, etc. \_\_\_\_\_ 3
- Seeks if there is something to do, or explores surroundings, e.g., home, yard, etc. \_\_\_\_\_ 2
- Will engage in activities only if assigned or directed \_\_\_\_\_ 1
- Will not engage in assigned activities, e.g., putting away toys, etc. \_\_\_\_\_ 0

[54] **Passivity**

(Check ALL statements which apply)

- Has to be made to do things \_\_\_\_\_ 6-number checked =
- Has no ambition \_\_\_\_\_
- Seems to have no interest in things \_\_\_\_\_
- Finishes task last because of wasted time \_\_\_\_\_
- Is unnecessarily dependent on others for help \_\_\_\_\_
- Movement is slow and sluggish \_\_\_\_\_
- None of the above \_\_\_\_\_
- Does not apply, e.g., because he or she is totally dependent on others. (If checked, enter "0" in the circle to the right.) \_\_\_\_\_

A. Initiative  $\xrightarrow[\text{53-54}]{\text{ADD}}$

B. Perseverance

[55] **Attention** (Circle only ONE)

- Will pay attention to purposeful activities for more than fifteen minutes, e.g., playing games, reading, cleaning up \_\_\_\_\_ 4
- Will pay attention to purposeful activities for at least fifteen minutes \_\_\_\_\_ 3
- Will pay attention to purposeful activities for at least ten minutes \_\_\_\_\_ 2
- Will pay attention to purposeful activities for at least five minutes \_\_\_\_\_ 1
- Will not pay attention to purposeful activities for as long as five minutes \_\_\_\_\_ 0

[56] **Persistence**

(Check ALL statements which apply)

- Becomes easily discouraged \_\_\_\_\_ 4-number checked =
- Fails to carry out tasks \_\_\_\_\_
- Jumps from one activity to another \_\_\_\_\_
- Needs constant encouragement to complete task \_\_\_\_\_
- None of the above \_\_\_\_\_
- Does not apply, e.g., because he or she is totally incapable of any organized activities. (If checked, enter "0" in the circle to the right.) \_\_\_\_\_

B. Perseverance  $\xrightarrow[\text{55-56}]{\text{ADD}}$

C. Leisure Time

[57] **Leisure Time Activity**

(Check ALL statements which apply)

- Organizes leisure time on a fairly complex level, e.g., plays billiards, fishes, etc. \_\_\_\_\_
- Has hobby, e.g., painting, embroidery, collecting stamps or coins \_\_\_\_\_
- Organizes leisure time adequately on a simple level, e.g., watching television, listening to phonograph, radio, etc. \_\_\_\_\_
- None of the above \_\_\_\_\_

C. Leisure Time  $\xrightarrow[\text{57}]{\text{ENTER}}$

VIII. SELF-DIRECTION  $\xrightarrow[\text{TRIANGLES A-C}]{\text{ADD}}$

IX. RESPONSIBILITY

[58] **Personal Belongings** (Circle only ONE)

- Very dependable--always takes care of personal belongings \_\_\_\_\_ 3
- Usually dependable--usually takes care of personal belongings \_\_\_\_\_ 2
- Unreliable--seldom takes care of personal belongings \_\_\_\_\_ 1
- Not responsible at all--does not take care of personal belongings \_\_\_\_\_ 0

[59] **General Responsibility** (Circle only ONE)

- Very conscientious and assumes much responsibility--makes a special effort; the assigned activities are always performed 3
  - Usually dependable--makes an effort to carry out responsibility; one can be reasonably certain that the assigned activity will be performed 2
  - Unreliable--makes little effort to carry out responsibility; one is uncertain that the assigned activity will be performed 1
  - Not given responsibility; is unable to carry out responsibility at all 0
- IX. **RESPONSIBILITY** ADD →   
58-59

X. **SOCIALIZATION**

[60] **Cooperation** (Circle only ONE)

- Offers assistance to others 2
- Is willing to help if asked 1
- Never helps others 0

[61] **Consideration for Others**  
(Check ALL statements which apply)

- Shows interest in the affairs of others \_\_\_\_\_
- Takes care of others' belongings \_\_\_\_\_
- Directs or manages the affairs of others when needed \_\_\_\_\_
- Shows consideration for others' feelings \_\_\_\_\_
- None of the above \_\_\_\_\_

[62] **Awareness of Others**  
(Check ALL statements which apply)

- Recognizes own family \_\_\_\_\_
- Recognizes people other than family \_\_\_\_\_
- Has information about others, e.g., job, address, relation to self \_\_\_\_\_
- Knows the names of people close to him, e.g., classmates, neighbors \_\_\_\_\_
- Knows the names of people not regularly encountered \_\_\_\_\_
- None of the above \_\_\_\_\_

[63] **Interaction With Others** (Circle only ONE)

- Interacts with others in group games or activity 3
- Interacts with others for at least a short period of time, e.g., showing or offering toys, clothing or objects 2
- Interacts with others imitatively with little interaction 1
- Does not respond to others in a socially acceptable manner 0

[64] **Participation in Group Activities**  
(Circle only ONE)

- Initiates group activities (leader and organizer) 3
- Participates in group activities spontaneously and eagerly (active participant) 2
- Participates in group activities if encouraged to do so (passive participant) 1
- Does not participate in group activities 0

[65] **Selfishness**  
(Check ALL statements which apply)

- Refuses to take turns \_\_\_\_\_ 4-number checked =
- Does not share with others \_\_\_\_\_
- Gets mad if he does not get his way \_\_\_\_\_
- Interrupts aide or teacher who is helping another person \_\_\_\_\_
- None of the above \_\_\_\_\_
- Does not apply, e.g., because he or she has no social interaction or is profoundly withdrawn. (If checked, enter "0" in the circle to the right) \_\_\_\_\_

[66] **Social Maturity**  
(Check ALL statements which apply)

- Is too familiar with strangers \_\_\_\_\_ 5-number checked =
- Is afraid of strangers \_\_\_\_\_
- Does anything to make friends \_\_\_\_\_
- Likes to hold hands with everyone \_\_\_\_\_
- Is at someone's elbow constantly \_\_\_\_\_
- None of the above \_\_\_\_\_
- Does not apply, e.g., because he or she has no social interaction or is profoundly withdrawn. (If checked, enter "0" in the circle to the right.) \_\_\_\_\_

X. **SOCIALIZATION** ADD →   
60-66

INSTRUCTIONS FOR PART TWO

Part Two contains only one type of item. The following is an example.

[2] Damages Personal Property	Occasionally	Frequently
Rips, tears, or chews own clothing	(1)	2
Soils own property	1	(2)
Tears up own magazines, books, or other possessions	1	(2)
Other (specify: _____)	1	2
_____ None of the above	Total 1	4

(5)

Select those of the statements which are true of the individual being evaluated, and circle (1) if the behavior occurs occasionally, or (2) if it occurs frequently. Check "None of the Above" where appropriate. In scoring, total each column on the bottom (Total) line, and enter the sum of these totals in the circle to the right. When "None of the above" is checked, enter 0 in the circle to the right. In the above example, the first statement is true occasionally, and the last two statements are true frequently; therefore, a score of 5 has been entered.

"Occasionally" signifies that the behavior occurs once in a while, or now and then, and "Frequently" signifies that the behavior occurs quite often, or habitually.

Use the space for "Other" when:

1. The person has related behavior problems *in addition* to those circled.
2. The person has behavior problems that are *not covered* by any of the examples listed.

The behavior listed under "Other" must be a specific example of the behavior problem stated in the item.

Some of the items in Part Two describe behaviors which need not be considered maladaptive for very young children (for example, pushing others). The question of whether a given behavior is adaptive or maladaptive depends on the way that particular behavior is viewed by people in our society. Nonetheless, in completing this Scale you are asked to record a person's behavior as accurately as possible, ignoring, for the moment, your personal biases; then, when you later interpret the impact of the reported behaviors, you should take into consideration societal attitudes.

PART TWO

I. VIOLENT AND DESTRUCTIVE BEHAVIOR

	Occasionally	Frequently
<b>[1] Threatens or Does Physical Violence</b>		
Uses threatening gestures	1	2
Indirectly causes injury to others	1	2
Spits on others	1	2
Pushes, scratches or pinches others	1	2
Pulls others' hair, ears, etc.	1	2
Bites others	1	2
Kicks, strikes or slaps others	1	2
Throws objects at others	1	2
Chokes others	1	2
Uses objects as weapons against others	1	2
Hurts animals	1	2
Other (specify: _____)	1	2
None of the above		2
<b>Total</b>		2

**[2] Damages Personal Property**

Rips, tears or chews own clothing	1	2
Soils own property	1	2
Tears up own magazines, books, or other possessions	1	2
Other (specify: _____)	1	2
None of the above		2
<b>Total</b>		2

**[3] Damages Others' Property**

Rips, tears, or chews others' clothing	1	2
Soils others' property	1	2
Tears up others' magazines, books, or personal possessions	1	2
Other (specify: _____)	1	2
None of the above		2
<b>Total</b>		2

**[4] Damages Public Property**

Tears up magazines, books or other public property	1	2
Is overly rough with furniture (kicks, mutilates, knocks it down)	1	2
Breaks windows	1	2
Stuffs toilet with paper, towels or other solid objects that cause an overflow	1	2
Attempts to set fires	1	2
Other (specify: _____)	1	2
None of the above		2
<b>Total</b>		2

**[5] Has Violent Temper, or Temper Tantrums**

	Occasionally	Frequently
Cries and screams	1	2
Stamps feet while banging objects or slamming doors, etc.	1	2
Stamps feet, screaming and yelling	1	2
Throws self on floor, screaming and yelling	1	2
Other (specify: _____)	1	2
None of the above		2
<b>Total</b>		2

I. VIOLENT AND DESTRUCTIVE BEHAVIOR

ADD  
1-5

II. ANTISOCIAL BEHAVIOR

**[6] Teases or Gossips About Others**

Gossips about others	1	2
Tells untrue or exaggerated stories about others	1	2
Teases others	1	2
Picks on others	1	2
Makes fun of others	1	2
Other (specify: _____)	1	2
None of the above		2
<b>Total</b>		2

**[7] Bosses and Manipulates Others**

Tries to tell others what to do	1	2
Demands services from others	1	2
Pushes others around	1	2
Causes fights among other people	1	2
Manipulates others to get them in trouble	1	2
Other (specify: _____)	1	2
None of the above		2
<b>Total</b>		2

**[8] Disrupts Others' Activities**

Is always in the way	1	2
Interferes with others' activities, e.g., by blocking passage, upsetting wheelchairs, etc.	1	2
Upsets others' work	1	2
Knocks around articles that others are working with, e.g., puzzles, card games, etc.	1	2
Snatches things out of others' hands	1	2
Other (specify: _____)	1	2
None of the above		2
<b>Total</b>		2

Occasionally Frequently

[9] Is Inconsiderate of Others

Keeps temperature in public areas uncomfortable for others, e.g., opens or closes window, changes thermostat	1	2	
Turns TV, radio or phonograph on too loudly	1	2	○
Makes loud noises while others are reading	1	2	
Talks too loudly	1	2	
Sprawls over furniture or space needed by others	1	2	
Other (specify: _____)	1	2	
None of the above			
<b>Total</b>	<b>1</b>	<b>2</b>	

[10] Shows Disrespect for Others' Property

Does not return things that were borrowed	1	2	○
Uses others' property without permission	1	2	
Loses others' belongings	1	2	
Damages others' property	1	2	
Does not recognize the difference between own and others' property	1	2	
Other (specify: _____)	1	2	
None of the above			
<b>Total</b>	<b>1</b>	<b>2</b>	

[11] Uses Angry Language

Uses hostile language, e.g., "stupid jerk," "dirty pig," etc.	1	2	○
Swears, curses, or uses obscene language	1	2	
Yells or screams threats of violence	1	2	
Verbally threatens others, suggesting physical violence	1	2	
Other (specify: _____)	1	2	
None of the above			
<b>Total</b>	<b>1</b>	<b>2</b>	

II. ANTISOCIAL BEHAVIOR

ADD  
6-11

III. REBELLIOUS BEHAVIOR

Occasionally Frequently

[12] Ignores Regulations or Regular Routines

Has negative attitude toward rules but usually conforms	1	2	
Has to be forced to go through waiting lines, e.g., lunch lines, ticket lines, etc.	1	2	○
Violates rules or regulations, e.g., eats in restricted areas, disobeys traffic signals, etc.	1	2	
Refuses to participate in required activities, e.g., work, school, etc.	1	2	
Other (specify: _____)	1	2	
None of the above			
<b>Total</b>	<b>1</b>	<b>2</b>	

[13] Resists Following Instructions, Requests or Orders

Gets upset if given a direct order	1	2	○
Plays deaf and does not follow instructions	1	2	
Does not pay attention to instructions	1	2	
Refuses to work on assigned subject	1	2	
Hesitates for long periods before doing assigned tasks	1	2	
Does the opposite of what was requested	1	2	
Other (specify: _____)	1	2	
None of the above			
<b>Total</b>	<b>1</b>	<b>2</b>	

[14] Has Impudent or Rebellious Attitude Toward Authority

Resents persons in authority, e.g., teachers, group leaders, ward personnel, etc.	1	2	○
Is hostile toward people in authority	1	2	
Mocks people in authority	1	2	
Says that he can fire people in authority	1	2	
Says relative will come to kill or harm persons in authority	1	2	
Other (specify: _____)	1	2	
None of the above			
<b>Total</b>	<b>1</b>	<b>2</b>	

[15] Is Absent From, or Late For, the Proper Assignments or Places

Is late to required places or activities	1	2	○
Fails to return to places where he is supposed to be after leaving, e.g., going to toilet, running an errand, etc.	1	2	
Leaves place of required activity without permission, e.g., work, class, etc.	1	2	
Is absent from routine activities, e.g., work, class, etc.	1	2	
Stays out late at night from home, hospital ward, dormitory, etc.	1	2	
Other (specify: _____)	1	2	
None of the above			
<b>Total</b>	<b>1</b>	<b>2</b>	

Occasionally Frequently

[16] Runs Away or Attempts to Run Away

Attempts to run away from hospital, home, or school ground	1	2	○
Runs away from group activities, e.g., picnics, school buses, etc.	1	2	
Runs away from hospital, home, or school ground	1	2	
Other (specify _____)	1	2	
_____None of the above	1	2	
<b>Total</b>			

[17] Misbehaves in Group Settings

Interrupts group discussion by talking about unrelated topics	1	2	○
Disrupts games by refusing to follow rules	1	2	
Disrupts group activities by making loud noises or by acting up	1	2	
Does not stay in seat during lesson period, lunch period, or other group sessions	1	2	
Other (specify _____)	1	2	
_____None of the above	1	2	
<b>Total</b>			

III. REBELLIOUS BEHAVIOR ADD  
12-17 →

IV. UNTRUSTWORTHY BEHAVIOR

[18] Takes Others' Property Without Permission

Has been suspected of stealing	1	2	○
Takes others' belongings if not kept in place or locked	1	2	
Takes others' belongings from pockets, purses, drawers, etc.	1	2	
Takes others' belongings by opening or breaking locks	1	2	
Other (specify _____)	1	2	
_____None of the above	1	2	
<b>Total</b>			

[19] Lies or Cheats

Twists the truth to own advantage	1	2	○
Cheats in games, tests, assignments, etc.	1	2	
Lies about situations	1	2	
Lies about self	1	2	
Lies about others	1	2	
Other (specify _____)	1	2	
_____None of the above	1	2	
<b>Total</b>			

IV. UNTRUSTWORTHY BEHAVIOR ADD  
18-19 →

V. WITHDRAWAL

[20] Is Inactive

Occasionally Frequently

Sits or stands in one position for a long period of time	1	2	○
Does nothing but sit and watch others	1	2	
Falls asleep in a chair	1	2	
Lies on the floor all day	1	2	
Does not seem to react to anything	1	2	
Other (specify _____)	1	2	
_____None of the above	1	2	
<b>Total</b>			

[21] Is Withdrawn

Seems unaware of surroundings	1	2	○
Is difficult to reach or contact	1	2	
Is apathetic and unresponsive in feeling	1	2	
Has a blank stare	1	2	
Has a fixed expression	1	2	
Other (specify _____)	1	2	
_____None of the above	1	2	
<b>Total</b>			

[22] Is Shy

Is timid and shy in social situations	1	2	○
Hides face in group situations, e.g., parties, informal gatherings, etc.	1	2	
Does not mix well with others	1	2	
Prefers to be alone	1	2	
Other (specify _____)	1	2	
_____None of the above	1	2	
<b>Total</b>			

V. WITHDRAWAL ADD  
20-22 →

VI. STEREOTYPED BEHAVIOR AND ODD MANNERISMS

[23] Has Stereotyped Behaviors

Drums fingers	1	2	○
Taps feet continually	1	2	
Has hands constantly in motion	1	2	
Slaps, scratches, or rubs self continually	1	2	
Waves or shakes parts of the body repeatedly	1	2	
Moves or rolls head back and forth	1	2	
Rocks body back and forth	1	2	
Paces the floor	1	2	
Other (specify _____)	1	2	
_____None of the above	1	2	
<b>Total</b>			

	Occasionally	Frequently	
<b>[24] Has Peculiar Posture or Odd Mannerisms</b>			
Holds head tilted	1	2	
Sits with knees under chin	1	2	
Walks on tiptoes	1	2	
Lies on floor with feet up in the air	1	2	○
Walks with fingers in ears or with hands on head	1	2	○
Other (specify: _____)	1	2	
_____ None of the above	1	2	
<b>Total</b>			

VI. STEREOTYPED BEHAVIOR AND ODD MANNERISMS → ADD  
23-24

VII. INAPPROPRIATE INTERPERSONAL MANNERS

<b>[25] Has Inappropriate Interpersonal Manners</b>			
Talks too close to others' faces	1	2	
Blows on others' faces	1	2	
Burps at others	1	2	
Kisses or licks others	1	2	○
Hugs or squeezes others	1	2	○
Touches others inappropriately	1	2	○
Hangs on to others and does not let go	1	2	
Other (specify: _____)	1	2	
_____ None of the above	1	2	
<b>Total</b>			

VII. INAPPROPRIATE INTERPERSONAL MANNERS → ENTER  
25

VIII. UNACCEPTABLE VOCAL HABITS

<b>[26] Has Disturbing Vocal or Speech Habits</b>			
Giggles hysterically	1	2	
Talks loudly or yells at others	1	2	
Talks to self loudly	1	2	
Laughs inappropriately	1	2	○
Makes growling, humming, or other unpleasant noises	1	2	○
Repeats a word or phrase over and over	1	2	
Mimics others' speech	1	2	
Other (specify: _____)	1	2	
_____ None of the above	1	2	
<b>Total</b>			

VIII. UNACCEPTABLE VOCAL HABITS → ENTER  
26

IX. UNACCEPTABLE OR ECCENTRIC HABITS

	Occasionally	Frequently	
<b>[27] Has Strange And Unacceptable Habits</b>			
Smells everything	1	2	
Inappropriately stuffs things in pockets shirts, dresses or shoes	1	2	
Pulls threads out of own clothing	1	2	
Plays with things he is wearing, e.g., shoe string, buttons, etc.	1	2	○
Saves and wears unusual articles, e.g., safety pins, bottle caps, etc.	1	2	○
Hoards things, including foods	1	2	
Plays with spit	1	2	
Plays with feces or urine	1	2	
Other (specify: _____)	1	2	
_____ None of the above	1	2	
<b>Total</b>			

[28] Has Unacceptable Oral Habits

Drools	1	2	
Grinds teeth audibly	1	2	
Spits on the floor	1	2	
Bites fingernails	1	2	
Chews or sucks fingers or other parts of the body	1	2	○
Chews or sucks clothing or other inedibles	1	2	○
Eats inedibles	1	2	○
Drinks from toilet stool	1	2	
Puts everything in mouth	1	2	
Other (specify: _____)	1	2	
_____ None of the above	1	2	
<b>Total</b>			

[29] Removes or Tears Off Own Clothing

Tears off buttons or zippers	1	2	
Inappropriately removes shoes or socks	1	2	○
Undresses at the wrong times	1	2	○
Takes off all clothing while on the toilet	1	2	○
Tears off own clothing	1	2	
Refuses to wear clothing	1	2	
Other (specify: _____)	1	2	
_____ None of the above	1	2	
<b>Total</b>			

	Occasionally	Frequently	
<b>[30] Has Other Eccentric Habits and Tendencies</b>			
Is overly particular about places to sit or sleep	1	2	
Stands in a favorite spot, e.g., by window, by door, etc	1	2	
Sits by anything that vibrates	1	2	○
Is afraid to climb stairs or to go down stairs	1	2	
Does not want to be touched	1	2	
Screams if touched	1	2	
Other (specify: _____)	1	2	
_____ None of the above			
<b>Total</b>			

IX. UNACCEPTABLE OR ECCENTRIC HABITS → **ADD 27-30** →

**X. SELF-ABUSIVE BEHAVIOR**

<b>[31] Does Physical Violence to Self</b>			
Bites or cuts self	1	2	
Slaps or strikes self	1	2	
Bangs head or other parts of the body against objects	1	2	
Pulls own hair, ears, etc.	1	2	
Scratches or picks self causing injury	1	2	○
Soils and smears self	1	2	
Purposely provokes abuse from others	1	2	
Picks at any sores he might have	1	2	
Pokes objects in own ears, eyes, nose, or mouth	1	2	
Other (specify: _____)	1	2	
_____ None of the above			
<b>Total</b>			

X. SELF-ABUSIVE BEHAVIOR → **ENTER 31** →

**XI. HYPERACTIVE TENDENCIES**

<b>[32] Has Hyperactive Tendencies</b>			
Talks excessively	1	2	
Will not sit still for any length of time	1	2	○
Constantly runs or jumps around the room or hall	1	2	
Moves or fidgets constantly	1	2	
Other (specify: _____)	1	2	
_____ None of the above			
<b>Total</b>			

XI. HYPERACTIVE TENDENCIES → **ENTER 32** →

**XII. SEXUALLY ABERRANT BEHAVIOR**

	Occasionally	Frequently	
<b>[33] Engages in Inappropriate Masturbation</b>			
Has attempted to masturbate openly	1	2	○
Masturbates in front of others	1	2	
Masturbates in group	1	2	
Other (specify: _____)	1	2	
_____ None of the above			
<b>Total</b>			
<b>[34] Exposes Body Improperly</b>			
Exposes body unnecessarily after using toilet	1	2	
Stands in public places with pants down or with dress up	1	2	○
Exposes body excessively during activities, e.g., playing, dancing, sitting, etc.	1	2	
Undresses in public places, or in front of lighted windows	1	2	
Other (specify: _____)	1	2	
_____ None of the above			
<b>Total</b>			

<b>[35] Has Homosexual Tendencies</b>			
Is sexually attracted to members of the same sex	1	2	○
Has approached others and attempted homosexual acts	1	2	
Has engaged in homosexual activity	1	2	
Other (specify: _____)	1	2	
_____ None of the above			
<b>Total</b>			

<b>[36] Sexual Behavior That Is Socially Unacceptable</b>			
Is overly seductive in appearance or actions	1	2	
Hugs or caresses too intensely in public	1	2	○
Needs watching with regard to sexual behavior	1	2	
Lifts or unbuttons others' clothing to touch intimately	1	2	
Has sexual relations in public places	1	2	
Is overly aggressive sexually	1	2	
Has raped others	1	2	
Is easily taken advantage of sexually	1	2	
Other (specify: _____)	1	2	
_____ None of the above			
<b>Total</b>			

XII. SEXUALLY ABERRANT BEHAVIOR → **ADD 33-36** →

XIII. PSYCHOLOGICAL DISTURBANCES

Occasionally Frequently

[37] Tends to Overestimate Own Abilities

	Occasionally	Frequently
Does not recognize own limitations	1	2
Has too high an opinion of self	1	2
Talks about future plans that are unrealistic	1	2
Other (specify _____)	1	2
_____None of the above		
<b>Total</b>	<u>1</u>	<u>2</u>

[38] Reacts Poorly to Criticism

Does not talk when corrected	1	2
Withdraws or pouts when criticized	1	2
Becomes upset when criticized	1	2
Screams and cries when corrected	1	2
Other (specify _____)	1	2
_____None of the above		
<b>Total</b>	<u>1</u>	<u>2</u>

[39] Reacts Poorly to Frustration

Blames own mistakes on others	1	2
Withdraws or pouts when thwarted	1	2
Becomes upset when thwarted	1	2
Throws temper tantrums when does not get own way	1	2
Other (specify _____)	1	2
_____None of the above		
<b>Total</b>	<u>1</u>	<u>2</u>

[40] Demands Excessive Attention or Praise

Wants excessive praise	1	2
Is jealous of attention given to others	1	2
Demands excessive reassurance	1	2
Acts silly to gain attention	1	2
Other (specify _____)	1	2
_____None of the above		
<b>Total</b>	<u>1</u>	<u>2</u>

[41] Seems To Feel Persecuted

Complains of unfairness, even when equal shares or privileges have been given	1	2
Complains, "Nobody loves me"	1	2
Says, "Everybody picks on me"	1	2
Says, "People talk about me"	1	2
Says, "People are against me"	1	2
Acts suspicious of people	1	2
Other (specify _____)	1	2
_____None of the above		
<b>Total</b>	<u>1</u>	<u>2</u>

[42] Has Hypochondriacal Tendencies

Complains about imaginary physical ailments	1	2
Pretends to be ill	1	2
Acts sick after illness is over	1	2
Other (specify _____)	1	2
_____None of the above		
<b>Total</b>	<u>1</u>	<u>2</u>

[43] Has Other Signs of Emotional Instabilities

Changes mood without apparent reason	1	2
Complains of bad dreams	1	2
Cries out while asleep	1	2
Cries for no apparent reason	1	2
Seems to have no emotional control	1	2
Vomits when upset	1	2
Appears insecure or frightened in daily activities	1	2
Talks about people or things that cause unrealistic fears	1	2
Talks about suicide	1	2
Has made an attempt at suicide	1	2
Other (specify _____)	1	2
_____None of the above		
<b>Total</b>	<u>1</u>	<u>2</u>

XIII. PSYCHOLOGICAL DISTURBANCES → ADD 37-43 →

XIV. USE OF MEDICATIONS

[44] Use of Prescribed Medication

Uses tranquilizers	1	2
Uses sedatives	1	2
Uses anticonvulsant drugs	1	2
Uses stimulants	1	2
Other (specify _____)	1	2
_____None of the above		
<b>Total</b>	<u>1</u>	<u>2</u>

XIV. USE OF MEDICATIONS → ENTER 44 →



DATA SUMMARY SHEET

PART TWO

- |  |                          |             |
|--|--------------------------|-------------|
| <i>I. VIOLENT AND DESTRUCTIVE BEHAVIOR</i>         | <input type="checkbox"/> | <i>I</i>    |
| <i>II. ANTISOCIAL BEHAVIOR</i>                     | <input type="checkbox"/> | <i>II</i>   |
| <i>III. REBELLIOUS BEHAVIOR</i>                    | <input type="checkbox"/> | <i>III</i>  |
| <i>IV. UNTRUSTWORTHY BEHAVIOR</i>                  | <input type="checkbox"/> | <i>IV</i>   |
| <i>V. WITHDRAWAL</i>                               | <input type="checkbox"/> | <i>V</i>    |
| <i>VI. STEREOTYPED BEHAVIOR AND ODD MANNERISMS</i> | <input type="checkbox"/> | <i>VI</i>   |
| <i>VII. INAPPROPRIATE INTERPERSONAL MANNERS</i>    | <input type="checkbox"/> | <i>VII</i>  |
| <i>VIII. UNACCEPTABLE VOCAL HABITS</i>             | <input type="checkbox"/> | <i>VIII</i> |
| <i>IX. UNACCEPTABLE OR ECCENTRIC HABITS</i>        | <input type="checkbox"/> | <i>IX</i>   |
| <i>X. SELF-ABUSIVE BEHAVIOR</i>                    | <input type="checkbox"/> | <i>X</i>    |
| <i>XI. HYPERACTIVE TENDENCIES</i>                  | <input type="checkbox"/> | <i>XI</i>   |
| <i>XII. SEXUALLY ABERRANT BEHAVIOR</i>             | <input type="checkbox"/> | <i>XII</i>  |
| <i>XIII. PSYCHOLOGICAL DISTURBANCES</i>            | <input type="checkbox"/> | <i>XIII</i> |
| <i>XIV. USE OF MEDICATIONS</i>                     | <input type="checkbox"/> | <i>XIV</i>  |





**APPENDIX C: Ward Atmosphere Scale (Moos, 1974, 1989, 1996).**

MIND GARDEN  
Palo Alto, California

**WAS**  
**Instructions**  
**Form R**

There are 100 statements here. They are statements about treatment programs. Please decide which statements are true of your program and which are false. Please be sure to answer every statement and to fill in your name and the other information requested.

**Please provide the following information:**

Today's date: \_\_\_\_\_

Your name or ID: \_\_\_\_\_ Age: \_\_\_\_\_

Name of program: \_\_\_\_\_

Gender (*Please circle*):    Male    Female

How long have you lived or worked in this program?    Years  Months  Days

If you are a staff member, check here

and indicate your staff position/title: \_\_\_\_\_

Please decide which statements are **true** of your program and which are not.

**True** - Circle the **T** if you think the statement is **true** or **mostly true** of your program.

**False** - Circle the **F** if you think the statement is **false** or **mostly false** of your program.

**Please be sure to answer every statement.**

**Do not write below this line**

	I	S	SP	A	PO	PPO	AA	OO	PC	SC
R/S										
S/S										

**Form R**

	True	False
1. Patients put a lot of energy into what they do around here. ....	T	F
2. Doctors have very little time to encourage patients. ....	T	F
3. Patients tend to hide their feelings from one another. ....	T	F
4. The staff act on patients' suggestions. ....	T	F
5. New treatment approaches are often tried in this program. ....	T	F
6. Patients hardly ever discuss their sex life. ....	T	F
7. Patients often gripe. ....	T	F
8. Patients' activities are carefully planned. ....	T	F
9. The patients know when doctors will be on the unit. ....	T	F
10. The staff very rarely punish patients by restricting them. ....	T	F
11. This is a lively program. ....	T	F
12. The staff know what the patients want. ....	T	F
13. Patients say anything they want to the doctors. ....	T	F
14. Very few patients have any responsibility here. ....	T	F
15. There is very little emphasis on teaching patients solutions to practical problems. ....	T	F
16. Patients tell each other about their personal problems. ....	T	F
17. Patients often criticize or joke about the staff. ....	T	F
18. This is a very well-organized program. ....	T	F
19. Doctors do not explain what treatment is about to patients. ....	T	F
20. Patients may interrupt when a doctor is talking. ....	T	F
21. The patients are proud of this program. ....	T	F
22. Staff are interested in following up patients once they leave the program. ....	T	F
23. It is hard to tell how patients are feeling here. ....	T	F
24. Patients are expected to take leadership here. ....	T	F
25. Patients are strongly encouraged to plan for the future. ....	T	F
26. Personal problems are openly talked about. ....	T	F
27. Patients in this program rarely argue. ....	T	F
28. The staff make sure that the unit is always neat. ....	T	F
29. If a patient's medicine is changed, a nurse or doctor always explains why. ....	T	F
30. Patients who break the rules are punished for it. ....	T	F
31. There is very little group spirit in this program. ....	T	F
32. Nurses have very little time to encourage patients. ....	T	F
33. Patients are careful about what they say when staff are around. ....	T	F

**Go on to next page.**

Form R (Continued)

	True	False
34. Patients here are encouraged to be independent.....	T	F
35. There is very little emphasis on what patients will be doing after they leave.....	T	F
36. Patients are expected to share their personal problems with each other.....	T	F
37. Staff sometimes argue openly with each other.....	T	F
38. The unit sometimes gets very messy. ....	T	F
39. The patients clearly understand the program rules. ....	T	F
40. Patients who argue with other patients will get into trouble with the staff.....	T	F
41. Very few patients ever volunteer around here.....	T	F
42. Doctors spend more time with some patients than with others. ....	T	F
43. Patients freely set up their own activities here.....	T	F
44. Patients can leave the unit whenever they want to.....	T	F
45. There is very little emphasis on making plans for getting out of this program.....	T	F
46. Patients talk very little about their past. ....	T	F
47. Patients sometimes play practical jokes on each other.....	T	F
48. Most patients follow a regular schedule each day.....	T	F
49. Patients never know when staff will ask to see them.....	T	F
50. Staff do not order the patients around. ....	T	F
51. Patients are quite busy all of the time.....	T	F
52. The healthier patients here help take care of the less healthy ones.....	T	F
53. When patients disagree with each other, they keep it to themselves.....	T	F
54. Patients can wear whatever they want. ....	T	F
55. This program emphasizes training for new kinds of jobs.....	T	F
56. The staff rarely ask patients personal questions. ....	T	F
57. It's hard to get people to argue around here.....	T	F
58. Many patients look messy. ....	T	F
59. In this program, everyone knows who is in charge.....	T	F
60. Once a schedule is arranged for a patient, the patient must follow it. ....	T	F
61. The program has very few social activities. ....	T	F
62. Patients rarely help each other.....	T	F
63. It's okay to act crazy around here.....	T	F
64. There is no patient government in this program. ....	T	F
65. Most patients are more concerned with the past than with the future. ....	T	F
66. Staff are mainly interested in learning about patients' feelings.....	T	F

Go on to next page.

**Form R (Continued)**

	True	False
67. Staff here never start arguments. ....	T	F
68. Things are sometimes very disorganized around here.....	T	F
69. Patients who break the rules know what will happen to them.. ....	T	F
70. Patients can call nursing staff by their first name. ....	T	F
71. Very few things around here ever get people excited.....	T	F
72. The staff help new patients get acquainted here. ....	T	F
73. Patients tend to hide their feelings from the staff.....	T	F
74. Patients can leave the unit without saying where they are going. ....	T	F
75. Patients are encouraged to learn new ways of doing things. ....	T	F
76. The patients rarely talk with each other about their personal problems. ....	T	F
77. In this program, staff think it is a healthy thing to argue. ....	T	F
78. The staff set an example for neatness and orderliness. ....	T	F
79. People are always changing their minds here. ....	T	F
80. Patients will be transferred from this unit if they do not obey the rules.....	T	F
81. Discussions here are very interesting ....	T	F
82. Staff sometimes do not show up for their appointments with patients.....	T	F
83. Patients are strongly encouraged to show their feelings. ....	T	F
84. Staff rarely give in to patients' pressure.....	T	F
85. Staff care more about how patients feel than about their practical problems. ....	T	F
86. Staff strongly encourage patients to talk about their past.....	T	F
87. Patients here rarely become angry.....	T	F
88. Patients are rarely kept waiting when they have appointments with staff.....	T	F
89. Patients never know when they will be transferred from this program. ....	T	F
90. It is not safe for patients to discuss their personal problems around here. ....	T	F
91. Patients often do things together on weekends.....	T	F
92. Staff go out of their way to help patients.....	T	F
93. The program always stays just about the same. ....	T	F
94. The staff discourage criticism. ....	T	F
95. Patients must make specific plans before leaving the program.....	T	F
96. It is hard to get a group together for card games or other activities. ....	T	F
97. A lot of patients just seem to be passing time here. ....	T	F
98. The day room is often messy.....	T	F
99. Staff tell patients when they are getting better.....	T	F
100. It is a good idea to let the doctors know that they are in charge.....	T	F

**Stop here.**

**APPENDIX D: Massey University Human Ethics Committee, Research Approval Letter.**

7 April 1997

Facsimile

Robert A DALDY  
Department: Psychology

HEC97/35



**MASSEY  
UNIVERSITY**

Private Bag 11222  
Palmerston North  
New Zealand  
Telephone 01-356 9099

Dear Robert,

**Re: Human Ethics Application HEC97/35**  
Effects of transferring a behaviorally oriented treatment programme for chronically mentally ill patients from an inpatient to a community setting.

Thank you for attending the meeting of the Human Ethics Committee held on Thursday 27 March 1997, supervisor Dr Frank Deane. The Committee raised the following points regarding your application:

It must be absolutely clear that participants give express consent for the researcher to view medical records.

There must be the provision for a witness to sign the Consent Form.

Subject to the above amendments and inclusions being received, the ethics of the application will be approved.

Any departure from the approved protocol will require the researcher to return their project to the Human Ethics Committee for approval.

Yours sincerely

Professor Philip Dewe  
Chairperson  
Human Ethics Committee

cc: Supervisor: Dr Frank Deane

**APPENDIX E: Manawatu-Whanganui Ethics Committee, Research Approval  
Letter.**

**MANAWATU-WHANGANUI  
ETHICS COMMITTEE**

**CENTRAL RHA**  
TE IHONGA HAUORA



Chairperson Dr Audrey Jarvis  
e-mail jarvis@manawatu.gen.nz

Secretary Ms Vicki Graham  
e-mail mwethics@manawatu.gen.nz

13 May 1997

Robert Daldy  
Masters student, Dept of Psychology  
Massey University  
Private Bag 11 222  
PALMERSTON NORTH

Dear Mr Daldy

**Ethics Register 14/97: Evaluation of a psychiatric inpatient facility**

Thank you for your amended documentation relating to this study.

I am pleased to advise that the Manawatu-Whanganui Ethics Committee gives full ethical approval for your study to commence in the Manawatu-Whanganui area.

The Ethics Committee makes decisions on ethical issues only. We note your study is to be carried out in the Whanganui area, so you will need to obtain written approval from the Chief Executive Officer, Good Health Wanganui, for your study to commence. You should forward a copy of your proposal, along with a copy of this letter, to the Chief Executive Officer. Application for any CHE finances and/or resources for this proposal should be made to the Chief Executive Officer. It is important that you give details of all CHE resources, such as staff time, which will be required.

Please note, this ethical approval for the Manawatu and Whanganui area is for a two year period only, and re-approval is required after that time. There is a short form to be completed when requesting re-approval, which is available from the Committee Co-ordinator.

Ethical approval is conditional upon the Ethics Committee receiving annual progress reports on the study, a final report at the completion of the study, and a copy of any publication. Your first progress report will be due by May 1998 or on completion of your study. Please notify us if your study is abandoned or the protocol changed in any way.

The Manawatu-Whanganui Ethics Committee has received your ACC declaration form A, and is satisfied that this project is in the category of public good research. Participants may be eligible for ACC coverage should injury or harm result from their participation in this study.

We wish you every success with this study.

Yours sincerely

**Dr Audrey Jarvis  
CHAIRPERSON**

Room 214, Matai Hostel, Palmerston North Hospital

PO Box 5203, Palmerston North

Telephone/Fax: 06 356 7773

13