The role of Lorikeet Clubhouse in psychiatric rehabilitation

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Edith Cowan University

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THE ROLE OF LORIKEET CLUBHOUSE IN PSYCHIATRIC REHABILITATION

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USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
Abstract

Previous studies have suggested that participation in psychosocial support groups such as the Foundation House (Clubhouse) model have psychological benefits for patients with major mental disorders. In this research, 47 members of the Lorikeet Clubhouse in Shenton Park, WA completed the Brief Symptom Inventory, the Level of Expressed Emotion Scale and the Coping Scale for Adults to investigate whether differences existed between active and inactive Clubhouse members. Analyses of variance found no group differences on these measures, although trends in the data suggest that Clubhouse participation have a protective effect for members who report high levels of expressed emotion (EE) in their home. These conclusions are tentative due to the small sample size. Members perceived the Clubhouse to have lower levels of EE than their home environments, however these measures were correlated.
I certify that this thesis does not, to the best of my knowledge and belief:

(i) incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education;
(ii) contain any material previously published or written by another person except where due reference is made in the text; or
(iii) contain any defamatory material.

Michelle Smith
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CHAPTER 1
LITERATURE REVIEW

1.1 Introduction

A need for services in addition to the medical treatment of adults with major mental disorders saw the development of the field of psychiatric rehabilitation in the 1950's. Current opinion amongst mental health professionals is that psychiatric rehabilitation plays an integral role in the management of adults diagnosed with serious and persistent mental illness (Caldwell, Fishbein & Woods, 1994). This is thought to be in part due to the diminishing resources for the treatment of the long-term patient, and the need for ongoing psychological intervention for many psychiatric patients in order to address the secondary and tertiary disabilities associated with mental illness (Bachrach, 1992).

While different elements of psychiatric rehabilitation have moved in and out of favour, there is a consensus as to what constitutes the field of psychiatric rehabilitation (Anthony & Liberman, 1986). The overall goal of psychiatric rehabilitation is to “assist the person to perform the physical, emotional, intellectual and social skills needed to live, learn and work in the community, with the least amount of support necessary” (Anthony & Liberman, 1986, p. 542).

One model of psychiatric rehabilitation is the Foundation House (Clubhouse) model that provides a range of psychosocial and pre-vocation
services to members. The Clubhouse model is based on the belief that people gain their independence and self-esteem by being offered choices, and making their own decisions. Clubhouse members are encouraged to participate in activities and programs as well as the day to day running of the facility. Members are made to feel welcome, that their attendance is anticipated, and it is recognised that their participation makes a valuable contribution (Schizophrenia Fellowship of Western Australia Inc. and Curtin University, 1996).

Benefits of Clubhouse participation include peer-support (Lorikeet self-study, 1997), reduced hospital recidivism rates (Wilkinson, 1992), and access to advocacy services and transitional employment programs (Macias, Jackson, Schroeder, & Wang, 1999). Research on expressed emotion, a measure of the emotional quality of family life, also found involvements outside the home to be beneficial to psychological well being. Specifically, people with schizophrenia who were involved in activities outside the family home had a reduced rate of relapse compared to a similar group who were in direct contact with family members for more than 35 hours per week (Brown, Birley & Wing, 1972).

This study is designed to examine whether active members of Lorikeet Clubhouse differ from inactive members on three psychological determinants: perceived level of expressed emotion, coping style and level of symptomatology.
1.2 Psychiatric rehabilitation

The management of mental illnesses has changed significantly in recent years and now recognises the integral role of psychiatric rehabilitation (Caldwell et al., 1994). Psychiatric rehabilitation involves treating the consequences of a mental illness rather than simply the symptoms of the illness, and is based on a recognition of the total impact of the disorder on a person's life (Anthony, 1993). In 1980, the World Health Organisation classified the consequences of diseases, and in doing so provided a conceptual framework for describing the impact of several mental illnesses (Anthony, 1993). It was recognised that mental illness can have far reaching limitations and secondary effects such as unemployment, social isolation, discrimination and poverty (Anthony, 1993).

The role of psychiatric rehabilitation in the management of mental illness gained increasing recognition in the 1970's when the de-institutionalisation of psychiatric facilities saw people with severe and persistent mental disabilities move into the community (Bachrach, 1992). This was in response to decreasing resources available to manage patients with long-term mental illnesses, increasing interest in the benefits of rehabilitation, and dissatisfaction with traditional forms of treatments which have historically had poor outcomes for conditions such as schizophrenia (Bachrach, 1992). The de-institutionalisation movement was formalised in 1959 with legislation that deemed that mental illness and retardation should no longer be grounds for
a person being removed from the community. The British Mental Health Act of 1959 supported “forms of training and social services which can be given without bringing patients into hospitals as inpatients or which make it possible to discharge them from hospital sooner” (Royal Commission, 1957, p.76 as cited in Bachrach, 1992). The new assumption was that people with a major mental illness should be helped to maintain themselves in the community as independently as possible.

In order to achieve these aims, management of severe mental illnesses shifted from focusing principally on symptom alleviation to addressing the complexities of a person’s residential, social, vocational and educational needs and preferences (Young & Ensing, 1999). There are several approaches to psychiatric rehabilitation which aim to address these needs. These approaches include the operant program model, the therapeutical model and setting modification practices.

The operant program model program provides rewards for rehabilitation targets such as self-care, home-management skills or social interaction skills. Often token economies are used as reinforcement and research has found useful improvements in target behaviours especially in self-care skills (Lavender & Watts, 1995).

The therapeutic community model incorporates individual accountability and democratic decision making in the management of a social group by staff and patients (Lavender & Watts, 1995) and includes services such as that provided at the Lorikeet Clubhouse. Patient activity and skill
levels tend to increase in response to increased autonomy and feelings of empowerment (Anthony, 1993).

The setting modification practice approach involves the analyses and modification of a rehabilitation setting to permit greater autonomous individual behaviour both within the group and in the wider community (Lavender & Watts, 1995).

1.3 Aims of psychiatric rehabilitation programs

Psychiatric rehabilitation programs aim to accommodate these psychological components of recovery and encourage the individual to develop to his or her fullest potential even with limitations (Bachrach, 1992). To be effective, a rehabilitation program should build on an individual’s strengths and encourage participation in the process. It is now recognised that the individual holds the key to his or her own recovery, with the role of the mental health professional being to facilitate the rehabilitation process. Often recovery happens without professional help as the individual may prefer to use his or her own support system. This might include self-help groups, families, friends, church, adult education or recreational groups (Anthony, 1993).

While traditional treatment of a mental illness was limited to pharmacotherapies to manage symptoms, rehabilitation addresses the secondary and tertiary effects of the illness (Bachrach, 1992). The secondary effects include adverse personal reactions to the illness and rehabilitation involves helping people to accept, understand and come to terms with their illnesses. Tertiary consequences include the social disabilities such as
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diminished social networks, stigma, poverty, unemployment and an absence of a place in society (Bachrach, 1992).

Psychiatric rehabilitation also stresses the importance of environmental factors in the care of individuals with long-term mental illnesses. It is essential that the patient’s capacities be adapted to environmental realities or that the environment be modified to suit the capacities of the patient (Bachrach, 1992).

1.4 Dimensions of psychiatric rehabilitation

Psychiatric rehabilitation can be seen as a process of adaptation whereby a person aims for increasingly higher levels of interpersonal functioning and personal satisfaction (Young & Ensing, 1999). Young and Ensing discuss the role of insight, rebuilding a sense of self, having a sense of hope, empowerment, social support and coping in the rehabilitation process. Two of these components, social support and coping are pertinent to this study and will be discussed in detail.

1.4.1 Social support

Social support refers to the mechanism by which interpersonal relationships protect people from the negative effects of stress (Kaplan, Sadock & Grebb, 1994). These relationships serve to foster competence, validate identity, and offer guidance and feedback, and mastery over one’s emotions (Young & Ensing, 1999). Research has consistently found a link between high levels of social support and lower levels of psychological distress (Anthony & Liberman, 1986).
There has been a rapid proliferation of support groups and self-help groups for persons with psychiatric disabilities since the 1980s (Mannion, Meisel, Solomon, & Draine, 1996). Support groups are presumed to be beneficial for several reasons. Establishing new friendships and acquaintances meets some of a person's social needs, and these new friendships were found to provide valuable role models for successfully coping with problems similar to their own (Mannion et al., 1996). Members claim reduced feelings of stigma and alienation amongst support group members as they often share similar disabilities and difficulties. Support groups aim to provide both formal and informal education, and to facilitate exchange of information amongst members (Mannion et al., 1996).

Recent research has systematically evaluated the role of community based support services in the prevention of re-hospitalisation (Song, Biegel & Johnsen, 1998). Song et al. used logistic regression to predict re-admission rates at a psychiatric hospital in a sample of 9367 patients. The predictor variables in this study included primary diagnosis, dual diagnosis, use of community based support services, previous hospital admissions, gender, race and age. Hospitalisation rates of participants were monitored for a two year period and the researchers found previous hospital admissions was the single most predictive variable in determining relapse, and this was followed by use of community based support services. Additionally, they found that people who used a greater amount of community based support services were less
likely to be hospitalised in the concurrent year and if hospitalised, had a reduced length of stay (Song et al., 1998).

1.4.2 Coping style

Coping is defined as "the process through which the individual manages the demands of the person-environment relationship that are appraised as stressful and the emotions they generate" (Lazarus & Folkman, 1984, p.19). The stress-vulnerability model of mental illness proposes that coping plays a vital role in buffering the potentiators and stressors that can often lead to psychiatric decompensation (Anthony & Liberman, 1986). Young and Ensing (1999) also found that being able to develop a set of individual coping mechanisms is an integral component of the rehabilitation process. Coping mechanisms include self-monitoring, whereby a person learns to identify and be aware of their reactions and stress levels in particular situations, establishing of routines to manage workloads, increased physical activity, and the use of social support networks (Young & Ensing, 1999).

In this research, coping is defined as a set of cognitive and affective actions that arise in response to a particular concern. These behaviours represent an attempt to restore the equilibrium or remove the turbulence for the individual (Frydenberg & Lewis, 1997).

The way in which an individual copes with stressors is of particular relevance in the rehabilitation setting (Donat et al., 1992). Individual differences in coping influence the resilience of an individual at risk of developing a mental illness, in particular the expression of the mental illness
and its long term course, and the quality of the inter-morbid adjustment (Donat et al., 1992).

1.5 Expressed emotion

While the aetiology of a psychiatric illness often remains unclear, research into factors associated with relapse has found important intervention variables (Donat, 1996). The rate of relapse for people with a mental illness is influenced by many factors, including the environment with which that person interacts (Donat, 1996). Brown et al. (1972) observed patients after treatment for schizophrenia and discovered that the degree to which patients managed in the community seemed to be associated with the kind of living environment to which they returned. They found that patients who experienced limited contact with their relatives, perhaps due to employment outside the home, fared better than patients who spent longer periods of time with their families. Subsequent studies looked at the aspects of the living situation that contributed most to patient outcomes. Results indicated that patients returning to homes high in emotional involvement were more likely to relapse than patients living in homes with lower levels of emotional involvement (Hooley, 1985). This association was further refined and it was found that one aspect of the living environment, the principal caregiver's level of "expressed emotion" is an important predictive variable for re-hospitalisation (Vaughn & Leff, 1976).

Expressed emotion (EE) is an indicator of a key relative's negative affect or intrusive over-concern toward the patient (Vaughan, 1989). Research replicating the earlier work of Brown et al. (1972) assessed the level of EE in
37 schizophrenic and 30 depressed patients using an abbreviated version of the Camberwell Family Interview with a key family member. Using a criticism threshold of seven critical comments, Vaughn and Leff (1976) found a 9-month relapse rate of 50% for patients returning to high EE homes compared to a 12% relapse rate for patients returning to low EE homes. This association between relapse and EE still held when the degree of behavioural disturbance and level of work impairment in the 2 years before admission were controlled statistically (Brown et al., 1972).

Additionally, their findings indicted that the relationship between relapse and EE was not unique to patients with schizophrenia. When the threshold was reduced from six or seven comments to two critical comments, a significant relationship emerged for depressed patients. Using the lower threshold, 67% of the depressed patients returning to high EE homes relapsed over the follow-up period compared to only 22% of depressed patients returning to low EE homes (Vaughn & Leff, 1976). These results suggested that depressed patients were even more vulnerable to the effects of relative’s critical comments. The researchers concluded that while there was a difference in relapse patterns of schizophrenic and depressed groups, it appeared that other psychiatric patients were also effected by the quality of their emotional relationships with key relatives (Vaughn & Leff, 1976).

The strength of association between EE and relapse has been found across cultures and other diagnostic groups, including bi-polar affective disorder, organic disorder, adjustment disorder, substance abuse and
personality disorder (Miklowitz, Goldstein, Nuetchterlein, Snyder, & Mintz, 1988; Hooley, Orley & Teasdale, 1986; Donat, 1996).

Data indicating that EE is related to relapse over an extended period of time come from a 2-year follow-up study by Leff and Vaughn (1981). Data were obtained on 25 of the 26 non-relapsed schizophrenic patients who participated in the original 1976 study, and the cumulative relapse rate for patients living in high EE homes was 62% compared to a 20% relapse rate for patients living in low EE homes (Leff & Vaughn, 1981).

1.5.1 The measurement of the EE

After confirmation of the initial findings regarding EE and relapse, the investigators explored ways to improve the rating of EE and to establish a reliable measure of the concept (Hooley, 1985). Brown and Rutter developed the Camberwell Family Interview (CFI) to measure the concept of EE (1966, as cited in Brown, et al., 1972). The CFI obtains information about events and activities in the home from a key relative and assesses the attitudes and feelings associated with these events. The original CFI takes 4-5 hours to administer and score. A shortened form of the CFI was developed by Vaughn and Leff (1976) that assesses the emotional climate in the home during the 3 month period prior to the patient’s admission and takes 1.5 to 2 hours to administer and score. The most crucial aspect of both interviews concerns the behaviour toward, and feelings expressed about the patient. A rating of EE is made based on these aspects of the interview (Hooley, 1985). The abbreviated version of
the CFI is currently the standard method of assessing EE against which alternative measures of EE are compared (Kazarian, 1992).

CFI ratings of relatives are based on five scales. These are criticism, hostility, emotional over-involvement, warmth and positive remarks. Later research has found that the warmth and positive remarks scales add little to the predictive power of EE. The critical comments and emotional over-involvement sub-scales were found to contribute most to the overall measure of EE (Hooley, 1985).

1.5.2 The perception of expressed emotion

The use of EE measures in clinical settings has been limited due to the time required to train interviewers and raters, and to administer and score the CFI (Kazarian, Cole, Malla, & Baker, 1990). The availability of key relatives has also often limited the applicability of this EE measure (Cole & Kazarian, 1988).

Cole and Kazarian (1988) designed the Level of Expressed Emotion Scale (LEE) questionnaire that is intended to assess a person’s perception of EE, rather than assess directly the number of critical comments and amount of intrusive over-involvement expressed by a family member. The measure is based on the conceptual framework outlined by Vaughn and Leff and designed to measure the level of perceived EE in a person’s most influential relationship (Cole & Kazarian, 1988).

Kavanagh (1992) describes the perception of EE to be an important factor in the vicious cycle of negative interaction often experienced in families
experiencing a mental illness in a family member. He proposes an interactive model whereby the expression of critical comments and/or emotional over-involvement can serve to exacerbate a patient’s symptoms, which in turn creates more stress and tension which often leads to increased expressed emotion. The interpretation that each person makes of the other’s behaviour can either moderate or intensify the situation. Hooley and Teasdale (1989) found that perceived criticism was even more predictive of relapse in depressed patients than the amount of EE expressed by the relative during the CFI.

An advantage of the LEE is that it is not necessary to interview a person’s relative, and the questionnaire approach is simpler and easier to score (Gerlsma, van der Lubbe, & van Nieuwenhuizen, 1992). A disadvantage is the introduction of possible response bias by shifting the focus from experimenter or observer ratings of EE to the patient’s perceptions of EE. However changing the source of information from relative to patient has been found to not decrease the relevance of the concept in relation to psychiatric relapse (Gerlsma et al., 1992). Some researchers have suggested that the perception of EE may provide important additional information: a discrepancy between a person’s perception of EE and an observer-experimenter rating of EE has implications for intervention. In these cases a patient-focused approach to treatment may be more relevant than a family-focused approach (Hooley & Teasdale, 1989).
1.5.3 The measurement of perceived emotion

While perceived EE is a different construct than EE as assessed by the CFI, both are designed to measure the concept of EE proposed by Vaughn and Leff in 1981. The original associations between EE and relapse appear to apply equally to perceived EE and relapse (Cole & Kazarian, 1988). Initial research compared the LEE with the Influential Relationships Questionnaire (IRQ) (Baker et al., 1984 as cited in Cole & Kazarian, 1988) in a sample of 46 schizophrenic outpatients. The IRQ measures the presence of over-protection, criticism, and lack of care. The overall correlation between these scales was $r = .86$ suggesting that both tap an underlying common factor, probably EE. This claim was made as both measures were intended to measure EE (Cole & Kazarian, 1988).

Subsequent research compared the LEE and IRQ with the CFI (Kazarian et al., 1990). In this study, fifteen schizophrenic patients completed the LEE and IRQ and 23 of their relatives completed the CFI, LEE and IRQ. Relatives were instructed to rate their attitudes and behaviour toward the patient over the past three months. Results of this study showed one sub-scale of the IRQ had a significant correlation with the CFI Emotional Over-involvement scale. However, several sub-scales of the LEE showed significant correlations with the Warmth and Critical comments scales of the CFI, supporting the validity of LEE (Kazarian et al., 1990). Additionally, the results of this study suggested that the patient’s perceptions of EE and the relatives
perceptions of their own attitudes and behaviour mirror the more objective ratings of the CFI (Kazarian et al., 1990).

In 1996, Donat examined the relationship between perceived EE and re-hospitalisation rates in a sample of 188 psychiatrically impaired people who were discharged from a psychiatric hospital using all sub-scales of the LEE. A Cox regression analysis revealed a significant relationship between LEE scores and re-hospitalisation (Chi square (4) = 9.579, p<.05) (Donat, 1996). A stepwise procedure was conducted in a second analysis in order to determine the single most valuable sub-scale for the prediction of relapse. Of the four component scales of the LEE, only the Intrusiveness sub-scale was found to be a significant predictor of re-hospitalisation. To further evaluate the relative predictive power of the Intrusiveness sub-scale, another exploratory stepwise regression was conducted. The variables for this regression were the LEE Intrusiveness sub-scale, age, sex, education, race, axis I diagnosis, score on the Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983), scores on an abbreviated version of the Symptom Checklist-90, and alcohol/drug abuse/dependence (yes/no). The alcohol/drug abuse/dependence variable was single best predictor of re-hospitalisation, and the LEE intrusiveness scale was the second most powerful predictor (Donat, 1996). While these results need to be replicated to confirm these findings, the author concluded that the effect of LEE scores on re-hospitalisation parallels results found in similar studies using the CFI. This study supports the use of the LEE as a measure of psychosocial
features that have been found to have an impact on the recovery of people with a psychiatric illness (Donat, 1996).

### 1.6 Factors influencing psychiatric relapse

Research has found a strong association between EE and relapse even when factors such as clinical condition, degree of disturbance, and extent of impairment have been statistically controlled (Hooley, 1985). There are data that suggest that three factors influence the emotional involvement aspect of EE. These are medication, the amount of face to face contact between the patient and relative, and independent life events (Hooley, 1985).

In Vaughn and Leff’s 1976 study, medication was found to serve as a protective factor for patients living in a high EE home. Specifically, 78% of patients not taking medication and living in high EE homes relapsed, compared to only 25% of those living in high EE environments but taking medication (Vaughn & Leff, 1976).

A similar protective effect also appears to operate when patients spend reduced amounts of time (less than 35 hours per week) with highly critical or emotionally over-involved relatives. These findings were also found in earlier research by Brown et al., (1962 as cited in Hooley, 1985), Brown et al., (1972) and Vaughn and Leff (1976). However, these protective effects of reduced contact and medication only appear to reduce relapse rates in high EE homes; low EE relapse rates seem to be unaffected by these factors (Hooley, 1985).

Leff and Vaughn (1981) also found that independent life events interact with relatives’ emotional attitudes in the period prior to relapse. Their research
found that relapse was often preceded by either a period of high expressed emotion in the household or an elevated number of independent life events. This suggests that both may constitute unacceptable forms of stress for psychiatrically vulnerable individuals (Hooley, 1985). Therefore, the individual’s coping strategies and resources would appear to be important variables in maintaining psychological well being.

Donat et al. (1992) found that coping styles, self-reported symptoms, and perceptions of expressed emotion were often overlooked in planning the treatment and rehabilitation outcomes of psychiatric patients. These differences influence the expression, time of onset, long-term course and inter-morbid adjustment of patients. These authors found two variables to be of clinical importance in the planning and implementation of treatment strategies; firstly the patients’ perception of EE in the home and the second variable being the typical coping pattern used in stressful situations (Donat et al., 1992).

1.7 The Foundation House (Clubhouse) model of rehabilitation

The Foundation House (Clubhouse) model was founded in 1948 in Manhattan by former psychiatric patients and aims to address many of the secondary and tertiary disabilities associated with chronic mental illness. The Clubhouse is a place where people can spend time and engage in meaningful activities outside the family home (Macias et al., 1999).

The Clubhouse provides support services for people with psychiatric disabilities, and membership is available to any person who has had a
psychiatric illness. The Clubhouse Model is centred on the work ordered day, and operates on average for eight hours per day, five days per week. Members are engaged voluntarily in meaningful pre-vocational tasks that enable the Clubhouse to function successfully and are supported by generalist staff. Consumers are not patients or clients, but members with choices in work activities, choices regarding the selection of a staff worker, access to all records, and a life-time right of membership and support services. This is balanced with responsibilities involving the running of the Clubhouse and taking responsibility for its survival. The Clubhouse sends a clear message to its members that they are capable, competent and needed (Macias et al., 1999).

Through this active participation, Clubhouse members can regain independence and self-esteem, attributes that are often in decline during a psychiatric illness. The Clubhouse provides valuable psychosocial and emotional support, and this encourages the re-establishment of independent functioning.

This model of rehabilitation addressed many of the criticisms of rehabilitation. These criticisms are that psychiatric rehabilitation has often been seen as anti-medical and anti-psychiatric in practice, and not recognising the role of pharmacology in managing symptoms (Bachrach, 1992). Psychiatric rehabilitation and psychiatric treatment shared common ground in the caring for long-term patients and the benefits that each discipline offers the patient needs to be considered (Bachrach, 1992). Other criticisms include having unrealistic expectations of patients or viewing employment as the goal.
of rehabilitation, and through gate-keeping practices being selective about those individuals who are offered rehabilitation. However, in a recent survey of 173 Clubhouses in the United States, eighty percent of respondent Clubhouses reported providing a work-ordered day, transitional employment, independent employment, supported education, transportation, and assistance with housing, finances, individual advocacy and social activities (Macias et al., 1999). Other research has evaluated the effect of Clubhouse membership on psychiatric hospitalisation recidivism rates of its members. The results indicate a 48% reduction in the number of hospital admissions and a shorter admission time for active members (Wilkinson, 1992). This suggests that Clubhouse members enjoy many psychological benefits from being involved in such an organisation (Macias et al., 1999). Today there are 340 Foundation House based Clubhouses around the world, which are linked to the International Centre for Clubhouse Development (ICCD). This centre provides training, program development and monitors standards in the Clubhouses (Macias et al., 1999).

1.7.1 The Lorikeet Clubhouse

Lorikeet Clubhouse operates on the Fountain House Clubhouse Model that was first adopted in Australia in 1991 at Bromham Place, Richmond, Victoria. The Lorikeet Clubhouse is situated in Stubbs Terrace, Shenton Park and was established in 1994 by the Schizophrenia Fellowship of Western Australia. In keeping with the Clubhouse guidelines, no formal interventions or therapies are undertaken at the Clubhouse (Schizophrenia Fellowship of
Western Australia Inc. and Curtin University, 1996) and the Clubhouse is not involved in the medical management of patients. There are currently 6 paid staff, and 350 members of whom 70 are currently active members. On average, 20 members attend the Clubhouse daily (Lorikeet Clubhouse Self-Study, 1997).

1.8 Rationale and objectives

The Schizophrenia Fellowship of Western Australia is interested in learning whether differences exist between active and inactive members in order to address the high proportion of members who are currently inactive. Given the findings of psychiatric rehabilitation studies that are discussed earlier in this report, it is expected that active members will have lower levels of symptomatology. Further exploratory research was conducted to determine if the levels of expressed emotion at home and in the Clubhouse or coping styles could explain the expected symptomatology differences. It is anticipated that the results of this study may identify training or recruitment needs that could ultimately lead to more active participation at the Clubhouse. While there may be many personality factors influencing a person’s decision to be involved in a Clubhouse, finite resources have limited the scope of this study.

Several studies have concluded that psychological well being after a hospital admission is related to the emotional climate of that person’s home environment (Donat, 1996). However, no previous studies have compared a person’s perception of expressed emotion in the home and in another setting. This study compares a person’s perception of expressed emotion at home and
at the Lorikeet Clubhouse and extends previous research which has established a relationship between perception of EE in the home and relapse (Donat, 1996) and reduced hospital recidivism rates for Clubhouse members (Wilkinson, 1992). In this study, perceived expressed emotion and symptomatology were measured in order to determine if Club membership serves as a protective factor for patients experiencing high EE in the home.

In addition, various psychological benefits have been found to be associated with participation in rehabilitation services and this study aimed to replicate the previous findings by comparing levels of symptomatology of active and inactive Clubhouse members. Additionally, this study explored whether any coping style predominates amongst active and inactive Clubhouse members, and whether there was a relationship between coping style and either symptomatology or perceived EE in the home.

It is envisaged that the current research would add to the understanding of the rehabilitation of people with chronic mental illnesses. This has practical consequences for the management and discharge plans of this group and has implications for their well being. This research aims to highlight any psychological differences between active and inactive members at the Lorikeet Clubhouse.
1.9 Hypotheses

1. Active participants who attend the Lorikeet Clubhouse at least once per week will have fewer symptoms of psychiatric illness and distress as measured by the BSI than inactive members.

2. Given the philosophies and aims of the Clubhouse to encourage rehabilitation and to support members, the level of perceived EE at the Clubhouse will be less than the level of perceived EE at home.

3. It is expected that those participants who report high levels of EE at home and who are active members of the Clubhouse will experience lower levels of symptomatology than participants who report high EE at home who are not active members.

4. In addition to the above hypotheses, exploratory analyses examining the four coping styles identified by the CSA will determine if there are predominant coping styles used by active and inactive members.
CHAPTER 2

METHOD

2.1 Participants

In total, 47 members (24 males and 23 females) of the Lorikeet Clubhouse participated in this study, all of whom had a history of mental illness. Sex distributions between active and inactive members were not significant \( \text{t}(145) = .134, \ p > .05 \)

The criteria for inclusion in this study were

i. to be a registered member of the Lorikeet Clubhouse in Shenton Park,
   and

ii. currently on their mailing list.

Membership at the Clubhouse is open to any person who has experienced a form of mental illness.

Participants were divided into two groups-

Group 1: the active members who regularly attended the Clubhouse once a week or more frequently \((n=22 \text{ participants})\).

Group 2: the inactive members who attended the Clubhouse a few times a month or less frequently \((n=25 \text{ participants})\).

The overall participation rate was 17.1\% with 275 questionnaires being distributed by mail or in person at the Clubhouse. The participation rate for the active group was 31.4\%, and 10.9\% for the inactive group.
Participants ranged in age from 17 to 53 years ($M = 38.2, SD = 9.3$). The average age for the active group was 34.5 years ($SD = 10.4$) and this was significantly younger than the inactive group ($M = 41.5, SD = 6.8$), $t(1,45) = -2.744$, $p<.05$. The majority of participants lived alone. Table 2 summarises these living arrangements.

<table>
<thead>
<tr>
<th>Living Arrangements</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>4</td>
<td>8.5</td>
</tr>
<tr>
<td>Partner</td>
<td>13</td>
<td>27.7</td>
</tr>
<tr>
<td>Friends</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Alone</td>
<td>24</td>
<td>51.1</td>
</tr>
<tr>
<td>Supported accommodation</td>
<td>2</td>
<td>4.3</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>8.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>47</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

No significant differences were found between active and inactive members in relation to age at onset of the mental illness, duration of illness, time since last presentation of illness, current medication, or use of ongoing psychiatric care. Table 2 summarises these findings.
### Table 2
Sociodemographic Characteristics of Participants

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Active</th>
<th>Inactive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>11</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>12</td>
<td>23</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>34.5</td>
<td>41.5</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>10.4</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td></td>
<td>17-53</td>
</tr>
<tr>
<td><strong>Age at onset of mental illness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>23.7</td>
<td>25.1</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>8.9</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td></td>
<td>14-43</td>
</tr>
<tr>
<td><strong>Time since last presentation (mths)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>45.8</td>
<td>49.7</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>63.3</td>
<td>58.3</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td></td>
<td>0-220</td>
</tr>
<tr>
<td><strong>Duration of mental illness (mths)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>13.3</td>
<td>19.5</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>33.7</td>
<td>39.6</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td></td>
<td>0.1-156</td>
</tr>
<tr>
<td>Currently on medication</td>
<td>77.3%</td>
<td>83.3%</td>
<td>80.4%</td>
</tr>
<tr>
<td>Ongoing psychiatric care</td>
<td>77.3%</td>
<td>87.5%</td>
<td>82.6%</td>
</tr>
</tbody>
</table>

#### 2.2 Measures

Three validated and recognised questionnaires were used in this study, in addition to a demographic information questionnaire developed by the researcher.

##### 2.2.1 The Brief Symptom Inventory

The Brief Symptom Inventory (BSI: Derogatis, 1993) is a 53-item self-report inventory designed to reflect the psychological symptom patterns of psychiatric outpatients, medical patients and the community non-patient population. It is a brief form of the SCL-90-R. Each item of the BSI is rated
on a five-point scale of distress (0-4), rating from ‘not at all’ (0) to ‘extremely’ (4) at either poles of the scale (Derogatis, 1993). From the BSI a profile reflecting nine primary symptoms and three global indices of distress can be obtained. The BSI takes approximately ten minutes to complete, and reflects a single, point-in-time assessment of an individual’s clinical status (Derogatis, 1993). The Schizophrenia Fellowship suggested that short forms of this and other psychological measures were used where possible due to the amount of time and concentration required to complete the longer versions. Given the high proportion of participants who receive regular psychiatric care and who currently take medication for their mental illness, the psychiatric outpatient norms were used in this study.

Test-retest reliability coefficients for the BSI range from .68 to .91 for the symptom dimension scales. The coefficients range from .80 to .90 for the global indices of distress. Independent investigation of the internal consistency of the measure have found alpha coefficients of all nine dimensions and global indices in the range of alpha =.78 to .83.

Convergent validity had been demonstrated with the Clinical, Wiggins and Tyron scales of the MMPI. These correlation coefficients have ranged from $r = .32$ to .72. Correlation between the BSI and the SCL-90-R ranged from $r = .92$ to .99 suggesting that for psychiatric populations these items measure the same construct (Derogatis, 1993).
2.2.2 The Level of Expressed Emotion Scale

The Level of Expressed Emotion (LEE: Cole & Kazarian, 1988) is a 60-item true-false inventory designed to provide an index of the perceived emotional climate in a person's influential relationships. The LEE measures four dimensions of expressed emotion: intrusiveness, emotional response, attitude toward illness and tolerance/expectations. A 22-item short version is also available and was used in this research at the request of the Schizophrenia Fellowship Ethics Committee. This measure does not require the participation of a key relative, as the patient's perception of expressed emotion is assessed (Gerlsma & Hale, 1997). This reduces training, administration and scoring time associated with the Camberwell Family Interview, the benchmark measure of expressed emotion (Cole & Kazarian, 1988).

Psychometric evaluation of the LEE has found an acceptable level of internal consistency (KR-20 = .84-.95) and temporal stability (Pearson r = .67-.82) over a six-week period (Cole & Kazarian, 1988). Gerlsma and Hale (1997) found the LEE to be predictive of symptomatology and coping at a six-month follow-up, suggesting construct validity. Additionally, both versions of the LEE have been demonstrated to correlate with the total score of the Camberwell Family Interview, supporting the validity of the LEE (Kazarian et al., 1990). Other research has suggested that some important components of the LEE, such as the patient's perception of relatives attitudes and behaviours, and the relatives' self-perceptions, mirror the more objective ratings of the CFI (Donat, 1996).
Lower correlations were found between individual scales of the Total LEE score and sub-scales of the CFI. The total LEE score and the Emotional Over-involvement scale has a correlation of $r = .04$, Total LEE and the Warmth sub-scale correlates at $r = .16$, and the Critical Comments sub-scale correlates at $r = .32$ (Kazarian et al., 1990). The authors report that this reflects the different constructs that the LEE and CFI are measuring (Kazarian et al., 1990). The LEE is designed to assess the four interaction patterns identified by Vaughn and Leff (1981) as common in high EE environments (Startup, 1999). Gerlsma et al. (1992) evaluated the factor structure and psychometric qualities of the LEE and failed to retrieve the four domains identified by Vaughn and Leff (1981 as cited in Startup, 1999). Instead they found three moderately intercorrelated factors: lack of emotional support, intrusiveness and irritability with correlations ranging from $r=0.25$ to $r=0.53$ (Startup, 1999). Internal consistencies for these sub-scales ranged from $\alpha = 0.78$ to 0.91 (Startup, 1999). Gerlsma and Hale (1997) found strong relationships between the LEE and depressive symptomatology, relational satisfaction and coping styles. Startup (1999) confirmed the factor structure reported by Gerlsma et al. (1992) with an independent sample and found internal consistencies of the sub-scales ranging from $\alpha =0.83$ to 0.88 and to a total score $\alpha =0.92$, and good retest reliabilities at 2-month interval. Startup suggests that the test structure could be improved with two items having loadings with factors other than those reported by Gerlsma et al. (1992 as cited in Startup, 1999). A shortcoming of greater concern that was identified by Startup (1999) is that the LEE scale appears not
to include items pertaining to perceived criticism, despite this construct being a
central component of EE (Vaughn and Leff, 1981).

Despite the recently identified limitations of the LEE (Startup, 1999),
this measure was considered the most appropriate measure to assess EE, given
that the Ethics Committee of Schizophrenia Fellowship would not permit the
involvement of family members in this research.

2.2.3 The Coping Scale of Adults

The short form of the Coping Scale For Adults (CSA; Frydenberg &
Lewis, 1993) is a 20-item self-report measure designed to assess a number of
distinct coping strategies. The full version of the CSA consists of 74 items.
This measure was normed on Australian populations. Respondents rate the
items using a five-point likert scale. Responses to the CSA are summarised
into eighteen common coping strategies and four coping styles. These coping
styles are: Dealing independently with the problem, Non-productive coping,
Optimism, and Sharing.

Item reliability analysis showed test-retest correlations of $r=0.58$
(p<.001) over a fourteen day period, suggesting moderate temporal stability of
items (Frydenberg & Lewis, 1993). An analysis of consistency of the CSA for
the 18 identified coping strategies showed alpha coefficients ranging from
0.69 to 0.92. Scale inter-correlations suggest that the scales are sufficiently
distinct to warrant separate use (Frydenberg & Lewis, 1993).
2.3 Procedure

Subjects for this research were obtained through the Lorikeet Clubhouse in Shenton Park. The Chief Executive Officer of the parent body, the Schizophrenia Fellowship of W.A. was contacted regarding the proposed research, which was then reviewed by members of that body's Management Committee. Approval to conduct this research was received by the ethics committee of the university and by the Management Committee of the Schizophrenia Fellowship of W.A.

The study was then promoted in the Clubhouse monthly newsletter, and the researcher received feedback from staff members in relation to data collection methods and questionnaire format. The researcher then attended Clubhouse team meetings to introduce the research and answer concerns over individual involvement.

Members attending the Clubhouse were given the information sheet and questionnaire and invited to participate in the study. Questionnaires were completed anonymously, and stored securely until collected by the researcher. Members who had not attended the Clubhouse during the data collection time were sent the information sheet and questionnaire by mail, and invited to participate in the study by returning the completed questionnaire in a self-addressed envelope to the Clubhouse.
Chapter 3

RESULTS

3.1 Testing of Assumptions

The assumptions for univariate and multivariate analysis were met before data analysis. The individual dependent variables were normally distributed. The Box’s M test for multivariate homogeneity of variance indicated that the assumption of homogeneity of dispersion was not violated. Levene’s test of equality of variance indicated homogenous group variances.

3.2 Measure of Symptomatology

A one-way between groups ANOVA was conducted to determine if differences existed on the measure of symptomatology between active and inactive members. Due to incomplete responses, four questionnaires were not used in this analysis of total BSI score. The analysis showed non-significant effects for group ($F (1,42) = .560, p = .458$). While there was no effect for the whole sample, exploratory analyses were conducted with subsections of the population to determine if interaction effects existed. Additional categorical independent variables of sex, age at onset of illness, time since last presentation of illness and the duration of illness were created in order to determine whether these demographic factors accounted for any differences. The categories were selected to ensure maximum analytical power and represent meaningful
clinical points of analyses. These categories are included in Appendix 1. These analyses did not show any significant interaction effects.

A correlation analysis indicated that scores on the BSI were correlated with the demographic variable of age at onset of psychiatric illness ($r = .332$, $p < .05$). Twelve additional correlational analyses among the dependent variables found one significant correlation between non-productive coping style and scores on the BSI ($r = .344$, $p < .05$).

### 3.3 Measure of Expressed Emotion at the Clubhouse

A one-way ANOVA indicated that active and inactive members did not differ on their perceptions of EE in the Clubhouse ($F (1, 44) = .904, p = .347$). Analyses were conducted to determine if there was an interaction effect between the demographic variables of sex, age at onset of illness, time since last presentation or duration of illness and group for the perceived levels of EE at the Clubhouse. Of the four interactions examined, there was only one significant interaction between group and the time since last presentation of illness variable for level of perceived EE at the Clubhouse ($F (2, 42) = 3.831$, $p = .031$). Correlational analysis revealed that the level of perceived EE at the Clubhouse was correlated to the demographic variable of time since last presentation of psychiatric illness ($r = .336$, $p < .05$).
Table 3
Mean and standard deviations of Levels of Expressed Emotion at the Clubhouse

<table>
<thead>
<tr>
<th>Time since last presentation</th>
<th>0-12 months</th>
<th>13-48 months</th>
<th>49+ months</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Active</td>
<td>1.87</td>
<td>1.25</td>
<td>4.14</td>
<td>4.37</td>
</tr>
<tr>
<td>Inactive</td>
<td>1.20</td>
<td>1.79</td>
<td>1.31</td>
<td>1.80</td>
</tr>
<tr>
<td>Total</td>
<td>1.61</td>
<td>1.44</td>
<td>2.30</td>
<td>3.16</td>
</tr>
</tbody>
</table>

3.4 Measure of Expressed Emotion in the home

A one-way ANOVA indicated group differences were not significant with active and inactive members not differing on their perceptions of EE in the home ($F(1,44) = .007$, $p = .932$). Table 4 summarises the mean and standard deviations of perceived EE scores in the home. Analyses were conducted to determine if there was an interaction effect between demographic variables and perceived levels of EE at home. There were no interaction effects for any of the demographic variables of sex, age at onset of illness, time since last presentation or duration of illness and the level of perceived EE at home. None of the four interaction effects examined were significant and there were no trends in the data suggesting possible interaction effects would be present with increased power.
The role of Clubhouse in psychiatric rehabilitation

Table 4
Levels of Expressed Emotion at Home

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>6.59</td>
<td>4.42</td>
<td>0-14</td>
</tr>
<tr>
<td>Inactive</td>
<td>6.71</td>
<td>4.83</td>
<td>0-18</td>
</tr>
<tr>
<td>Total</td>
<td>6.65</td>
<td>4.59</td>
<td></td>
</tr>
</tbody>
</table>

It was hypothesised that those respondents who experience high levels of perceived EE at home and who are active members of the Clubhouse will report lower levels of symptomatology than inactive members of the Clubhouse who perceive high levels of EE. The analysis to test this hypothesis did not reveal significant differences between the BSI scores, although the mean scores presented in Table 5 suggest that differences might be emerging between active and inactive members perceiving high levels of EE in the home. The scores of one participant were excluded due to incomplete data and an improbable pattern of item endorsement for those items that were completed.

Table 5
Mean BSI raw scores, standard deviations and cell counts of active and inactive Clubhouse members perceiving high and low levels of EE in the home

<table>
<thead>
<tr>
<th></th>
<th>Low EE M</th>
<th>SD</th>
<th>n</th>
<th>High EE M</th>
<th>SD</th>
<th>n</th>
<th>Total M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>48.2</td>
<td>44.1</td>
<td>17</td>
<td>39.6</td>
<td>26.7</td>
<td>5</td>
<td>46.3</td>
<td>40.4</td>
<td>22</td>
</tr>
<tr>
<td>Inactive</td>
<td>57.6</td>
<td>40.7</td>
<td>16</td>
<td>58.5</td>
<td>51.7</td>
<td>8</td>
<td>57.8</td>
<td>43.5</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>52.7</td>
<td>42.1</td>
<td>33</td>
<td>51.2</td>
<td>43.4</td>
<td>13</td>
<td>52.3</td>
<td>42.0</td>
<td>46</td>
</tr>
</tbody>
</table>
3.5 Comparison of Expressed Emotion at Home and Expressed Emotion at the Clubhouse

A paired samples t-test indicated a significant difference between the perceived levels of expressed emotion in the home and in the Clubhouse (t = -7.04, p<.05). Clubhouse members perceived a lower level of perceived EE in the Clubhouse.

Given that the LEE is a self-report measure, it is possible that individual perceptual differences or personality factors may influence response style. In order to ascertain that the LEE scores were reflecting aspects of the environment rather than irrelevant individual differences, a correlation analysis was done between EE in the home and EE at the Clubhouse. As each member reports levels of EE from the same Clubhouse environment and a unique home environment, a correlation approaching zero would be expected. Correlated scores would suggest that personality factors are influencing scores. The correlation analysis found a significant correlation between LEE at home and in the Clubhouse (r = .564, p<.01).

3.6 Measure of Coping Style

Four one-way between groups ANOVAs did not reveal significant differences between active and inactive groups on the measures of coping style (“Dealing with problem” F (1,44) = 1.959, p=.169, “Non-productive coping” F (1,44) = .154, p=.696, “Optimism” F (1,44) = .010, p=.921, “Sharing” F (1,44) = .000, p=.986). Analyses were conducted to determine if there was an interaction effect between demographic variables of sex, age at onset of
illness, time since last presentation or duration of illness and coping styles. Three of the sixteen interaction effects examined were significant. There was an interaction effect between group and age of onset of the mental illness for the "Sharing" coping style ($F(2, 44) = 4.150, p < .05$). The significant difference was between active and inactive members on this scale who reported an onset of their illness between ages 20-25 years. Another interaction effect was found for the "Sharing" scale between group and the time since last presentation of an illness ($F(2, 42) = 4.577, p < .05$). However this result needs to be interpreted with caution as the Levene’s test indicates that variance is not equal across groups. Correlational analysis found a relationship between the age of the respondents and scores on the sharing scale ($r = -.344, p < .05$). Table 6 summarises the means and standard deviations of the coping styles for active and inactive members.

<table>
<thead>
<tr>
<th>Group</th>
<th>Deal Problem M</th>
<th>Deal Problem SD</th>
<th>Non-product M</th>
<th>Non-product SD</th>
<th>Optimism M</th>
<th>Optimism SD</th>
<th>Sharing M</th>
<th>Sharing SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>63.7</td>
<td>11.4</td>
<td>50.2</td>
<td>16.1</td>
<td>65.9</td>
<td>15.0</td>
<td>67.7</td>
<td>28.1</td>
</tr>
<tr>
<td>Inactive</td>
<td>69.8</td>
<td>17.3</td>
<td>52.2</td>
<td>17.9</td>
<td>66.4</td>
<td>19.4</td>
<td>67.8</td>
<td>28.8</td>
</tr>
<tr>
<td>Total</td>
<td>66.9</td>
<td>14.9</td>
<td>51.3</td>
<td>16.9</td>
<td>66.1</td>
<td>17.3</td>
<td>67.8</td>
<td>28.2</td>
</tr>
</tbody>
</table>
Chapter 4

DISCUSSION

4.1 Symptomatology

Contrary to expectations, active members of Lorikeet Clubhouse did not report fewer symptoms of psychiatric illness and distress than did inactive members. Factors that might have contributed to this result are discussed below.

First, this research had a very low participation rate for both active and inactive members. According to records kept at the Clubhouse, there are 350 members, of whom 70 are currently active members, with an average of 20 members attending the Clubhouse daily. The response rate for the active members was 31.4%. Recent addresses were available for 280 of the inactive members, and 220 questionnaires were mailed to members. There were 25 questionnaires returned by inactive members that could be used in the data analysis. This gives a participation rate of 10.9%. Therefore, it is possible that the 47 respondents who participated in this research are not representative of the 350 members of the Clubhouse.

When compared to the psychiatric outpatient norms provided with the BSI, the T-scores of these participants suggest that they were less symptomatic than their cohorts. The psychiatric outpatient norms were used given that 80.4% of respondents regularly take psychotropic medication and 82.6% received ongoing psychiatric care. The T-score range of responses was $T = 30-70$ ($M=50$, $SD=10$) with 63 being the cut-off for clinical presentation of a
disorder. Using these norms, the pattern of item endorsement suggests that both active and inactive members have few psychiatric symptoms. The mean T-score for the active group is 42.2 (SD = 11.5) and 46.4 for the inactive group (SD = 12.2). This research hypothesised that active members would have fewer psychiatric symptoms, however the results also suggest that the inactive members who responded to the research are also higher functioning individuals. One explanation for these results may be that the inactive members in this research do not attend Clubhouse because they no longer need the psychosocial support. Additionally, demographic data suggests that many Clubhouse members have not experienced an episode of psychiatric illness for months or years, which may account for lower scores than the psychiatric outpatient norms. Therefore, a higher response rate from well-functioning inactive members could account for the lack of differences between the active and inactive groups.

Original Clubhouse recruitment procedures meant that many people became members of the Clubhouse without completing an orientation and with little understanding of the concept of a Clubhouse, the services available, and expectation of members. With the current records, it was not possible to differentiate between inactive members who attended regularly in the past and those who attended only once and did not return.

Attendance patterns may also mean that the active members are not a homogenous group. These patterns suggest a core of approximately 20 members who regularly attend the Clubhouse on at least a weekly basis and a
smaller number of respondents who attend less frequently. Similar patterns of attendance were found in the Lorikeet Clubhouse Evaluation (Schizophrenia Fellowship & Curtin University, 1996) which reported 60% of active members consistently attended 2-3 times per week. From the participation data collected, there appears to be considerable variation in the participation patterns of the active group members. There are approximately 20 active members who attend frequently and regularly, however only 45% of this group have a regular job at Lorikeet. In comparison, only 4% of the inactive members had a regular job. The reasons why only half of the members who attend at least weekly have a regular job at the Clubhouse needs to be explored further. There may be more apparent group differences between those with and those without a regular job at Lorikeet, and alternative criteria for distinguishing between members may need to be considered.

4.2 Expressed emotion

Those members of Lorikeet who participated in the research reported less EE at the Clubhouse than they did at home. This suggests that the Clubhouse is meeting the aims of providing appropriate psychosocial support to members in an environment with low amounts of criticism, emotional over-involvement and intrusiveness (Cole & Kazarian, 1988).

Analyses found no significant differences between active and inactive members on their perceptions of EE at the Clubhouse. Therefore it can be assumed that participation is not influenced by factors such as perceived hostility, criticism or emotional over-involvement within the Clubhouse.
Speculative explanations for significant results with higher LEE scores for inactive members may suggest training needs such as encouraging more peer support or modifying staff-member relations. Interaction effects did not reveal any clear trends relating to demographic variables and the level of EE at the Clubhouse. Similarly, there were no group differences in relation to the level of EE at home. It can be assumed that the level of perceived EE in the home does not influence membership at Lorikeet. Other explanations of significant results may suggest that members who perceived high EE in the home found attending Lorikeet to be a respite from a difficult home environment.

However, this study found a significant correlation between the perceived level of EE at home and at the Clubhouse. As there is no theoretical or logical account for a correlation between these measures, this relationship might suggest that scores on the LEE may be influenced by personality traits or perceptual style rather than objective measures of an environment. While Cole (1992) stated that the LEE had advantages over other measures of EE in that a respondent’s perception of EE was assessed, and that perception of EE was as important as the more objective measurement with the CFI, the limitations of self-report measures are well documented (Bordens & Abbott, 1991). Specifically, the validity of this measure is questionable given the correlation between theoretically unrelated environments. Future studies may benefit from counterbalancing the order of presentation of measures in the questionnaire to determine if the correlation found in this research is related to poor validity of the scale or context effects (Whitley, 1996).
4.3 Protective benefits of Clubhouse participation

The literature suggests that being involved in community support groups have psychological benefits for participants (Song, Biegel & Johnsen, 1998), and it was expected that active participation in the Clubhouse might provide protective benefits for those who perceived high EE in the home. The LEE has a cut-off for high EE at 9 endorsed items (Cole, 1992), however the mean LEE for active and inactive members was 6.59 and 6.71 respectively and only 28% (n=13) of respondents reported high levels of EE in the home. While the analysis did not find any significant results, there appears to be a trend emerging for members perceiving high amounts of EE in the home. The difference in BSI scores for this group appears much greater than this difference for the low EE group, and a larger sample size would have provided sufficient statistical power to detect any protective benefits for Clubhouse participation that might exist. A power analysis indicates that a sample size in excess of 70 participants is needed given the size of effects observed (Whitley, 1996).

4.4 Coping style and Clubhouse membership

Coping styles were investigated as a possible way to explain expected differences in the symptomatology of active and inactive members. The results found that there were no significant differences with the coping style “Dealing with the problem” for active and inactive members. Frydenberg and Lewis (1997) define this coping style as “encompassing working hard and solving the problem while maintaining a social dimension characterised by relaxing and
The role of Clubhouse in psychiatric rehabilitation

indulging in humorous diversions and physical recreation as well as attempting to improve the significant relationships in one’s life...and using these techniques to maintain self-esteem” (p. 36). There was an unexpected interaction effect that found inactive members aged between 17-35 years endorsed significantly more items on the “Dealing with problem”. This may suggest that the Clubhouse is attractive to younger members who are experiencing difficulties in managing their problems in a productive manner. No differences were found for the older age categories.

People who endorsed the “Sharing” coping style use strategies such as seeking professional help to deal with their problems, social action, seeking social support and not keeping the problem to themselves (Frydenberg and Lewis 1997). There was an interaction effect between group and the members whose age at the onset of their mental illness was 14-19 years for the dependent variable of “Sharing”. This suggests that active members with an early onset age were more likely to use “Sharing” techniques such as “Talk to others and give each other support”, “Go to meetings which look at the problems” and “Ask a professional person for help”. As such, Lorikeet membership may be attractive to those who find benefit from social interactions, especially in difficult times, and who first experienced their mental illness in adolescence and have adjusted to this. Inactive members tended to use more sharing techniques with later onset of their illness, however once the onset age was 26 years or later there were no differences between active and inactive members. This may suggest that most people use sharing
techniques at some stage and those involved in the Clubhouse with earlier presentation of their illness appear to use more of those strategies.

Another interaction effect was found for the demographic variable relating to time since the last presentation of the mental illness and the “Sharing” style. Active and inactive members did not differ on use of Sharing techniques when their most recent presentation of their mental illness was within the past 12 months, however group differences emerged when the time since presentation was greater than 12 months. Active members whose last presentation of an illness was between 1-4 years ago used more sharing techniques than inactive members did with a similar time since last presentation. However, when the time since presentation increased to 4-10 years ago, inactive members used more sharing techniques than active members did. This may indicate that most people use sharing techniques at some stage as a means to integrate and accept their mental illness, and people involved with the Lorikeet Clubhouse do this sooner after the presentation of their last episode of mental illness.

It should be emphasised, however, that the main analysis did not reveal significant differences in coping styles between active and inactive members, and there are no consistent findings when interpreting the twenty analyses for interaction effects. The significant interactions can be regarded as spurious findings unless future research replicates these results.
4.5 Conclusion

A low participation rate and difficulties with the definition of active membership meant that fewer conclusions could be made regarding the role of Lorikeet Clubhouse in psychiatric rehabilitation than might be desired.

This research found no significant differences between the BSI scores of active and inactive Clubhouse members. Additionally, there were no interaction effects for sex, age at onset of illness, time since last presentation of illness, or the duration of the mental illness.

Clubhouse members reported that there was less expressed emotion perceived at the Clubhouse than in their homes, and this suggests that staff and members are providing a supportive and non-judgemental environment. However, a correlation between the levels of perceived emotion at home and in the Clubhouse suggests that individual perceptual style rather than an objective measure of the actual environment might influence scores on the LEE.

No significant differences were found between the coping styles of active and inactive members. While some interaction effects were found, there were no clear trends emerging from these findings and the results would need to replicated in other studies before conclusions can be made.

This research aimed to quantify the reported benefits of Clubhouse participation, although no significant differences were found. A larger sample and more refined definition of membership may clarify these issues and further substantiate the role of Clubhouses in psychiatric rehabilitation.
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References


Appendix 1

Categories of Demographic Variables used as additional independent variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category 1</th>
<th>Category 2</th>
<th>Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at Onset</td>
<td>14-19 years</td>
<td>20-25 years</td>
<td>26-43 years</td>
</tr>
<tr>
<td>Duration of illness</td>
<td>0-2 months</td>
<td>3-156 months</td>
<td></td>
</tr>
<tr>
<td>Time since last presentation</td>
<td>0-12 months</td>
<td>13-48 months</td>
<td>49-220 months</td>
</tr>
</tbody>
</table>