TESTING A MODEL OF PSYCHOSOCIAL OUTCOMES AMONG ADULTS LIVING WITH MENTAL ILLNESS ACCESSING COMMUNITY-BASED SERVICES

by

Christina Mutschler
Bachelor of Arts, Honours, University of Regina, 2014

A thesis

presented to Ryerson University

in partial fulfillment of the
requirements for the degree of
Master of Arts
in the program of
Psychology

Ryerson University

Toronto, Ontario, Canada, 2017

AUTHOR'S DECLARATION FOR ELECTRONIC SUBMISSION OF A THESIS

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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

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

I understand that my thesis may be made electronically available to the public.

Abstract

Testing A Model Of Psychosocial Outcomes Among Adults Living With Mental Illness Accessing Community-Based Services
Christina Mutschler
Master of Arts, Psychology, Ryerson University, 2017

Psychosocial rehabilitation is an approach to recovery from mental illness that promotes skill development, self-determination, and social interaction. One specific type of psychosocial rehabilitation is the clubhouse model. Progress Place, an accredited clubhouse located in Toronto, Ontario recently developed a realist theory that identifies mechanisms of change that lead to recovery outcomes for members. The purpose of the present study was to measure mechanisms and outcomes quantitatively in order to validate the theory of change for the clubhouse model. A total of 168 members completed a self-report questionnaire measuring mechanism and outcome variables, as well as the effects of length and frequency of involvement. The data was analyzed using a hierarchical regression framework as well as mediation models. Results found a significant relationship between the mechanism and outcome variables. The results provide evidence that there are many mechanisms involved in recovery from severe mental illness.

Acknowledgements

I would like to express my deepest gratitude to my supervisor, Dr. Kelly McShane, who has been the most supportive, understanding, and patient supervisor that I could possible dream of. Her guidance and passion for research in the community has provided me with an invaluable experience that will provide a framework for my future academic pursuits. I would also like to thank Progress Place, especially Criss Habel-Brosek, for her continuous support in the current project. A very grateful thank you to the Progress Place members who became so invested in the current project. Without you this thesis would not have been possible.

Dedication

I dedicate my thesis work to my family and friends, who have provided me with the greatest support throughout my graduate career thus far. To my parents, thank you for your continuous support, through every challenge and success that I have had. Thank you to my brothers, Matthew and Michael, for continuously making me laugh with inside jokes and way too many Family Guy quotes; I will always be grateful. Dylan, thank you for your continuous support through every stressful moment and helping me think about something other than work – even if only for a few moments. Lastly, I would like to express my sincere gratitude to my amazing friends, the cohort, each and every one of you have a special place in my heart, and have made this entire journey possible.

Table of Contents

List of Tables

List of Figures

List of Appendices

Testing a Model of Psychosocial Outcomes Among Adults Living with Mental Illness Accessing Community-Based Services

Introduction

Psychosocial rehabilitation is an approach to recovery from mental illness that focuses on recognizing strengths, maximizing self-sufficiency, and long term recovery (Barton, 1999). The model promotes skill development, self-determination, employment, and development of the social network (Barton, 1999). Research on psychosocial rehabilitation programs has found that these factors individually have an effect on recovery, but generally research does not look at how all aspects of the psychosocial model, specifically the mechanisms that are involved in recovery, work as a whole. One specific type of psychosocial rehabilitation program is the clubhouse model. Clubhouses provide individuals living with severe mental illness opportunities to successfully live and work in their communities through a variety of services including vocational rehabilitation, employment opportunities, housing support services, case management, social and recreational programs, supported education, advocacy and crisis response services (International Center for Clubhouse Development [ICCD], 2015). Research on clubhouses has indicated that individual factors such as skill development, employment, and increased social networks are all important factors in recovery.

Progress Place is an accredited clubhouse and training base located in Toronto, Ontario. It recently developed a theory from a realist perspective that identified mechanisms of change and subjective outcomes of recovery that occur for members (Rouse, & McShane, 2013). Realist evaluation is a theory-based approach to evaluation, which focuses on identifying the context, outcomes, and underlying mechanisms that allow for changes and recovery to occur (Pawson & Tilley, 1997). The objective of the evaluation was to specify subjective outcomes, mechanisms

and the context under which the outcome-mechanism link can be achieved. The study used a mixed methods design comprising theory development and theory testing with members, staff, and board of directors. The model designed from this study found three models in which recovery outcomes can occur (see Appendix A). The first model involves the development of a subjective sense of feeling better and at peace. The model suggests that this outcome is achieved by the development of the following subjective mechanisms: acceptance, sense of respect and non-judgment; dignity and self-worth; reduced experience of stigma; independence and self-efficacy; relationship to others and reduced isolation; and a sense of belonging. The second outcome model involves the development of a feeling of personhood. This subjective outcome is achieved by the development of feelings of acceptance, sense of respect and non-judgment; dignity and self-worth; reduced experiences of stigma; relationship to others and reduced isolation; and a sense of belonging. The third model involves acquiring skills, which is developed through the mechanisms of independence and self-efficacy; and dignity and self-worth.

The subjective mechanisms and outcomes that were identified by the realist evaluation offer Progress Place a theory explaining how their members are benefitting from the clubhouse. The purpose of a realist evaluation is to hypothesize, create, and refine an existing program theory (Pawson and Tilley, 1997). The current realist evaluation began with the theory of psychosocial rehabilitation, which, alongside qualitative data, informed the creation of the CMO configurations. From the realist perspective, single evaluations cannot produce universally valid findings. Although members and staff discussed the mechanisms and outcomes as elements of change and recovery that occur for members, the program has yet to assess members quantitatively on these constructs involved in the model of change. Therefore, the purpose of the

present study was to refine and validate the pre-existing theory of psychosocial rehabilitation at Progress place. As well, consideration and examination of the length of involvement and frequency of usage of members was explored.

Psychosocial Rehabilitation

Psychosocial rehabilitation is an approach to mental illness recovery that contrasts with other types of rehabilitation that focus on symptom stabilization and acute care (Barton, 1999). The approach comes from the humanistic style of psychology in that it assumes that each person is capable of improving their level of functioning (Cnaan, Blankertz, Messinger, & Gardner, 1988). In a psychosocial rehabilitation center, service providers motivate clients towards better use of their potential social, emotional, mental, and working capacity (Cnaan et al., 1988). Psychosocial rehabilitation stresses that there is a difference between treatment, which focuses on symptoms and impairment, and rehabilitation, which focuses on an individual's strengths (Cnaan et al., 1988). The approach focuses on the strengths and abilities that will allow for independent functioning and fulfilling social roles (Cnaan et al., 1988). Therefore, the psychosocial approach believes that growth and recovery is a process that continuously occurs throughout each client's life.

Clubhouse Model of Psychosocial Rehabilitation

Clubhouse International, formerly known as the International Center for Clubhouse Development (ICCD) is an international non-profit organization that supports the creation of community-based clubhouses. Using a psychosocial rehabilitation approach, clubhouses provide individuals living with mental illness opportunities to successfully live and work in their communities through a variety of programs and services (ICCD, 2015). In order to attain accreditation by the ICCD as a registered clubhouse, clubhouses must follow the standards set

out by Clubhouse International. These standards include regulations about membership, relationships, space, the work- ordered day, employment opportunities, education, functions of the house, funding, governance, and administration. Clubhouse International suggests that clubhouses have "continuously demonstrated that people with mental illness can successfully live and work in their respective communities" (ICCD, 2015) which has been empirically supported by research evaluating the effectiveness of clubhouses. Cluhouses assist members in realizing their goals, maximizing interaction with the wider community, and enhancing quality of life (Raeburn, Schmied, Hungerford, & Cleary, 2014). Members are also expected to help run the clubhouse, either as a volunteer or paid employee, which is the focus of every clubhouse around the world (Macias et al., 1999).

Progress Place is open from Monday to Friday from 9am to 4pm for the work-ordered day; from 4pm to 8pm on weekdays, and 11-8pm on weekends and holidays it is open for social activities. Progress Place follows a psychosocial model in that they believe that their members are capable of expanding their own levels of functioning. At Progress Place, individuals gain empowerment through work by having choice, socializing, enabling confidence, and having a routine. Cnaan and colleagues outlined a variety of principles that define the psychosocial rehabilitation approach (1988). Clubhouses, including Progress Place, follow the principles of psychosocial rehabilitation as they provide services to their members.

Self-Determination. A key factor in psychosocial rehabilitation is self-determination (Cnaan et al., 1988). Psychosocial rehabilitation allows the client to make decisions and live by their own consequences, instead of having someone else make their decisions for them. Therefore, they are given the choice of how often they would like to attend, what kind of programming they would like to participate in, and what staff they would like to work with. This

allows clients to feel self-determination and autonomy over their lives. Previous research in psychosocial rehabilitation has found that the development of self-efficacy predicts the development of life satisfaction (Arns & Linney, 1993). Cnaan and colleges suggest that psychosocial programming should allow those with mental health symptoms to participate in all levels of the organization, including management, planning, policy-making, implementation and evaluation (1988).

Progress Place allows all members to have self-determination in that they are able to make choices about their lives. They choose when they want to come to the clubhouse, where they would like to work in the clubhouse, what kind of additional employment in the community they would like to take part in, and what type of social activities they want to participate in. Members who have integrated back into the community may visit the clubhouse to update the staff and other members on what they are doing. Although members are given their own choices as to their levels of participation, most gain a sense of community that they feel committed to.

Results from the realist evaluation found that individuals who utilize Progress Place have self-determination in a variety of areas in their lives. Because of the self-determination felt at Progress Place, mechanisms that were found to increase recovery outcomes included having greater independence and confidence in their decision-making. They felt they have more self-efficacy in making their own choices and have the skills in order to make plans, problem solve, and act independently. They stated that due to Progress Place they need much less support from family members and this makes them feel much more independent. Results of the realist evaluation found that self-determination results in the mechanism, independence and self-efficacy (Rouse & McShane, 2013).

Normalization. From the initial onset of mental health symptoms, individuals often lose

aspects of living a normal life. For example, individuals with mental illness often struggle to engage in family, school, work, and social life in the same manner they once could (Mandiberg & Edwards, 2013). Additionally, their lives are often overtaken by symptoms, treatment, and finding supports in the community (Mandiberg & Edwards, 2013). Psychosocial rehabilitation programs attempt to normalize the lives of those who have a severe mental illness. Normalization is achieved by providing work experiences, social events, adequate housing, opportunities to shop in regular stores, and to be active members in their communities (Cnaan et al., 1988). Research has indicated that individuals with mental illness believe that gaining employment is a normalizing experience that will help them feel less dependent on others (Mueser, Drake, & Bond, 1997). Additionally, those who have more control in their choice of housing and have greater housing quality have been found to have higher levels of subjective quality of life (Nelson, Sylvestre, Aubry, George, & Trainor, 2007). Although normalization results in better outcomes for individuals with severe mental illness, many individuals do not have the opportunity to live a normal lifestyle. Psychosocial rehabilitation programs offer activities that are reflective of a normal lifestyle to those who may not otherwise have access to them.

Progress Place offers a variety of services that help with normalization. The program holds partnerships with a variety of City of Toronto landlords to provide adequate housing for some of their members. Progress Place has access to 80 units for members who are mainly independent. Staff will assist the member in moving into the unit and will visit them occasionally based on need. Progress Place also has access to another 50 units that are for a homeless housing initiate. This type of housing is much more supportive and members who utilize have more intense mental health symptoms. In addition to housing, Progress Place offers employment and

social networks that also assist members in their transition into a traditional lifestyle.

By adopting the normalization values of psychosocial rehabilitation programs, Progress Place assists individuals in transitioning into a normal lifestyle. Results from the realist evaluation found that from participating at Progress Place, individuals stated that they are able to realize that they have value and worth as a person regardless of their mental health status. Normalization that occurs at Progress Place was found to engender the mechanism, dignity and self-worth, by reminding members that they matter and are needed (Rouse & McShane, 2013).

Social networks. Research has found that individuals with severe mental illness have a small or less satisfactory social network (Corrigan & Phelan, 2004). Therefore, they often suffer from social isolation and do not have enough resources to depend on during times of need. Further, the size of a social network is the best predictor for preventing future hospitalization (Corrigan & Phelan, 2004). Individuals with severe mental illness who have larger or more satisfactory social networks report higher quality of life and are more likely to experience factors associated with recovery (e.g., being goal oriented, having hope; Corrigan & Phelan, 2004). But, due to stigma associated with severe mental illness, individuals often have difficulty finding friend and professional networks. Individuals are often unable to obtain good jobs or acquire housing in their communities due to prejudice (Corrigan & Phelan, 2004). Therefore, family members are often the only source of support for individuals with severe mental illness (Cnaan et al., 1988). Promoting peer support is one way that psychosocial rehabilitations may help in providing more support to their clients. Additionally, the programs attempt to find meaningful work and appropriate housing for individuals with severe mental illness (Cnaan et al., 1988). By doing this, individuals have the opportunity to expand their social networks in order to provide them with support.

Strengthening the relationships and social networks of individuals with severe mental health issues is a goal of all psychosocial rehabilitation programs and specifically clubhouses. Clubhouses offer individuals with severe mental illness an environment that promotes a sense of community and belonging. Clubhouses provide a setting for members that include acceptance, equality, and social activities that promote the development of meaningful relationships. Peer support is an important aspect of building relationships in the clubhouse model because member and staff relationships are based on shared experiences, reciprocity, and equality (Biegel et al., 2013). Previous research has found that social interactions are one of the most attractive aspects of attending the clubhouse (Biegel et al., 2013). This same study found that after joining the clubhouse, members increased their social relationships, friendships, and access to social support (Biegel et al., 2013). Additionally, clubhouses have been found to support individuals in rebuilding their social networks and connecting with others in similar situations (Carolan, Onaga, Pernice-Duca, & Jimenez, 2011).

The promotion of social interactions at Progress Place was found to engender two separate mechanisms of changes in members. First, many members described feeling isolated due to living with a mental illness. They stated that Progress Place gives them an opportunity to interact with others in a variety of contexts. Due to their social interaction, they often feel reduced isolation and are able to establish interpersonal skills and relationships. The mechanism, relationships with others and reduced isolation, was identified as a key factor of how Progress Place assists members in recovery (Rouse & McShane, 2013). Beyond the feelings of reducing isolation, members also described having a sense of belonging and social connectedness at Progress Place. They described Progress Place as a family, full of people they can trust and

where they can fully be themselves. The mechanism, sense of belonging, was described to come from a mutual, reciprocal need that members have for each other (Rouse & McShane, 2013).

Reducing stigma. Stigmatization of individuals with severe mental illness has been found to affect many important areas of functioning. Due to the stigma that is felt by a majority of those with mental illness in the community, many psychosocial rehabilitation centers also attempt to combat stigma in order to support their well-being and integration in the community (Cnaan et al., 1988). Stigma has been found to lower self-esteem, make individuals less willing to begin treatment, and reduce the number of positive social interactions an individual has (Couture & Penn, 2003). Additionally, individuals with serious mental illness are less likely to have apartments leased to them, to be given job opportunities, and to be provided with appropriate health care (Couture & Penn, 2003).

Reducing stigma that is felt by individuals with severe mental illness is a goal of clubhouses around the world. Clubhouses reduce stigma by taking a psychosocial approach that suggests that members are capable of expanding their own levels of functioning. In the clubhouse model, there is no power differential between the staff and the members. Staff are participants in the clubhouse and have the same responsibilities as the members (Mandiberg & Edwards, 2013). Both groups work together to provide the services that are offered at the clubhouse. Members are encouraged to attend all programming meetings, staff meetings, and board meetings, so that all decisions can be made with their input (Mandiberg & Edwards, 2013). Clubhouses reinforce independence and autonomy that is often lost due to stigma from the community. Clubhouses may also put on stigma reducing workshops in their communities where members and staff can share their experiences with mental illness. This approach provides education to the community about what clubhouses are and the people who attend them.

Research has indicated that individuals who utilize clubhouses have less feelings of stigma compared to individuals who utilize other rehabilitation programs (Jung & Kim, 2012). When members do encounter stigma in the community, they may be better able to hinder the consequences due to the collective and collaborative identity that is created in the clubhouse environment (Mandiberg & Edwards, 2013).

Progress Place takes the approach of all clubhouses in that it produces an environment of support and collaborative in an attempt to reduce stigma. Progress Place also creates workshops for healthcare teams to promote awareness and reduce the stigma of mental illness. Members have the opportunity at these workshops to tell their story, describe what a mental illness is and how stigma affects them.

The realist evaluation at Progress Place indicated that the efforts to reduce stigma felt by members contributed to recovery. Members described that when they interact with people outside of Progress Place, or even at other mental health organizations, they often experience stigma and feel vulnerable. Conversely, members described that they feel safe and protected at Progress Place and that Progress Place is free from stigma and discrimination. One member described Progress Place as an "emotional oasis", noting that members not only feel reduced stigma, but they also feel a sense of responsibility in reducing stigma in the community. Therefore, the mechanism, reduction of stigma, was identified as a mechanism of change for members (Rouse & McShane, 2013).

Continuous support. Psychosocial rehabilitation programs take on a "no limits" approach, meaning that anyone who has ever had difficulties with mental illness is accepted into the program (Cnaan et al., 1988). In comparison to other mental health treatment facilities that require a diagnosis with symptoms currently present, the psychosocial rehabilitation approach

allows for individuals who are constantly in a state of recovery to receive the help and support that they need. The continuous care approach is reinforced by the accepting nature of the program. Therefore, the program allows for individuals who are on a continuous path of recovery to access services whenever they may need them. A former member is welcomed back at any time if they need support.

Results from the realist evaluation found that due to the continuous support from Progress Place, members experience acceptance, sense of respect, and non-judgment from both other members and staff regardless of their culture, sexual orientation, severity of mental illness, or any other marginalizing status. They stated that there is no judgment at Progress Place and both members and staff must work to suspend judgments about others to create an inclusive environment for all. Therefore, the members suggested that having feelings of acceptance, sense of respect, and non-judgment is a mechanism of change at Progress Place (Rouse & McShane, 2013).

Skill development. Psychosocial rehabilitation programs believe that skill development will assist individuals through their recovery by enabling them to live a more typical lifestyle (Cnaan et al., 1988). The approach suggests that many individuals with mental illness have not had the opportunity to learn the skills that are needed for living independently. This may be due to the unlearning of skills as their mental illness progressed, or they may have never received formal education due to the severity of their illness. Therefore, psychosocial programs focus on assessing for the presence or absence of skills, rather than clinical symptoms. Progress Place focuses on social skill training that consists of basic skills such as conversation, conflict resolution, relationships, and dealing with everyday interactions with doctors or employees. Progress Place also provides programming in employable skills such as courses in computer

learning and English programs that teach basic reading and writing skills. Research has indicated that individuals who lack formal education and independent skills are at a higher risk of being readmitted into a psychiatric institution (Cnaan et al., 1988). Additionally, education and skills that are developed from psychosocial rehabilitation protect against the exacerbation of psychiatric symptoms (Cnaan et al., 1988). Many partnerships exist between Progress Place and disability offices to help members get the support they need to go back to school. Other types of skill development at psychosocial rehabilitation programs may occur through education and employment.

Employment. Gaining meaningful employment is central to the process of recovery including gaining social networks; developing independence, self-esteem, and work related skills; and ultimately, integrating back into the community. Although the majority of individuals with severe mental health problems state that obtaining employment is a primary goal, only a small minority of those individuals are employed (Mueser et al., 1997). Developing work related skills and gaining meaningful employment is central to the psychosocial rehabilitation process. Research has found that those who work in competitive employment for extended periods of time show reduction in psychiatric symptoms (Bond et al., 2001). Additionally, individuals with mental illness who work have described their experience as meaningful to them and that it has helped with their recovery (Dunn, Wewiorski, & Rogers, 2008). Specifically, they stated that work leads to increased levels of pride and self-esteem, provides them with strategies to cope with mental health symptoms, and plays a central role in their identity (Dunn et al., 2008). Psychosocial rehabilitation addresses the importance of work in the recovery process for individuals with severe mental illness by providing many different opportunities for employment in the community.

At the center of every clubhouse is the foundation of the work ordered day where members work in collaboration with staff to provide services at the clubhouse. Members are involved in clerical work, food preparation, building maintenance, intake of new members, attendance recording, and telephone answering (Macias et al., 1999). Some clubhouses also employ members to assist with job training, accounting, and conducting research (Macias et al., 1999). A key aspect of the work ordered day is the idea of collaboration between staff and members (Raeburn et al., 2014). In order for the clubhouse to operate, it is vital for the members and staff to work in collaboration to provide services to all members (Raeburn et al., 2014).

In addition to the work ordered day, members of clubhouses are also given opportunities to work outside of the clubhouse in a transitional employment setting. The employment options consist of temporary, part-time jobs within the community that are allocated to members based on their current level of functioning (Bond, et al., 1999). The jobs are designed to assist individuals in getting back to the workplace and in doing so increase their self-confidence (Bond et al., 1999). Clubhouse staff will negotiate opportunities from workplaces in the community for entry-level jobs for their members (Bond et al., 1999).

Progress Place sets up group employment and transitional employment options for their members. Group employment is usually for individuals who have never had the opportunity to work due to the early development of mental illness. These types of employments may help an individual move towards longer work contracts. Transitional and supportive employments are other options members have at Progress Place. Although supportive and independent employment options are independent from Progress Place, they will post potential jobs in these areas for individuals who may be interested in applying. In supported employment, the clubhouse maintains a relationship with the working member and the employer (ICCD, 2015).

Members and staff work in partnership to find the best type, frequencies, and location of work and supports. In terms of independent employment, the clubhouse will not have a relationship with the employer, but members will continue to have all of the benefits from the clubhouse including advocacy, assistance in housing, clinical, and personal issues, and participation in social activities (ICCD, 2015).

Outcomes

The realist evaluation found that the outcome feeling better and at peace results from the development of the following subjective mechanisms: acceptance, sense of respect and non-judgment; dignity and self-worth; reduced experience of stigma; independence and self-efficacy; relationship to others and reduced isolation; and a sense of belonging. Members stated that they are always greeted with a smile, that they feel satisfied with themselves for being a member, and that they feel that they make a difference at Progress Place. Individuals described this outcome as a subjective reduction of their symptoms, as well as feeling at peace with their symptoms, when they attend Progress Place.

The other outcome path involves the development of a feeling of personhood. This subjective outcome is achieved by the development of feelings of acceptance, sense of respect and non-judgment; dignity and self-worth; reduced experiences of stigma; relationship to others and reduced isolation; and a sense of belonging. Members described personhood as if they are a person first, beyond the mental illness. Because of the psychosocial model at Progress Place, individuals are able to be their full self, regardless of their mental illness.

Results of the realist evaluation found that by engaging in programming at Progress Place, members acquire skills in a number of domains, including social, daily life, health, computers, employment, and general skills. Members endorsed that the development of these

skills are transferable to other settings and roles. Therefore, the outcome of acquiring skills was found to be an important recovery outcome for members.

Research Findings with Clubhouses

Many evaluations have been done on the effectiveness of clubhouses across the world. Results of these studies have indicated that members of clubhouses work more hours and attain a higher wage than individuals involved in other programs (Schonebaum et al., 2006). Additionally, members have been found to show improvement in schizophrenia symptoms (Tsang et al., 2010), as well as social relationships, friendships, and access to social support (Biegel et al., 2013). They report greater quality of life, self-esteem, and satisfaction (Gold, Macias, & Rodican, 2014) and have less feelings of stigma compared to individuals who utilize other rehabilitation programs (Jung & Kim, 2012). Although results appear to be positive, the clubhouse model has never been evaluated from a realist perspective as to how the principles guiding the model work to achieve these outcomes.

Because members must be given the opportunity to be active in all aspects of the clubhouse, it is important to include members in the evaluation of a clubhouse. Members must be central to the evaluation process in order to follow with the clubhouse standards, and to allow for a more meaningful evaluation (Floyd-Pickard & Lorenzo-Schibley, 2010). By having members participate in the evaluation process, participatory research can be an empowering experience for participants, often resulting in greater participation, and a more representative sample.

Laurel House, a clubhouse in Stamford, Connecticut, undertook an evaluation in which members were involved in the design, procedure, and reporting of the project (Boll, 1995). By including their members in the evaluation process, the researchers concluded “members have the right and the capacity to participate in the administration and assessment of psychosocial

clubhouse programs" (Boll, 1995, pg. 82) suggesting that clubhouses should involve members at all stages of the evaluation. Previous evaluations of clubhouses suggest using a research strategy that will match the purpose and goals of the clubhouse (Pickard & Lorenzo-Schibley, 2010). Although more rigorous methods may be available, it is important to keep in mind the population and customs that are found within the clubhouse (Pickard & Lorenzo-Schibley, 2010).

Purpose of Current Study

Psychosocial rehabilitation programs and clubhouse models specifically have been found to be effective services in the recovery process for individuals with severe mental illness (e.g., Biegel et al., 2013; Gold, Macias, & Rodican, 2014; Jung & Kim, 2012; Tsang et al., 2010). Although these studies have supported various recovery outcomes of clubhouses, the clubhouse model had not been evaluated for what mechanisms of change lead to recovery outcomes for members. A realist evaluation was conducted and found a variety of mechanism and outcomes that occur for members (Rouse & McShane, 2013). The realist framework suggests that single evaluations cannot produce fully valid findings and that empirical testing of realist evaluation models must take place before such models can be verified (Pawson and Tilley, 1997).

The purpose of the present study was to measure mechanisms and outcomes empirically in order to validate the clubhouse model as one that initiates change for members as they utilize Progress Place. Mechanism and outcome variables were measured using validated measures from the literature, as well as visual analogue scales. Mediation models simultaneously assessed whether pathways of mechanisms explained the relationship between usage and the outcomes.

Empirical data will allow Progress Place to determine the ways in which their services are benefiting the community with severe mental health conditions and how benefits are achieved. This knowledge will assist Progress Place in obtaining future funding, as they will

have empirical evidence for the underlying theory of the clubhouse model, one of the few comprehensive psychosocial recovery models. The present study will also provide empirical evidence toward the effectiveness of the theoretical model of clubhouses.

Aims and Hypotheses

Based on the current literature of psychosocial rehabilitation programs, as well as the recently developed theory on clubhouses, the mechanisms: respect, equality and non-judgment; relationships with others and reduced isolation; reduced feelings of stigma; sense of connection and belonging; dignity and self-worth; and independence and self-efficacy will be measured. Additionally, the subjective outcomes, personhood, feeling better and at peace, and acquiring skills, will also be measured. In order to test the developed theory, the mediating role of mechanisms on outcomes will be evaluated using multiple mediation models. The following aims and hypotheses are summarized in Appendix B.

Aim 1: Investigate changes that occur due to duration and frequency of membership in member's subjective sense of feeling better and at peace.

- Hypothesis 1a: The longer an individual has been a member of Progress Place, the higher their subjective scores of feeling better and at peace will be. This relationship will be mediated by the following mechanisms: acceptance, sense of respect, and non-judgment; dignity and self-worth; independence and self-efficacy; reduced experience of stigma; sense of belonging; and relationship to others and reduced isolation.
- Hypothesis 1b: The more frequently that members use Progress Place, the higher their subjective scores of feeling better and at peace will be. This relationship will be mediated by the following mechanisms: acceptance, sense of respect, and non-judgment; dignity and self-worth; independence and self-efficacy; reduced experience of stigma; sense of belonging;

and relationship to others and reduced isolation.

Aim 2: Investigate changes that occur due to duration and frequency of membership in member's subjective feeling of personhood.

- Hypothesis 2a: The longer an individual has been a member of Progress Place, the higher their subjective scores of personhood will be. This relationship will be mediated by the following mechanism variables: acceptance, sense of respect, equality, and non-judgment; dignity and self-worth; reduced experience of stigma; sense of belonging; and relationship to others and reduced isolation.
- Hypothesis 2b: The more frequently that members use Progress Place, the higher their subjective scores of personhood will be. This relationship will be mediated by the following mechanisms: acceptance, sense of respect, equality, and non-judgment; dignity and self-worth; and reduced experience of stigma; sense of belonging; and relationship to others and reduced isolation.

Aim 3: Investigate changes that occur due to duration and frequency of membership in member's subjective feeling of acquiring skills.

- Hypothesis 3a: The longer an individual has been a member of Progress Place, the higher their subjective scores of acquired skills will be. This relationship will be mediated by the mechanism variables: dignity and self-worth; and independence and self-efficacy.
- Hypothesis 3b: The more frequently that members use Progress Place, the higher their subjective scores of acquired skills will be. This relationship will be mediated by the mechanism variables: dignity and self-worth; and independence and self-efficacy.

Aim 5: Assess convergent validity of the Visual Analogue Scales.

- Hypothesis 5: Visual Analogue Scales used in the survey will be significantly correlated

with their corresponding validated measures and will be used for subsequent analyses.

Method

Population

The goal for the present study was to recruit members (N=100) at Progress Place who are currently active, meaning they use the clubhouse regularly, representing approximately 15% of the total population of users at Progress Place. According to membership records at Progress Place, the average age of members is 49 and 38% of the member population is female. Diagnoses of members include schizophrenia (56%), mood disorders (32%), anxiety disorders (7%), personality disorders (2%), and other diagnoses (2%). Length of membership at Progress Place varies with 24% of members attending for less than one year, 11% of members attending for one to two years, 39% of members attending between two and ten years, and 26% of members attending for more than ten years. A total of 8% of members are currently in school including adult education and community college settings. Additionally, 20% of members are currently working in either supported or independent employment.

There were 168 members who consented to the Progress Place Matters survey. Of these, 67 completed the survey online, and 101 completed the paper version. Ten surveys were withdrawn from analysis due to being incomplete. In the completed surveys, the sample included 43.7% female respondents, with a mean age of 48 years old (ranging from 17-75 years). With respect to education, 2.5% of the sample completed less than grade eight, 10.1% completed some high school, 20.3% completed high school, 29.7% attended post-secondary school, and 36.7% completed post- secondary school. With respect to living arrangement, 45% reported living alone, 28% live with family, 8.9% with non-relatives, 7.6% in Progress Place housing, 6.3% in a shelter, and 2.5% identified as having no current residence. In terms of current mental health status, 36.7% of members surveyed responded that they have depression, 29.1% anxiety, 36.1%

schizophrenia, 22.2% bipolar, and 2% reported other mental illnesses (i.e., borderline personality disorder).

Of the members surveyed, 24.1% have been members for less than one year, 34.8% for one to five years, 18.4% for five to eight years, and 22.8% have been members for more than 10 years. With respect to frequency of visits, 23.4% of members stated they attended Progress Place everyday, 69% stated they come in at least once a week, and 7% reported use every couple of weeks. With respect to specific program utilization, 38.1% of the members surveyed said they have held employment in the past 12 months including: transitional employment (16.5%), supported employment (8.2%), and independent employment (13.4%). Additionally, 12.7% of members stated that they have used the supported education program within the last year.

Measures

Participants were asked to participate in an online or paper-based questionnaire that assessed demographic information as well as the constructs identified as mechanisms and outcomes from the realist evaluation. Mechanisms or outcomes that are not fully captured by existing measures were examined using visual analogue scales (VAS). The language used in the VAS scales is directly what the members in the qualitative realist evaluation used. Therefore, these scales reflect the constructs to be measured and are consistent with how the constructs were described.

These scales have been found to be effective in evaluating subjective experiences in a variety of domains (Couper, Tourangeau, Conrad, & Singer, 2006). Visual analogue scales were also used to validate that the measures used from the literature are representative of the constructs from the realist evaluation. The visual analogue scales along with their description are

described in Appendix H. Measures that have been found to capture the mechanisms and outcomes listed in the realist review that were used in the present study are described below.

Demographics, Housing, Vocational and Service Use History (DHHS). The demographic questionnaire inquired about age, sex, education level, employment status, income, ethnicity, cultural background, family composition, and presence of disability or mental health illness. The DHHS questionnaire was developed for use in the At Home Chez Soi research that focuses on Canadian adults living with mental illness who are experiencing homelessness (Goering et al., 2011). The demographic items that were chosen for the present study are those that, in collaboration with Progress Place, were found to be relevant.

UCLA Loneliness Scale- short form. The UCLA Loneliness Scale is a self-report measure investigating the intensity of feelings of loneliness (Russell, 1996). The measure has been found to be highly reliable, in terms of internal consistency (Cronbach alpha= 0.89 to 0.94), as well test-retest reliability (r=0.73; Russell, 1996). Responses to questions on this scale are given on a 4-point likert scale with low scores representing never experiencing, and high scores representing always experiencing the statements. The short form of this scale (4 items) was used to measure the mechanism: relationships to others and reduced isolation (Hays & DiMatteo, 1987).

The General Belongingness Scale. The General Belongingness Scale is a 12 item self-report measure that assesses the dimensions of acceptance and a lack of exclusion (Malone, Pillow, & Osman, 2012). The internal consistency is high, with a Cronbach's alpha of .95. The scale is rated on a 7-point likert scale, with low scores representing disagreement and high scores representing agreement to the statements. In collaboration with Progress Place, questions on this scale were reframed in a positive light in order to reflect the supportive environment of the

clubhouse. The instrument was used to measure the mechanism: sense of belonging.

The Self-Efficacy Scale (General). The Self-Efficacy Scale is a 10-item self-report measure that assesses an individual's feelings of self-efficacy (Sherer et al., 1982). The internal consistency for the scale has been found to be good with Cronbach's alphas between 0.76 and 0.90. Responses are rated on a 4-point likert scale with low scores indicate statements that are not true and high scores indicate true statements. The scale was used to measure the mechanism: independence and self-efficacy.

Satisfaction with Life Scale. The Satisfaction with Life Scale is a 5-item scale that assesses global life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985). The measure has been found to have high internal consistency, with Cronbach's alpha at 0.87, and the two-month test-retest correlation coefficient was 0.82 (Diener, Emmons, Larsen, & Griffin, 1985). Responses to the measure are rated on a 7-point likert scale, with low scores indicating disagreement to the statements and high scores indicating agreement to the statements. The scale was used to measure the outcome: feel better and at peace.

Visual Analogue Scales. Visual analogue scales were used to measure mechanisms and outcomes with the language that was used in the qualitative realist evaluation (Rouse & McShane, 2013; see Appendix H). Participants will rate on a visual scale from 0-100 how much they agree with the given statement. Significant correlations of these scales with the validated measures will provide concurrent validity for the VAS measures.

Procedure

The current study gained ethical approval through Ryerson University's Research Ethics Board (REB). All members at Progress Place were informed about the study by staff during the yearly review of the clubhouse. The questionnaire was made available to participants online

using Qualtrics, and through a paper-based version, and was accessed using the computer labs in Progress Place.

Collaborative Approach. Guidelines in community-based research suggest that participants should contribute meaningfully to the research process by using participatory research methods that build on, share and develop different skills and expertise (Bergold, & Thomas, 2012). Psychosocial rehabilitation programs focus on skill development, and one way to encourage this is through engaging members in the research process. Research has indicated that individuals with severe mental illness can accurately evaluate programs that are beneficial to them and that the use of internal evaluation reinforces the rehabilitation goal of self-determination (Iyer, Rothmann, Vogler, & Spaulding, 2005). Additionally, due to the varying levels of functioning at Progress Place, it is important that members can access the study and understand questions in full. Therefore, engaging all members in the survey involved additional support by members and staff.

In order to meet the collaborative goals of the clubhouse, a community research team was created consisting of the primary investigator, supervisor, staff, and members of Progress Place. Participatory research guidelines suggest that individuals who are participants in research should be active in the development of research questions, in designing research instruments, and collecting data (Nelson, Ochocka, Griffin, & Lord, 1998). Participatory research involves a high level of cooperation between researchers and stakeholders, which is achieved through constant feedback loops. Therefore, the community research team was consulted for the construction of the measures that have been selected for each construct. The group evaluated the proposed measures in order to assess comprehension, relevance, and face validity of the items chosen. Researchers of individuals with psychiatric disabilities have stated that it is inappropriate to

dismiss the objections or concerns of an oppressed community being researched (Dickert & Sugarman, 2005). Therefore, items from the proposed measures were re-worded or removed from the questionnaire if the community research group deemed them inappropriate. This approach is less likely to produce the rigor of a more professionally designed research approach, but is more likely to foster change that is aligned with the goals of a psychosocial rehabilitation program (Zakrajsek, Mirza, Chan, Wilson, Karner, & Hammel, 2014).

Following the participatory research method approach, the primary investigator held a training session for staff and members at Progress Place on how to administer the questionnaire to potential participants. The training involved a group of members and staff participating in the online survey as a group, at Progress Place. During this time, the research team, in collaboration with the primary investigator, worked through the questionnaire and asked questions that they believe might come up with other members. They were also taught about the purpose of the research, the process of consent, and the details of the consent form. After the training session was complete, the research team had the opportunity to lead their own group sessions of the survey. The primary investigator or a staff member who was also trained on the survey supervised the sessions. The individual who lead the administration of the questionnaire (staff or member) provided in-depth information about the study as well as the consent process to the participants. Additionally, each participant was provided with the consent form through the online survey before they began. Eligibility to participate in this study was that the individual is an active member at Progress Place. The entire questionnaire took about 15 to 20 minutes to complete. The collaborative approach allowed members to be active participators throughout the entire evaluation: A factor that has been deemed necessary by other evaluations of psychosocial rehabilitation programs (Pickard & Lorenzo-Schibley, 2010).

Results

Descriptive statistics of the VAS measures and questionnaires can be found in table 1 and table 2. Results indicated that all VAS scales significantly correlated with their corresponding measures. Small to medium significant correlations were found between the General Belongingness Scale and VAS scale for sense of belonging (r=.576, p<.01), the UCLA Loneliness Scale and VAS scale reduced isolation and relationship with others (r=.320, p<.01), the Self-Efficacy scale and VAS scale for independence and self-efficacy (r=.356, p<.01), and the Satisfaction with Life Scale and VAS scale for feeling better and at peace (r=.431, p<.01). A correlation matrix with all VAS and corresponding measures can be found in table 3. Acceptable internal consistency using Cronbach's alpha was found for all validated measures (UCLA Loneliness Scale=.78; General Belongingness Scale=.943; Satisfaction with Life Scale=.922; Self-Efficacy Scale=.938). From the correlational analyses, it appears that the VAS scales have good concurrent validity with the standardized measures. In light of the fact that the VAS scales are derived from qualitative research, are more consistent with the mechanisms and outcomes that were reported by members, and have good concurrent validity, the remaining analyses will be produced using the VAS measures.

Table 1

Descriptive Statistics of Mechanisms and Outcomes

	VAS Measure[1]	M	SD	95% Confidence Interval	Response Range
Mechanism	Acceptance, equality, and non-judgment	80.1	20.7	[76.83, 83.34]	0-100
	Dignity and self-worth	77.3	21.5	[73.88, 80.65]	1-100
	Reduced experience of stigma	83	20.1	[79.78, 86.15]	10-100
	Independence and self-efficacy	81	19.8	[77.79, 84.04]	8-100
	Relationship to others and reduced isolation	74	23.8	[70.02, 77.63]	0-100

Outcome	Sense of connection and belonging	79	21.9	[75.20, 82.24]	0-100
	Feeling better and at peace	74	23	[70.31, 77.55]	0-100
	Personhood	83	18.9	[80.00, 85.93]	0-100
	Skills Acquired	75	23.6	[71.53, 79.05]	0-100

[1]VAS scale values ranged from 0-100.

Table 2

Descriptive Statistics for Questionnaires

Questionnaires	Mean	SD	95% Confidence Interval	Range
Sense of Belonging	64.7	14.40	[62.43, 67.03]	12-84
UCLA Loneliness	13.1	2.34	[12.73, 13.47]	4-16
Self- Efficacy	29.61	6.78	[28.53, 30.7]	10-40
Satisfaction with Life	22.38	7.99	[21.11, 23.65]	5-35

Table 3

Correlation Matrix of IVS, Mechanisms, and Outcomes

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Acceptance	-														
2. Isolation	.357**	-													
3. Stigma	.571**	.403**	-												
4. Belonging	.401**	.580**	.610**	-											
5. Efficacy	.161*	.471**	.338**	.571**	-										
6. Personhood	.467**	.411**	.498**	.580**	.494**	-									
7. Better and at Peace	.264**	.426**	.328**	.568**	.560**	.423**	-								
8. Dignity	.209**	.533**	.376**	.589**	.590**	.402**	.609**	-							
9. Skills	.224**	.407**	.246**	.414**	.492**	.423**	.484**	.440**	-						
10. SOB Scale	.252**	.485**	.289**	.576**	.451**	.359**	.552**	.508**	.322**	-					
11.SWL Scale	.012	.275**	.148	.404**	.340**	.223**	.431**	.449**	.295**	.672**	-				
12. SE Scale	.178*	.319**	.214**	.413**	.356**	.282**	.403**	.472**	.336**	.612**	.650**	-			
13. UCLA	.191*	.320**	.267**	.495**	.376**	.355**	.392**	.434**	.258**	.711**	.534**	.467**	-		
14. Length	-.145	.094	-.173	.084	.098	-.080	.098	.132	.028	.081	.228*	.109	.136	-	
15. Freq	-.091	.029	-.081	.028	.062	-.066	.095	.072	.079	.072	.107	.071	.074	.108	-

Note. **Correlation is significant at the 0.01 level. *Correlation is significant at the 0.05 level. Variables 1-9 are VAS measures. SOB=Sense of Belonging Scale, SWL= Satisfaction with Life Scale, SE= Self-Efficacy Scale, UCLA= UCLA Loneliness Scale.

Scatterplots of Mechanism and Outcome Scores by Duration of Membership

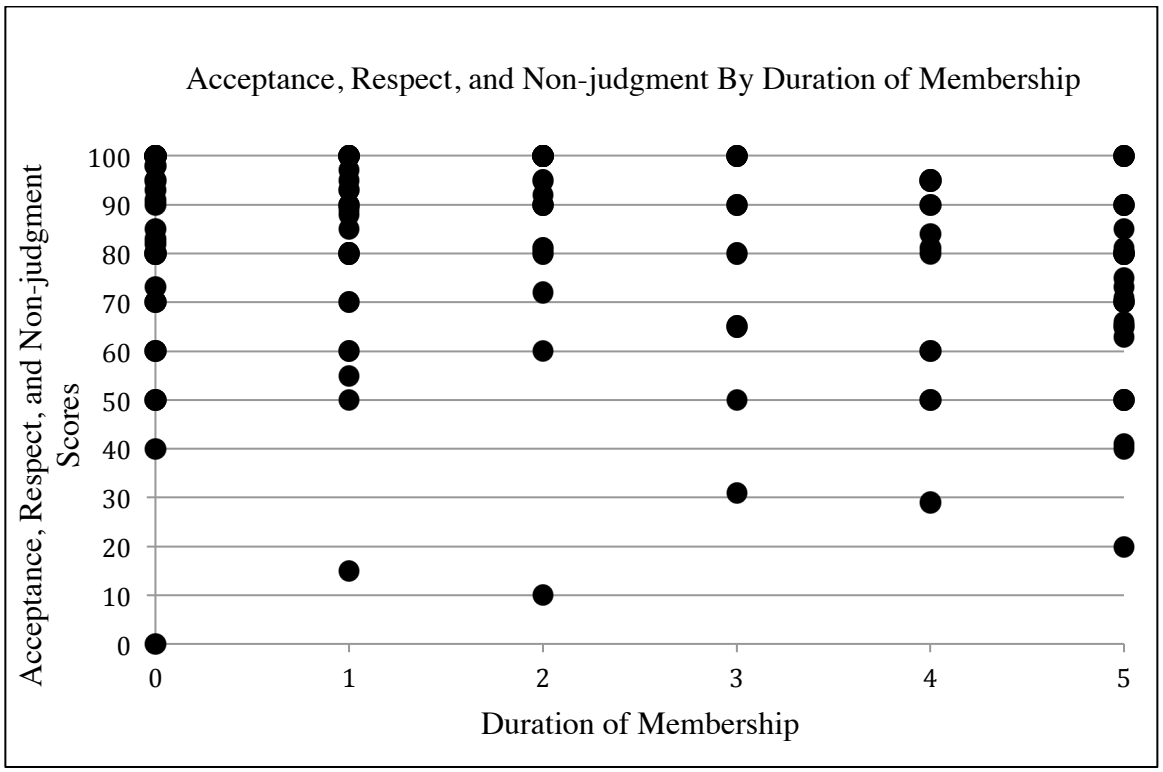


Figure 1. Acceptance, Respect, and Non-judgment by Duration of Membership.

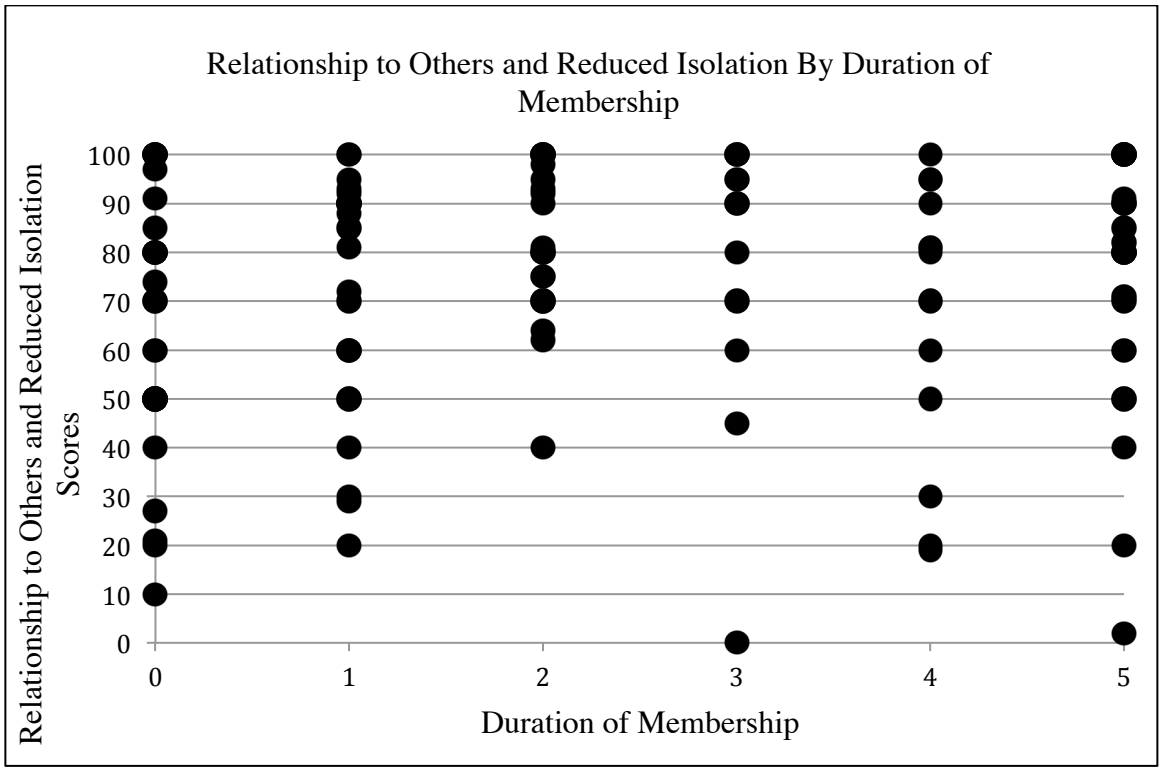


Figure 2. Relationship to Others and Reduced Isolation by Duration of Membership.

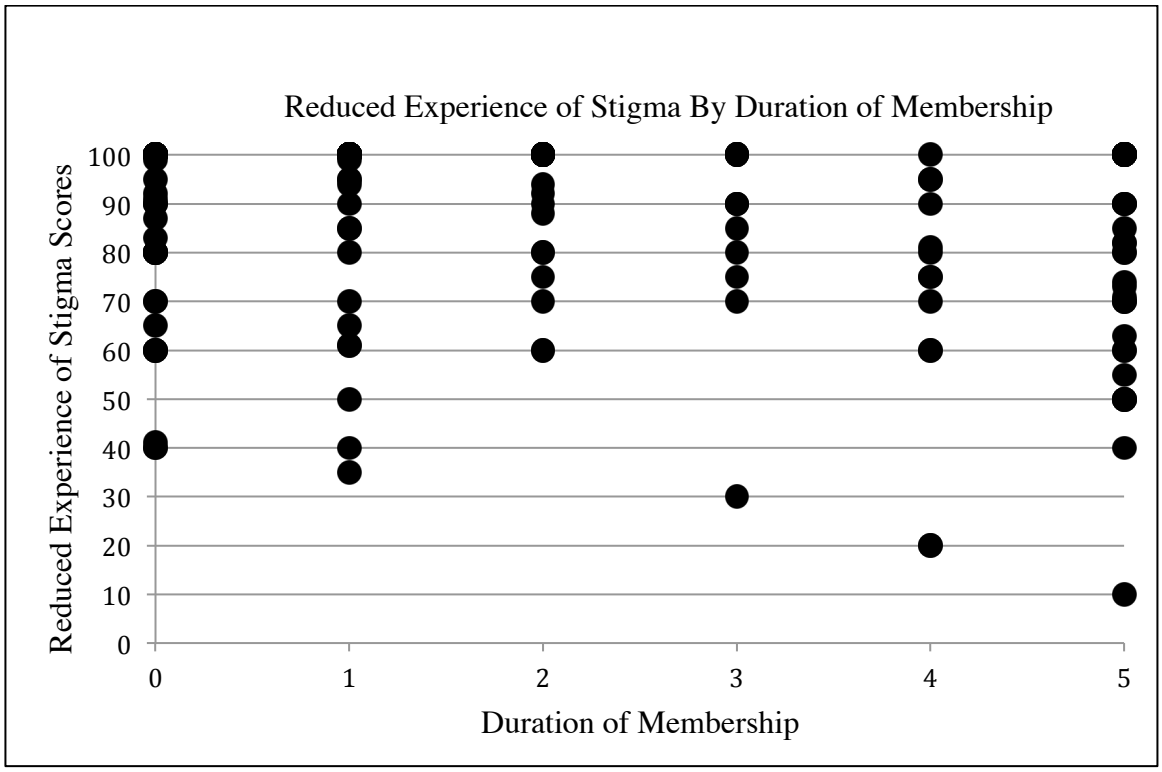


Figure 3. Reduced Experience of Stigma by Duration of Membership.

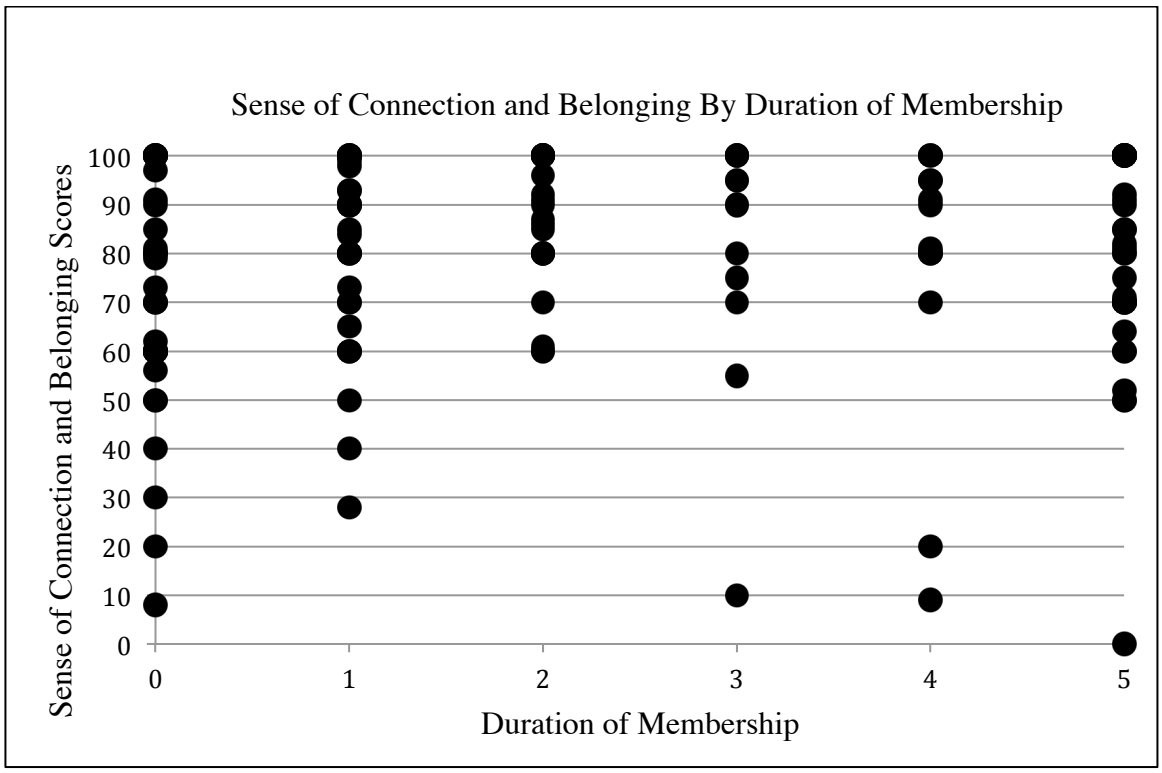


Figure 4. Sense of Connection and Belonging by Duration of Membership.

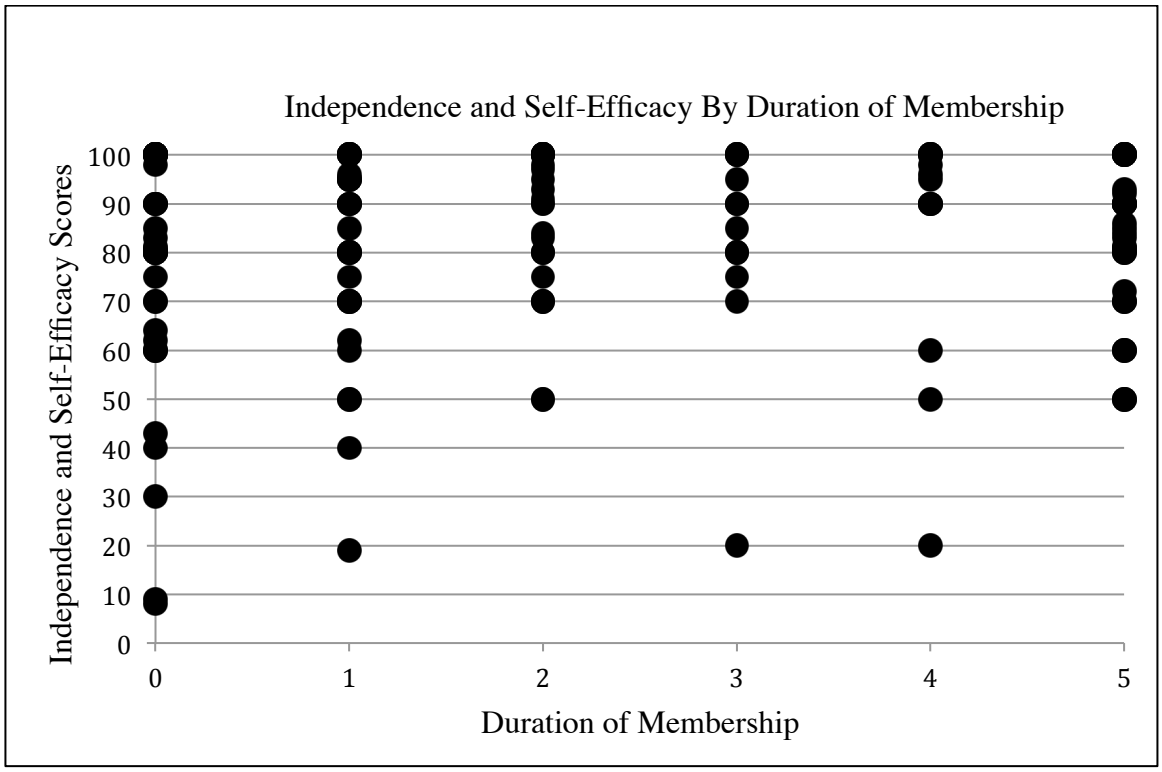


Figure 5. Independence and Self-Efficacy by Duration of Membership

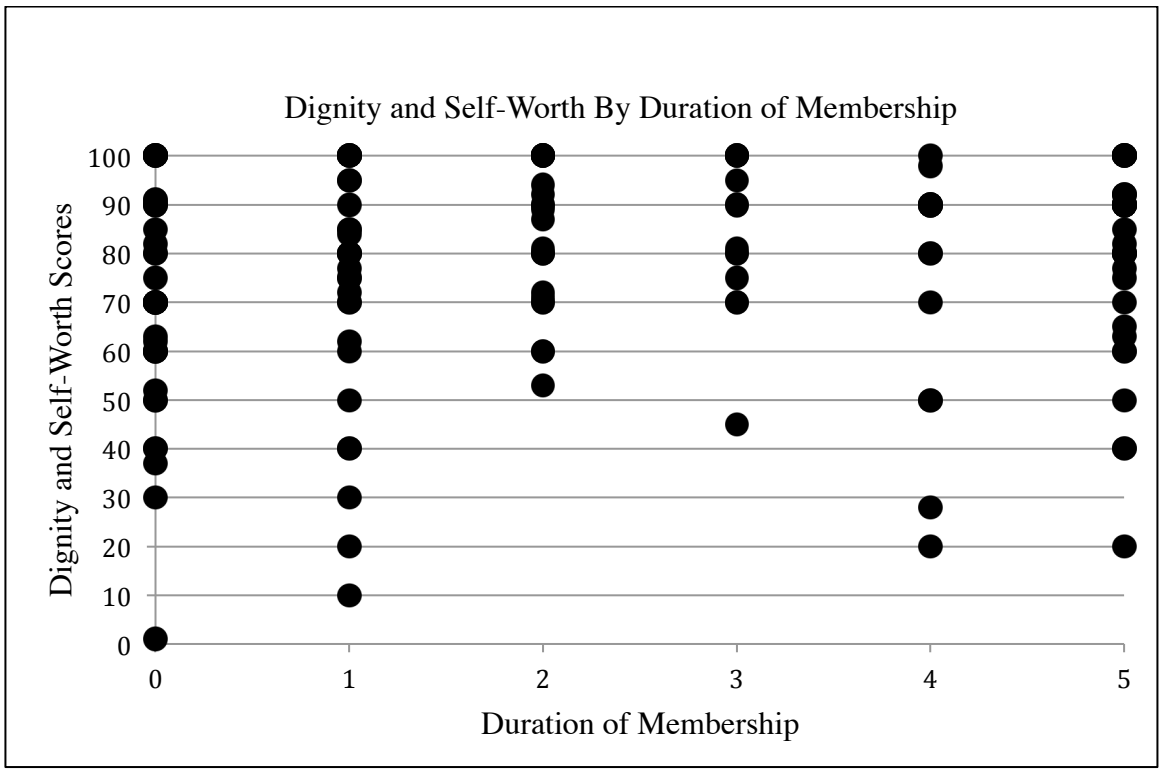


Figure 6. Dignity and Self-Worth by Duration of Membership

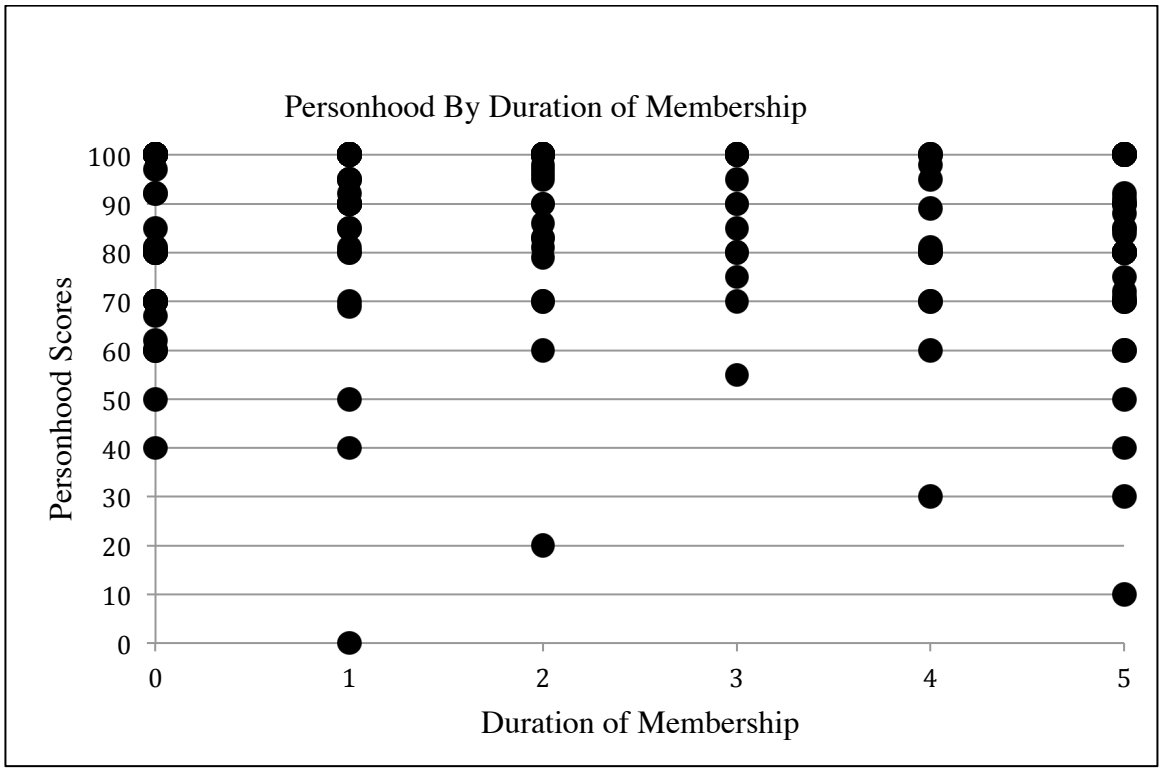


Figure 7. Personhood by Duration of Membership

Figure 8. Feeling Better and at Peace by Duration of Membership

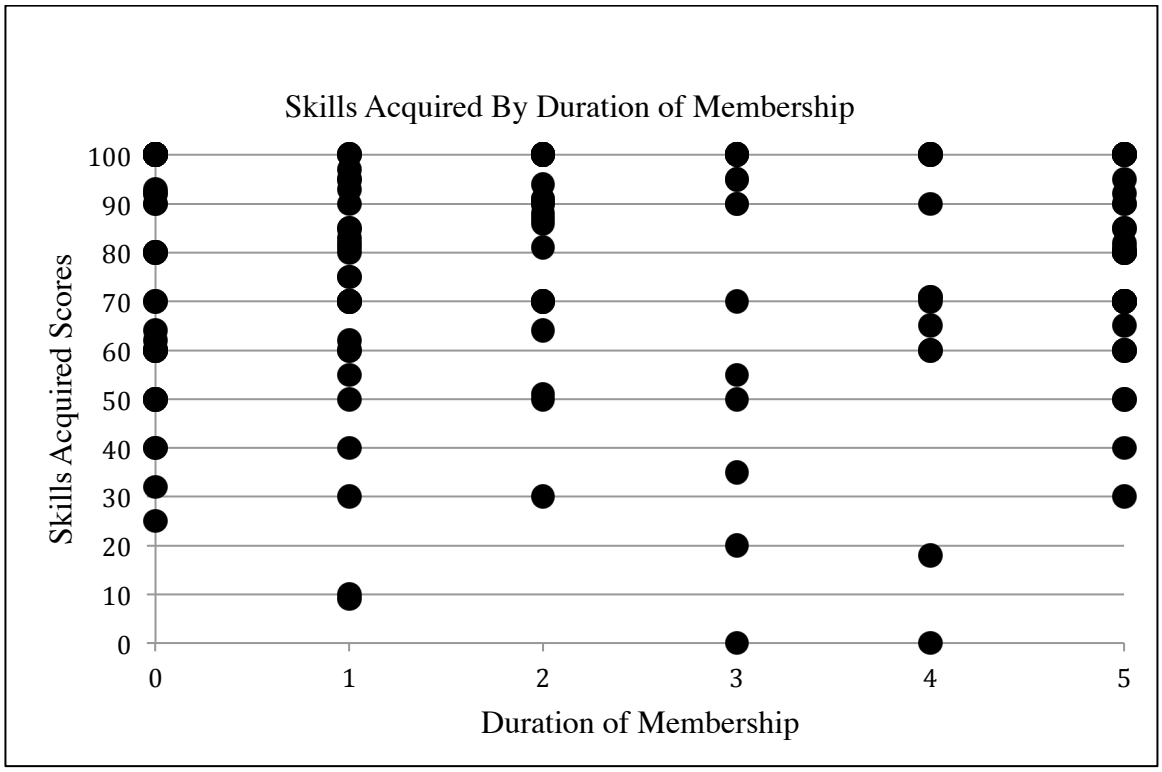


Figure 9. Skills Acquired by Duration of Membership

Type II error rates are affected substantially by unequal samples and will result in a loss of power in the analysis, regardless of the statistical test run (Cohen, 1992). Because the sample that was obtained is an extremely high usage group, and are therefore not evenly distributed, the aims and hypotheses related to frequency of usage were not examined. Rather, the pathways will be examined solely by member's duration of usage. Frequency of usage was added as a covariate in order to assess for significant relationships from the continuous variable.

Feeling Better and at Peace

Hypothesis 1a (i.e., the mediation of the relationship between duration of membership and feeling better and at peace) was not supported. Tests of mediation were conducted using 95% confidence intervals of the indirect effect derived from PROCESS (Hayes, 2013). The mechanisms that were hypothesized to mediate the relationship between duration of membership and feeling better and at peace were put into the mediation analyses simultaneously in order to

assess if each mediator had a significant contribution to the relationship. The mediation model was significant (R^2=.4729, p<.0001), and the direct path found three mechanism variables that predict the outcome of feeling better and at peace. Dignity and self worth (b= .3513, SE= .0906, 95% CI= .1723, .5304), independence and self-efficacy (b=.2870, SE= .0957, 95% CI= .0977, .4763) and sense of belonging (b=.2697, SE= .1040, 95% CI= .0642, .4753), significantly predicted feeling better and at peace. In contrast, when entered into the mediation model, no mechanism variables mediated the relationship between duration of membership and feeling better and at peace (see table 7). Additionally, duration of membership did not have a significant direct effect on feeling better and at peace, suggesting that a linear relationship between the two variables does not exist (see table 6).

Table 4

A Path: Relationship between duration of usage and mediators.

Mediator	b
Acceptance, sense of respect, and non-judgment	-1.8898*
Dignity and Self-Worth	1.5963
Independence and Self-Efficacy	1.2752
Reduction of Stigma	-1.5581
Sense of Belonging	1.0620
Reduced Isolation	1.1185

*Significant at p<.05

Table 5

B Path: Direct effects of mediators on feeling better and at peace.

	B	SE	t	LLCI	ULCI
Accept	.0741	.0963	.7693	-.1164	.2646
Dignity	.3513***	.0906	3.8794	.1723	.5304
Efficacy	.2870**	.0957	2.9980	.0977	.4763
Stigma	-.0980	.1039	-.9431	-.3036	.1075
Belong	.2697**	.1040	2.5942	.0642	.4753
Isolation	-.0054	.0793	-.0677	-.1622	.1515

***Significant at p<.001

**Significant at p<.01

Table 6

C Path: Direct effect of duration of usage onto feeling better and at peace.

Effect	SE	t	p	LLCI[1]*	ULCI[1]**
.2167	. .8048	.2692	.7882	-1.3746	1.8079

Table 7

Indirect effects of mediators on feeling better and at peace.

	Effect	SE	LLCI	ULCI
Acceptance	-.1401	.2114	-.8099	.1284
Dignity	.5608	.4166	-.0620	1.6131
Independence	.3660	.3330	-.0441	1.3900
Reduced Stigma	.1527	.2433	-.1454	.8745
Belonging	.2865	.3309	-.1260	1.3668
Isolation	-.0060	.1493	-.3479	.2555

Personhood

Hypothesis 2a (i.e., the mediation of the relationship between duration of membership and personhood) was not supported. Tests of mediation were conducted using 95% confidence intervals of the indirect effect derived from PROCESS (Hayes, 2013). The mechanisms that were hypothesized to mediate the relationship between duration of membership and personhood were put into the mediation analyses in order to assess if each mediator had a significant contribution to the relationship. The mediation model was significant (R^2=.4292, p<.0001), a direct path found two mechanism variables that predict the outcome of personhood: acceptance, sense of respect, and non-judgment (b= .2240, SE= .0729, 95% CI= .0798, .3682) and sense of belonging (b= 3.009, SE= .0860, 95% CI= .1309, .4708). When entered into the mediation model, no mechanism variables mediated the relationship between duration of membership and personhood (see table 11). Duration of membership did not have a significant direct effect on personhood, suggesting that a linear relationship does not exist between these two variables (see table 10).

Table 8

A Path: Relationship between duration of usage and mediators.

Mediator	b
Acceptance, sense of respect, and non-judgment	-1.5137
Dignity and Self-Worth	1.4757
Reduction of Stigma	-1.6189
Sense of Belonging	.9557
Reduced Isolation	.9895

Table 9

B Path: Indirect effects of mediators and personhood.

	B	SE	t	LLCI	ULCI
Acceptance	.2240**	.0729	3.071	.0798	.3682
Dignity	.0959	.0733	1.307	-.0491	.2408
Stigma	.0801	.0873	.917	-.0925	.2527
Belonging	.3009***	.0860	3.500	.1309	.4708
Isolation	.0429	.0668	.643	-.0891	.1749

***Significant at p<.001
**Significant at p<.01

Table 10

C Path: Direct effect of duration of usage onto personhood.

Effect	SE	t	p	LLCI	ULCI
-.7156	.6811	-1.0506	.2952	-2.0621	.6309

Table 11

Indirect effect of mediators on personhood.

	Effect	SE	LLCI	ULCI
Acceptance	-.3391	.2768	-1.0948	.0511
Dignity	.1415	.1780	-.0894	.6122
Reduced Stigma	-.1297	.2126	-.7491	.1288
Belonging	.2875	.3555	-.2344	1.2278
Isolation	.0425	.1127	-.0518	.5281

Skills Acquired

Hypothesis 3a (i.e., the mediation of the relationship between duration of membership and

acquiring skills) was not supported. Tests of mediation were conducted using 95% confidence intervals of the indirect effect derived from PROCESS (Hayes, 2013). The mechanisms that were hypothesized to mediate the relationship between duration of membership and skills acquired were put into the mediation analyses together in order to assess if each mediator had a significant contribution to the relationship. The mediation model was significant (R^2= .2815 p<.0001), a direct path indicated that both mechanism variables predicted the outcome of acquiring skills: independence and self efficacy (b= .4484, SE=.1028, 95% CI= .2453, .6514) and dignity and self-worth (b= .2683, SE= .0946, 95% CI= .0813, .4553). When entered into the mediation model, the mechanism variables did not mediate the relationship between duration of membership and personhood (see table 15). Additionally, duration of membership did not have a significant direct effect on acquiring skills (table 14), suggesting that a linear relationship between the two variables does not exist.

Table 12

A Path: Relationship between duration of usage and mediators.

Mediator	b
Independence and Self-Efficacy	.6570
Dignity and Self-Worth	.9786

Table 13

B Path: Direct effects of mediators and skills acquired.

	B	SE	t	LLCI	ULCI
Independence and Self-Efficacy	.4484***	.1028	4.3630	.2453	.6514
Dignity and Self-Worth	.2683**	.0946	2.8355	.0813	.4553

***Significant at p<.0001
**Significant at p<.01

Table 14

C Path: Direct effect of duration of usage on skills acquired.

Effect	SE	t	p	LLCI	ULCI
-.3065	.8691	-.3527	.7248	-2.0238	1.4108

Table 15

Indirect effect of mediators on skills acquired.

	Effect	SE	LLCI	ULCI
Independence and Self- Efficacy	.2946	.3717	-.2824	1.3071
Dignity and Self-Worth	.2626	.2750	-.1534	.9769

Theory of Change Pathways

Because no relationship was found in the original proposed analyses, further analyses were done to test the theory of change models. The results suggested that significant relationships existed between the mechanisms and outcomes, but that length of involvement did not predict either mechanisms or outcomes. Therefore, hierarchical regression analyses were chosen to test the hypothesized models.

The qualitative study done at Progress Place developed three models of change that include mechanisms and recovery outcomes (see appendix A). The first path is the restorative model and involves the development of a subjective sense of feeling better and at peace. The model suggests that this outcome is achieved by the development of subjective mechanisms: acceptance, sense of respect and non-judgment; dignity and self-worth; reduced experience of stigma; independence and self-efficacy; relationship to others and reduced isolation; and a sense of belonging. The second outcome path is the reaffirming model and involves the development of a feeling of personhood. This subjective outcome is achieved by the development of the following subjective mechanisms: 1) acceptance, sense of respect and non-judgment; dignity and

self-worth; reduced experiences of stigma; relationship to others and reduced isolation; and a sense of belonging. The third subjective path is the re-engaging model and involves acquiring skills. This subjective outcome is achieved by the development of independence and self-efficacy; and dignity and self worth. The subjective outcomes were used as the dependent variables in the hierarchical regression analysis. Demographic information (gender, age, education) service utilization (frequency and length of involvement) was entered in block 1 of the analysis and the mechanisms were entered into block 2. These analyses were done in order to test whether the mechanism variables predicted the development of outcomes beyond the effect of demographic information Multicolinearity statistics for these pathways are below the standard cutoff scores, suggesting that multicolinearity is not an issue in the hierarchical regression analyses (see table 16).

Table 16

Multicolinearity statistics.

Outcome	Mechanism	B	SE	Tolerance	VIF
Feeling better and at peace					
	Acceptance	.070	.095	.569	1.758
	Dignity	.353	.090	.530	1.886
	Reduced stigma	-.103	.102	.471	2.123
	Efficacy	.288	.095	.554	1.806
	Isolation	-.004	.079	.570	1.753
	Belonging	.273	.103	.401	2.495
Personhood	Acceptance	.230	.073	.649	1.540
	Dignity	.089	.073	.593	1.686
	Reduced stigma	.099	.086	.498	2.010
	Isolation	.040	.067	.588	1.700
	Belonging	.289	.085	.430	2.325
Skills acquired					
	Dignity	.266	.094	.695	1.438
	Efficacy	.448	.102	.695	1.438

The first subjective outcome that was examined was feeling better and at peace with an average score of 73.93. It was hypothesized that this outcome would be predicted by the two paths of mechanisms: 1) acceptance, sense of respect, and non-judgment; dignity and self-worth; reduced experience of stigma; independence and self-efficacy; and 2) sense of Belonging; and relationship to others and reduced Isolation. These two pathways were tested using a hierarchical multiple regression analysis to examine if the two blocks of mechanisms would be significant in predicting the outcomes, beyond demographic information. In the final step, containing all demographic information, as well as the two pathways of mechanisms, independence and self-efficacy ($p<0.022$), dignity and self-worth ($p<0.00$), and sense of belonging ($p<0.006$) were the only significant predictors of the subjective outcome feeling better and at peace.

Table 17

Model Summary for Feeling Better and at Peace

	Variable	B	Std. Error	Beta	t	R^2	R^2 Change
Model 1	(Constant)	64.499	15.962		4.041	.061	.061
	Gender	-3.505	3.539	-.089	-.990		
	Education	2.503	1.767	.126	1.416		
	Age	-.314	.178	-.172	-1.765		
	Length	1.720	1.160	.145	1.482		
	Freq	3.338	2.517	.119	1.326		
Model 2	(Constant)	2.386	14.287		.167	.516	.456***
	Gender	-4.240	2.659	-.107	-1.594		
	Education	1.263	1.371	.064	.921		
	Age	-.108	.135	-.059	-.800		
	Length	.222	.906	.019	.244		
	Freq	1.745	1.885	.062	.926		
	Acceptance	.114	.098	.103	1.160		
	Dignity	.364***	.091	.348	4.006		
	Stigma	-.147	.120	-.134	-1.223		
	Efficacy*	.225	.097	.197	2.316		

Belonging**	.330	.117	.311	2.819
Isolation	.004	.079	.004	.049

*Significant at p<0.05.
**Significant at p<0.01.
***Significant at p<0.001.

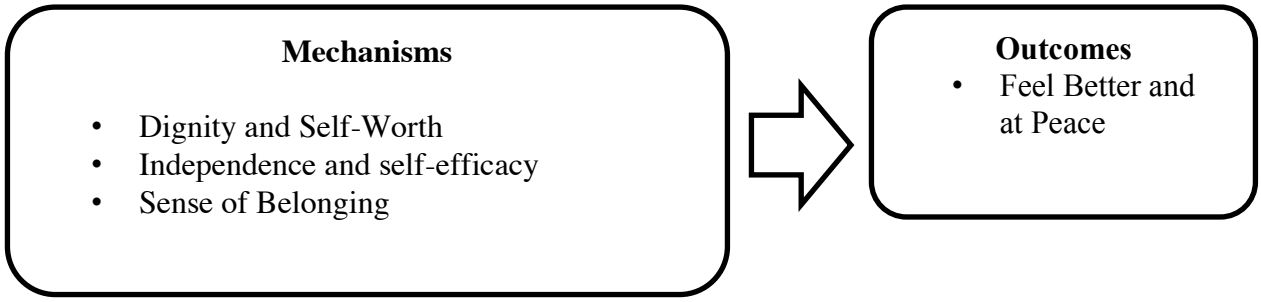


Figure 10: *Confirmed restorative model*

The second subjective outcome that was examined was feelings of personhood, with a mean of 82.96. It was hypothesized that this outcome would be predicted by the mechanisms: acceptance, sense of respect, and non-judgment; dignity and self-worth; reduced experience of stigma; sense of belonging; and relationship to others and reduced isolation. Hierarchical regression analysis tested whether the mechanisms would be significant in predicting the outcomes, beyond demographic information. The model found that the mechanisms, acceptance, sense of respect, and non-judgment (p<0.000), and sense of belonging (p<0.002), were significant predictors of the subjective outcome of personhood.

Table 18

Model Summary for Personhood

	Variable	B	Std. Error	Beta	t	R^2	R^2 Change
Model 1	(Constant)	104.701	13.608		7.694	.064	.064
	Gender	-1.469	3.021	-.043	-.486		
	Education	.811	1.507	.048	.539		
	Age*	-.365	.152	-.233	-2.406		
	Length	.010	.986	.001	.010		
	Freq	-1.597	2.152	-.066	-.742		

Model 2	(Constant)	41.801	12.000		3.483	.511	.448***
	Gender	-2.386	2.268	-.071	-1.052		
	Education	.282	1.157	.017	.244		
	Age	-.243	.115	-.155	-2.116		
	Length	-.216	.768	-.021	-.282		
	Freq	-1.434	1.614	-.060	-.888		
	Accept***	.266	.074	.294	3.606		
	Dignity	.109	.075	.122	1.462		
	Stigma	.064	.101	.068	.634		
	Belonging**	.304	.097	.334	3.142		
	Isolation	.027	.067	.034	.409		

*Significant at p<0.05.
**Significant at p<0.01.
***Significant at p<0.001.

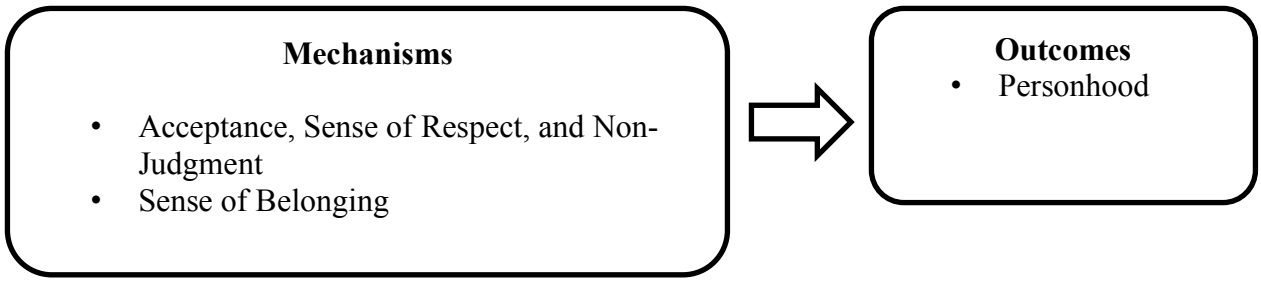


Figure 11*: Confirmed reaffirming model*

Lastly, the third subjective outcome that was examined was skills acquired, with a mean of 75.29. It was hypothesized that this outcome would be predicted by the mechanisms independence and self-efficacy; and dignity and self-worth. were run using a hierarchical regression analysis in order to test whether the two blocks of mechanisms would be significant in predicting the outcomes, beyond demographic information (see table 16). In the final step, containing all demographic information, as well as the one pathway of mechanisms, both predictors were found to be significant (self-efficacy, p=0.000; dignity and self-worth, p=0.005).

Table 16

Model Summary for Skills Acquired.

Variable	B	Std. Error	Beta	t	R^2	R^2 Change

Model 1	(Constant)	69.456	16.584		4.188	.049	.049
	Gender	-1.125	3.733	-.027	-.301		
	Education	1.829	1.852	.087	.987		
	Age	-.403	.187	-.208	-2.156		
	Length	1.619	1.215	.129	1.332		
	Freq	3.274	2.580	.113	1.269		
Model 2	(Constant)	22.503	16.131		1.395	.290	.242***
	Gender	-.884	3.254	-.021	-.272		
	Education	-.156	1.641	-.007	-.095		
	Age	-.186	.166	-.096	-1.120		
	Length	.574	1.072	.046	.536		
	Freq	2.020	2.257	.070	.895		
	Dignity*	.203	.101	.182	2.000		
	Efficacy***	.472	.111	.386	4.231		

*Significant at p<0.05.
**Significant at p<0.01.
***Significant at p<0.001.

Figure 12*: Confirmed re-engagement model*

Discussion

The purpose of the present study was to refine and validate the pre-existing theory of psychosocial rehabilitation at Progress Place and to examine the role of length of involvement and frequency of usage on mechanisms and outcomes. The current study began with the theory of psychosocial rehabilitation, which, alongside qualitative data from a realist evaluation, informed the creation of the CMO configurations. From the realist perspective, single evaluations cannot produce universally valid findings, and therefore, the current study hypothesized, created, and refined an existing program theory (Pawson and Tilley, 1997).

In respect to age and gender, the results paralleled accredited clubhouses in the United States that have 44.13% female members, with the average age being approximately 45 years old (ranging from less than 20 to over 70; International Survey of Clubhouses, 2011). These educational attainment rates parallel those found in other clubhouse research, with approximately (46%) of members having some college education (Dougherty, Hastie, Bernard, Broadhurst, Marcus, 1992). In terms of current mental health status, 36.7% of members surveyed responded that they have depression, in contrast to the International Survey of Clubhouses, which found across clubhouses in the United States, 15.9% endorsed depression. The differences may be because individuals in the present study were able to report on multiple mental disorders, therefore allowing for higher rates of comorbid illness. The International Survey of Clubhouses did not report on rates of anxiety, but found similar rates of bipolar disorder and schizophrenia as the present study (2011).

The participatory nature of the present evaluation allowed for a successful participation rate of 20% of clubhouse members. This number is the highest participation rate that Progress Place has had in any of their survey attempts. This is likely because the participatory approach is

congruent with the promotion of humanistic values within the clubhouse. A benefit of the participatory approach is that members took ownership over the survey and because of that, promoted it within the clubhouse. Although more rigorous methods could be used, it likely would not have led to a high participation rate, and would not be representative of the Progress Place population. The members surveyed represented a very high usage group; with 92.4% stated that they utilize Progress Place 1 day to 7 days a week. Previous studies of clubhouses have found that members attend approximately 18 hours per week, consistent with the present study (Pernice-Duca, 2008). These members are utilizing clubhouses often and are therefore likely to be having their needs met by the programming.

The present study found that the mechanism—outcome models remained relatively consistent with what was found in the previous qualitative realist evaluation (Rouse & McShane, 2015). The confirmed restorative model includes the mechanisms dignity and self-worth; independence and self-efficacy; and sense of belonging. These mechanisms were found to significantly predict the outcome feeling better and at peace. The confirmed reaffirming model includes the mechanisms acceptance, sense of respect, and non-judgment; dignity and self-worth; reduction of stigma; and sense of belonging. These mechanisms were found to significantly predict the outcome of personhood. The confirmed re-engaging model includes the mechanisms independence and self-efficacy; and dignity and self-worth. These mechanisms were found to significantly predict the outcome of acquiring skills.

Confirmed Restorative Model

The confirmed restorative model includes the mechanisms dignity and self-worth, independence and self-efficacy, and sense of belonging. These mechanisms were found to significantly predict the outcome feeling better and at peace. A recent study interviewed

clubhouse members who scored high on the Recovery Assessment Scale in order to identify factors of the later stages in recovery (Hancock, Bundy, Honey, Helich, & Tamsett, 2013). One outcome that was identified was accepting the illness and gaining control over symptoms. This outcome parallels feeling better, in that clubhouse members gain control over their symptoms, as well as being at peace with your mental illness, such as accepting that symptoms will not disappear completely. The importance of dignity and self worth, independence and self-efficacy, and sense of belonging in promoting feeling better and at peace has been documented in the psychosocial rehabilitation literature.

Results from the qualitative realist evaluation at Progress Place found that from participating, individuals are able to realize that they have value and worth as a person regardless of their mental health status, engendering the mechanism, dignity and self-worth (Rouse & McShane, 2015). The current study found a significant relationship between the mechanism dignity and self-worth, and the outcome of feeling better and at peace. This relationship has also been demonstrated in the literature. A study by Arns and Linney found that the development of self-esteem in a psychosocial rehabilitation program predicted the development of life satisfaction (Arns & Linney, 1993). A more recent study has found that participating in the activities at the clubhouse, i.e., the work ordered day, leads to the development of dignity and self-worth. In this study, clubhouse members discussed that increased feelings of dignity and self-worth lead them to feel more meaning in life (Tanaka & Davidson, 2015), which parallels the results of the present study.

Psychosocial rehabilitation gives clients the opportunity to make decisions and live by their own consequences, promoting the development of the mechanism, independence and self-efficacy. Because of the self-determination that is promoted at Progress Place, members felt that

they have more self-efficacy in making their own choices and have the skills in order to make plans, problem solve, and act independently. Results of the previous, qualitative evaluation found that self-determination results in the mechanism, independence and self-efficacy. The present study gives support that this mechanism predicts the development of the outcome feeling better and at peace, which has been supported in the literature. Personal empowerment, defined as sense of control over ones life, has been found to be a significant predictor of subjective quality of life among clubhouse members (Boyd & Bentley, 2006). Arns and Linney also found that the development of self-efficacy in a psychosocial rehabilitation program predicted the development of life satisfaction (Arns & Linney, 1993), complementing the results of the present study.

The previous realist evaluation at Progress Place uncovered that members describe having a sense of belonging and social connectedness at Progress Place (Rouse & McShane, 2015). They described Progress Place as a family, full of people they can trust and where they can fully be themselves. Peer support is an important aspect of building relationships in the clubhouse model because member and staff relationships are based on shared experiences, reciprocity, and equality (Biegel et al., 2013). The mechanism, sense of belonging, was described to come from a mutual, reciprocal need that members have for each other. This mechanism was found to predict the outcome feeling better and at peace, which is supported by the psychosocial rehabilitation literature. Research on clubhouses has found that individuals with severe mental illness who have larger or more satisfactory social networks report higher quality of life than those who do not (Corrigan & Phelan, 2004). Additionally, a recent study paralleled the results of the present study in that social network features influenced a subjective sense of recovery, including the extent of the support, and the reciprocal nature of the relationship (Pernice-Duca & Onaga, 2009). A study by Conrad-Garrisi and Pernice-Duca found that a sense of mattering, described as being attended

to, being concerned about, and regarded as significant, was predictive of a subjective sense of recovery (2013).

Confirmed Reaffirming Model

The confirmed reaffirming model includes the mechanisms acceptance, sense of respect, and non-judgment; and sense of belonging. These mechanisms were found to significantly predict the outcome of personhood. Personhood has been well documented in the psychosocial rehabilitation literature as an outcome of recovery that involves the remaking of a sense of being a person outside of the mental illness diagnosis (Lo, Yiu, & Ho, 2013; Tanaka & Davidson, 2015). Personhood has previously been discussed as the principle that transcends all others when working with people with severe mental illness (Anthony, 2004) and is one of the key factors of recovery when evaluating the quality of mental health care (Campbell, 1997).

Psychosocial rehabilitation programs allow for anyone who has ever had difficulties with mental illness to be accepted into the program (Cnaan et al., 1988). The continuous care approach is reinforced by the accepting nature of the program. Once an individual has utilized a psychosocial rehabilitation program they are considered to be part of it for as long as they choose (Cnaan et al., 1988). Results from the qualitative realist evaluation found that members experience acceptance, sense of respect, and non-judgment from both other members and staff regardless of their culture, sexual orientation, severity of mental illness, or any other marginalizing status. The members suggested that having feelings of acceptance, sense of respect, and non-judgment is a mechanism of change at Progress Place that leads to the outcome of personhood.

Acceptance, sense of respect and non-judgment have been found to be important factors in clubhouses, with a recent article reporting that clubhouse members do not feel judged, and

rather feel accepted and understood for who they are (Tanaka & Davidson, 2015). From their qualitative analyses, this study parallels the current results in that acceptance promotes the development of personhood in clubhouse members (Tanaka & Davidson, 2015). The article discusses that clubhouse staff portray respect, equality, and non-judgment by focusing on the strengths of members rather than their illness, and by emphasizing the equality of the staff member relationship. Due to this mechanism, members reported they have the opportunity to have "human value" (Tanaka & Davidson, 2015), which is synonymous with the concept of personhood in the present study.

Members at Progress Place describe having a sense of belonging and connection by participating in the clubhouse. In addition to predicting the outcome of feeling better and at peace, the mechanism sense of connection and belonging was found to predict the outcome of personhood. Having a diverse set of meaningful relationships and feeling like you are needed and valued by others has been found in previous research to be an important aspect in the recovery for clubhouse members (Hancock, Bundy, Honey, Helich, & Tamsett, 2013). Additionally, a recent study indicated that participating in the work ordered day at the clubhouse results in a sense of belonging, which helps members reconstruct their lives and find meaning in the life they wish to have (Tanaka & Davidson, 2014). These results, along with the current research, underscore the importance of the development of a sense of belonging for the outcome of personhood. Interestingly, a significant, negative correlation was found between age and personhood in the model. Although the finding may be spurious, an alternative explanation may be that individuals who are younger will have had less interaction with healthcare systems, due to a more recent diagnosis, and may be more likely to feel like a person, rather than a mental illness. More research is needed to further explore this correlation.

Confirmed Re-Engagement Model

The confirmed re-engagement model includes the mechanisms independence and self-efficacy and dignity and self-worth. These mechanisms were found to significantly predict the outcome of acquiring skills. Psychosocial rehabilitation programs believe that skill development will assist individuals through their recovery by enabling them to live a more typical lifestyle (Cnaan et al., 1988). A recent study by Hancock and colleagues found that individuals in the later stages of recovery at a clubhouse discuss contributing through meaningful activity is an important recovery outcome (2013). Specifically, they discuss that gaining skills for volunteer or paid employment, or doing other purposeful activity, is a key factor in recovery. Results of the qualitative evaluation found that by engaging in programming at Progress Place, members acquire skills in a number of domains, including social, employment, and general skills. Therefore, the outcome of acquiring skills was found to be an important recovery outcome for members.

Members of Progress Place stated that they have more independence and self-efficacy in making their own choices and have the skills in order to make plans, problem solve, and act independently. The present study suggests that this mechanism predicts the development of the outcome acquiring skills, which is also found in previous psychosocial rehabilitation literature. Research has suggested that self-efficacy and the development of skills may develop at the same time for members at clubhouses (Beard, Propst, & Malamud, 1982). Members may gain skills, which in turn, increase their self-efficacy for learning new skills. Specifically, previous research has found that members gain self-efficacy through the skills they learn in the work ordered day, and can extend these to employment outside of the clubhouse (Pernice-Duca, Markman, & Chateauvert, 2013). Self-efficacy can also increase feelings of recovery and personhood through

members' newly acquired skills (Pernice-Duca, Markman, & Chateauvert, 2013). Due to the correlational methods of the present study and the results of supporting literature, it is unknown whether self-efficacy predicts skill development, or vice versa. Research suggests that this correlation may be more complex than a basic linear relationship, and the gaining of self-efficacy and skills may occur simultaneously (Beard, Propst, & Malamud, 1982; Pernice-Duca, Markman, & Chateauvert, 2013).

By attending Progress Place, members are able to realize that they have value and worth as a person regardless of their mental health status, which produces the mechanism, dignity and self-worth. The current study found a significant relationship between the mechanism dignity and self-worth, and the outcome of acquiring skills. A qualitative study found that the work ordered day produces a sense of self-worth for members (Tanaka & Davidson, 2014). Clubhouse standards state that the work ordered day is designed to help members regain their self-worth, rather than be job-specific training (Adkins & Lenyoun, 2004). By promoting self-worth, members can seek out additional skills and pursue other activities that they may enjoy. Additional research has found that having skills for meaningful work is an important recovery outcome, and self-worth may assist members in finding work that they deem meaningful (Hancock, Bundy, Honey, Helich, Tamsett, 2013). Therefore, it appears that the relationship between self-worth and acquiring skills may not be linear, but may occur concurrently.

Implications

The results of the present study refine and validate the pre-existing theory of psychosocial rehabilitation recovery at Progress Place. The participatory approach was deemed to be successful in that 20% of Progress Place members participated in the research. The current study began with the theory of psychosocial rehabilitation, which, alongside qualitative data, informed

the creation and validation of the CMO configurations. The information gained from the present study highlight mechanisms and outcomes for which members' strengths and needs can be assessed. The results suggest that recovery, from a psychosocial rehabilitation perspective, is a multifaceted and holistic process that involves many mechanisms in order to produce outcomes.

Sense of connection and belonging was found to be a significant predictor of the outcome of feeling better and at peace and the outcome of personhood. It should be noted that the mechanisms sense of belonging and reduced isolation are very similar, but only sense of belonging was find to be a significant predictor. It is possible that individuals may feel a sense of connection and belonging at the clubhouse, but feel isolation when they leave. Progress Place should continue to make individuals feel welcome within the clubhouse, but should also work with individuals to create a social network outside of the clubhouse in order to promote reduced isolation. Going forward, clubhouses need to address the isolation that members may feel outside of the clubhouse in order to promote the development of recovery outcomes. Additionally, dignity and self-worth was found to be a significant predictor of the outcomes feeling better and at peace as well as acquiring skills. Therefore, if Progress Place is able to focus on increasing members' feelings of dignity and self-worth, through activities such as the work ordered day, they may be able to increase member's outcomes of feeling better and at peace and acquiring skills.

Another emerging avenue for treatment in the community is the Housing First initiative, which suggests that individuals should have access to adequate housing regardless of their mental health status. The premise is that housing will lessen homelessness, substance use relapse, and psychiatric hospital visits, which have been supported in the literature (Aubry et al., 2015). Although housing has been found to increase individual's quality of life (Aubry et al., 2015), the

present study suggests that many other factors other than housing may be involved in successful recovery. There are various mechanisms that produce outcomes of recovery from the psychosocial rehabilitation perspective, and it is necessary that programs promote a multifaceted, holistic perspective on recovery. It is important to note the effect of sense of connection and belonging on recovery outcomes, which has been researched extensively in the clubhouse literature. Although housing initiatives provide an important service, Progress Place, and other clubhouses that offer programming in addition to housing, may be able to produce many more recovery mechanisms and outcomes for members.

Limitations and Future Directions

Although the present study makes a considerable contribution to the psychosocial rehabilitation literature, a number of limitations exist. Interestingly, length of involvement did not have a relationship with the outcomes from the evaluation. It appears that regardless of how long an individual has been a member at Progress Place, outcomes are positive. This result was also found in a previous study that reported length of clubhouse membership did not have an impact on social network outcomes (Pernice-Duca, 2008). The author discussed that it is not the length of involvement but rather the quality of the involvement (i.e., meaningful relationships) that predict outcomes, which is a possible explanation in the present study. Members at Progress Place are given the opportunity to engage at the level of involvement they choose upon entering the program. Therefore, as they access the programs of their choice, outcomes are positive for that individual's stage in recovery. It is likely that Progress Place can offer programming to individuals regardless of their length of membership. Future research could address this hypothesis by evaluating differences between individuals at Progress Place and those who are not

attending clubhouses. It may also be important to look at the quality of their involvement, rather than the frequency and duration of membership.

The sample that was obtained in the present study consisted of high frequency users of Progress Place. Therefore, the participants were more likely to be satisfied with the support they are receiving. It would be of interest to contact members who do not attend Progress Place often, in order to determine what programming should be implemented for other members. The present study did not have a comparison sample to measure differences between the mechanisms and outcomes for individuals who attend Progress Place and those who do not. In place of a control group, it is recommended that Progress Place continue collecting data on these mechanisms and outcomes in order to track members over time. This data would provide longitudinal information about whether members at Progress Place change over time, and would also provide sufficient information suggesting that, regardless of severity, individuals are experiencing changes in their outcomes.

Although the quantitative data that was collected in the present study allowed for predictions of mechanism and outcome relationships, it is important to note that this relationship cannot determine causality. Regression models, although predictive, cannot determine the direction of the relationships. Therefore, it is possible that outcomes i.e., skills acquired, actually produce the mechanism, independence and self-efficacy, or they could occur simultaneously. Longitudinal data will also help in discovering the direction of these relationships can be predicted over time.

It should be noted that the VAS items that were used in the present study contained double and triple barreled items to represent constructs. Although this can be seen as problematic from a measurement point of view, these items were chosen because they reflect the language

that was used by participants. Members described their experiences using a number of terms that described one specific construct in their recovery. Therefore, these barreled items were necessary because they reflect the experiences of members. An additional limitation of the VAS scales is that they increase the likelihood of shared method variance. These items were highly correlated, and could have skewed the results of the present study. Conversely, there were no issues with multicolinearity in these scales, which provides evidence that although shared method variance may be present, the constructs do appear to be separate in their variance. In conclusion, the present study refined and validated a realist evaluation program theory. Future research should continue to test this theory of psychosocial rehabilitation within clubhouses in order to continue to promote mechanisms of change and recovery outcomes in members.

Conclusion

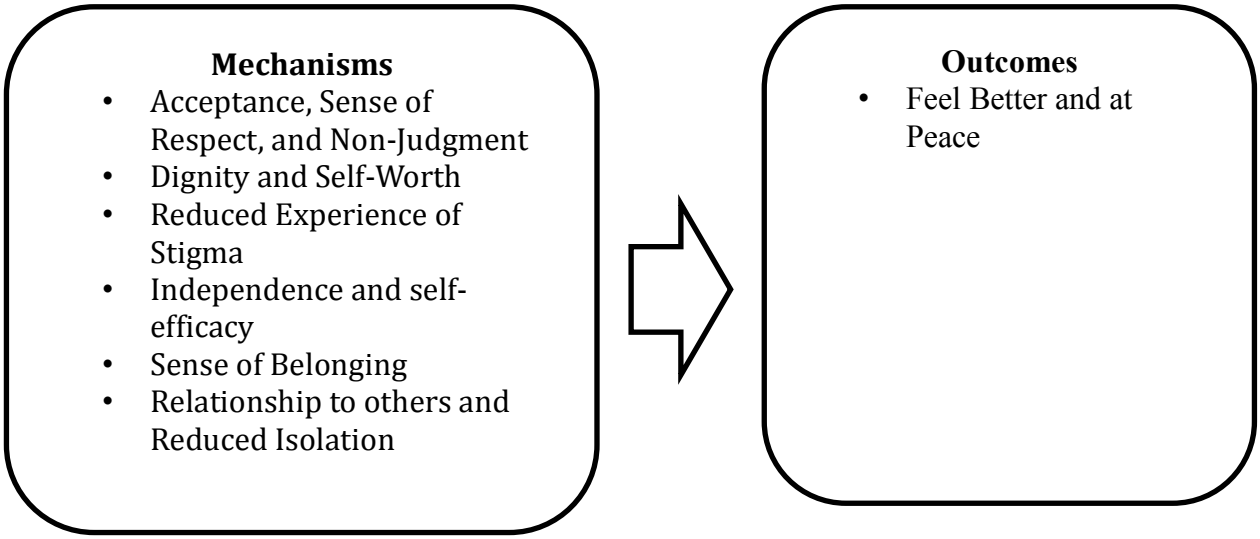
The present study has provided further support for a model of psychosocial rehabilitation at Progress Place. This model, represented by three mechanism—outcome pathways, is also supported by the previous psychosocial rehabilitation literature. It appears that from this model, Progress Place is providing a program that supports recovery for its members.

The present study found that sense of connection and belonging was an important mechanism for two recovery outcomes. Importantly, there was no difference in outcomes for members based on the length of their involvement. Therefore, it may be important to research the quality of the social support, rather than the length or frequency. Social support, defined as the quality of the network, versus the quantity, has been documented in the literature as an important recovery mechanism, and should be further researched in this population (Pernice-Duca, 2008). The quality of social support outside of Progress Place is not well understood, and may be an important piece to the present model of recovery.

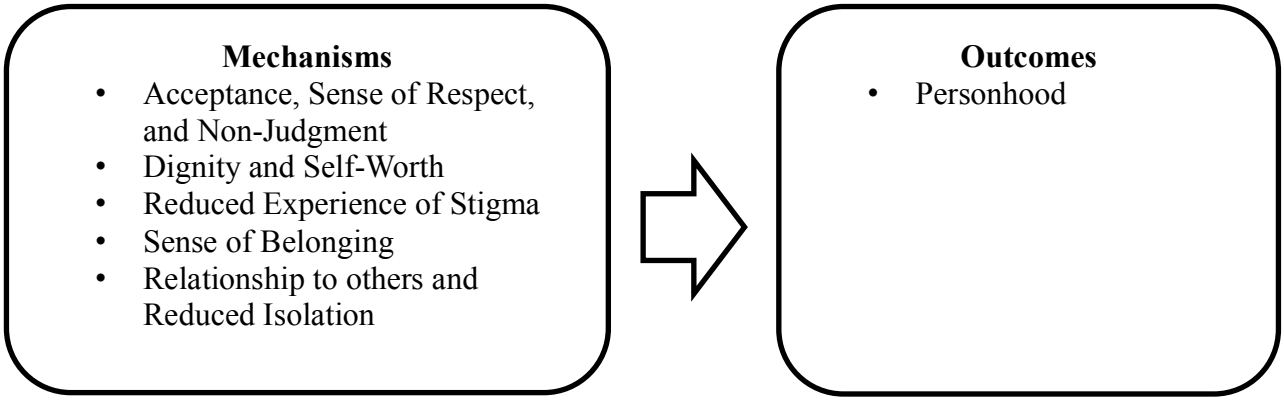
In conclusion, the present evaluation found that Progress Place is providing a program that is supporting recovery for its members. The evaluation presents results that suggest that the psychosocial rehabilitation model is quite complex, and a variety of mechanism—outcome pathways contribute to recovery. Due to this study, a refined model of psychosocial rehabilitation, supported by the literature, has been created.

Appendix A

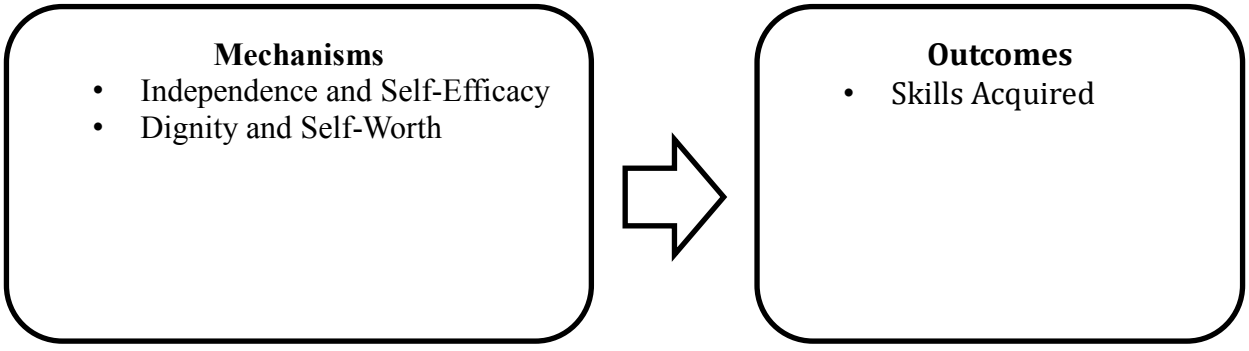
Restorative Model:



Reaffirming Model:



Re-engaging Model:



Appendix B

Aims and Hypotheses

Figure 1. Mediating model of frequency of usage.

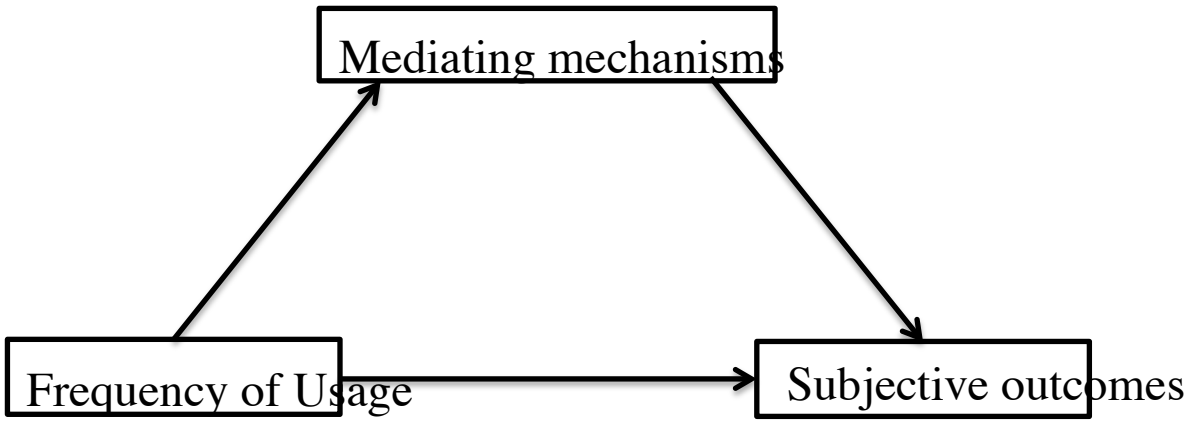
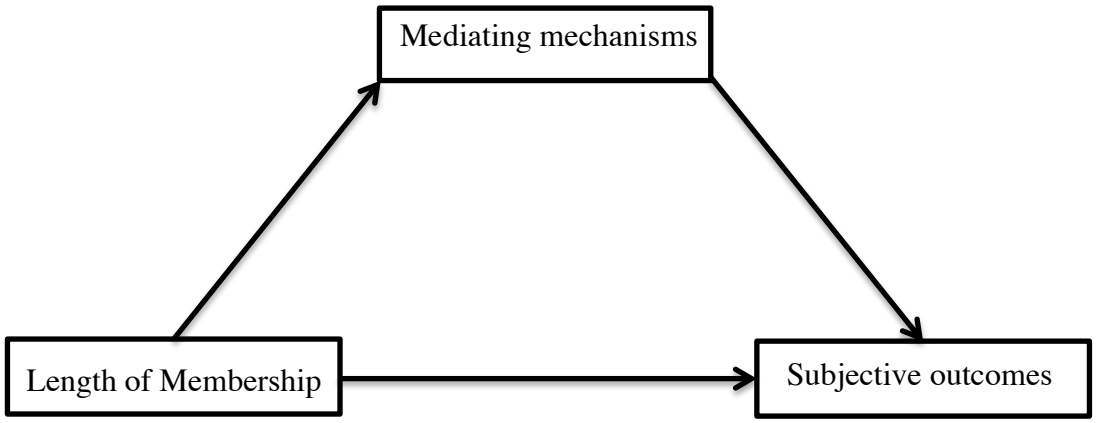


Figure 2. Mediating model of length of membership.



Appendix C

Demographics, Housing, Vocational and Service Use History Survey

1.What is your gender? Do you identify as:
- Male
- Female
- Transgender
- Transexual
- Other

2. What is your ethnic or cultural identity?

3. What is your level of education?
- Completed grade 4 or less
- Completed grade 5 to 8
- Attended some High School
- Completed High School
- Attended post-secondary school
- Completed post-secondary school

4. Have you participated in the transitional employment program at Progress Place in the past year?
- Yes
- No

5. Have you had independent employment in the past year?
- Yes
- No

6. Have you participated in the supported education program at Progress Place?
- Yes
- No

7. Are you currently diagnosed with a mental illness? If yes, please all that apply to you:
- No
- Depression
- Anxiety
- Schizophrenia
- Bipolar Disorder
- Other

8. What is your current housing situation?
- Living alone
- Living with family
- Living with partner
- Living in Progress Place housing
- Living in shelter
- No current residence

9. How long have you been attending Progress Place?
- Less than 1 year
- 1-3 years

- 3-5 years
- 5-8 years
- 8-10 years
- More than 10 years

10. Over the past 3 months, how often do you attend Progress Place?
    - Everyday
    - A couple of times a week
    - Once a week
    - Once every couple of weeks
    - Only for special events

Appendix D

UCLA Loneliness Scale

Directions: Indicate how often you feel the way described in each of the following statements. Rated on a scale from 1-4. (Never, Rarely, Sometimes, Often)
Circle one number for each.

1. I feel in tune with the people around me.	Never	Rarely	Sometimes	Often
2. I feel that others know me well.	Never	Rarely	Sometimes	Often
3. I can find companionship when I want it.	Never	Rarely	Sometimes	Often
4. People are around me and on my side.	Never	Rarely	Sometimes	Often

Appendix E

The General Belongingness Scale

Instructions: Here are some statements with which you may or may not agree. Using the key listed below, circle the number that most closely reflects your feelings about each statement.

1. When I am with other people, I feel included	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
2. I have close bonds with family and friends							
3. I feel accepted by others							
4. I have a sense of belonging							
5. I have a place at the table with others							
6. I feel connected with others							
7. I do not feel like an outsider							
8. I feel like people care about me							
9. I do not feel distant to others during the holidays							
10. I feel connected to the rest of the world							

11. When I am with other people, I feel like I belong
12. Friends and family involve me in their plans

Appendix F

The Self-Efficacy Scale (General)

1. I can always manage to solve difficult problems if I try hard enough.	Not at all true	Somewhat not true	Somewhat true	Exactly true
2. If someone opposes me, I can find the means and ways to get what I want.				
3. It is easy for me to stick to my aims and accomplish my goals.				
4. I am confident that I could deal efficiently with unexpected events.				
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.				
6. I can solve most problems if I invest the necessary effort.				
7. I can remain calm when facing difficulties because I can rely on my coping abilities.				

8. When I am confronted with a problem, I can usually find several solutions.	
9. If I am in trouble, I can usually think of a solution	
10. I can usually handle whatever comes my way.	

Appendix G

Satisfaction with Life Scale

1. In most ways my life is close to my ideal.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
2. The conditions of my life are excellent.							
3. I am satisfied with my life.							
4. So far I have gotten the important things I want in life.							
5. If I could live my life over, I would change almost nothing.							

Appendix H

Visual Analogue Scales

Acceptance, Sense of Respect, Equality, and Non-judgement

Please mark on a scale of 0-100 the extent you experience acceptance, respect, and non-judgment at Progress Place.

0 (none) 100 (always)

Relationship with Others and Reduced Isolation

Please mark on a scale of 0-100 the extent you feel reduced isolation and established interpersonal skills and relationships since being a member at Progress Place.

0 (none) 100 (always)

Reduced feelings of Stigma

Please mark on a scale of 0-100 the extent you feel protected, safe, and free from stigma and discrimination at Progress Place.

0 (none) 100 (always)

Sense of Connection and Belonging

Please mark on a scale of 0-100 the extent you feel a sense of belonging and social connectedness at Progress Place where you can fully be yourself.

0 (none) 100 (always)

Independence and Self-Efficacy

Please mark on a scale of 0-100 the extent you feel you are able to function independently and have confidence in your actions and decision-making.

0 (none) 100 (always)

Personhood

Please mark on a scale of 0-100 the extent you feel that others view you as a person who can be your full self, beyond your mental illness.

0 (none) 100 (always)

Feel Better and at Peace

Please mark on a scale of 0-100 the extent you feel at peace with yourself.

0 (none) 100 (always)

Dignity and Self-Worth

Please mark on a scale of 0-100 the extent you feel that you have value and worth as a person in society regardless of your mental health status.

0 (none) 100 (always)

Skills Acquired

Please mark on a scale of 0-100 the extent you feel that you have gained knowledge and skills at Progress Place that you can use in a volunteer or paid work experiences.

References

Adkins, V., & Lenyoun, M. An Active Treatment Alternative: A Clubhouse Model.

Anthony, W. A. (2004). The principle of personhood: The field's transcendent principle. *The Journal of Cognitive Rehabilitation,* 2004.

Arns, P. G., & Linney, J. A. (1993). Work, self, and life satisfaction for persons with severe and persistent mental disorders. *Psychosocial Rehabilitation Journal*, *17*(2), 63.

Aubry, T., Tsemberis, S., Adair, C. E., Veldhuizen, S., Streiner, D., Latimer, E., ... & Hume, C. (2015). One-year outcomes of a randomized controlled trial of housing first with ACT in five Canadian cities. *Psychiatric services*, *66*(5), 463-469.

Barton, R. (1999). Psychosocial rehabilitation services in community support systems: A review of outcomes and policy recommendations. *Psychiatric Services*.

Beard, J. H., Propst, R. N., & Malamud, T. J. (1982). The Fountain House model of psychiatric rehabilitation. *Psychosocial Rehabilitation Journal*.

Bergold, J., & Thomas, S. (2012). Participatory research methods: A methodological approach in motion. *Historical Social Research/Historische Sozialforschung*, 191-222.

Besancon, V., & Zipple, A. M. (1995). From day program to clubhouse: Practical strategies for supporting the transformation. *Psychosocial Rehabilitation Journal*, *18*(3), 7.

Biegel, D. E., Pernice-Duca, F., Chang, C. W., & D'Angelo, L. (2013). Correlates of peer support in a clubhouse setting. *Community mental health journal*, *49*(3), 249-259.

Boll, J. (1995). Member roles in program evaluation: A case study from a psychosocial clubhouse. *Psychiatric Rehabilitation Journal*, *19*(1), 79.

Bond, G. R., Becker, D. R., Drake, R. E., Rapp, C. A., Meisler, N., Lehman, A. F., ... & Blyler, C. R. (2001). Implementing Supported Employment as an Evidence-Based Practice.

Psychiatric services.

Boyd, A. S., & Bentley, K. J. (2006). The relationship between the level of personal empowerment and quality of life among psychosocial clubhouse members and consumer-operated drop-in center participants. *Social Work in Mental Health*, *4*(2), 67-93.

Campbell, J. (1997). How consumers/survivors are evaluating the quality of psychiatric care. *Evaluation Review*, *21*(3), 357-363.

Carolan, M., Onaga, E., Pernice-Duca, F., & Jimenez, T. (2011). A place to be: The role of clubhouses in facilitating social support. *Psychiatric rehabilitation journal*, *35*(2), 125.

Chang, C. W., Chung, C. L., Biegel, D. E., Pernice-Duca, F., Min, M. O., & D'Angelo, L. (2014). Predictors of loneliness of clubhouse members. *Psychiatric rehabilitation journal*, *37*(1), 51.

Cnaan, R. A., Blankertz, L., Messinger, K. W., & Gardner, J. R. (1988). Psychosocial rehabilitation: Toward a definition. *Psychosocial Rehabilitation Journal*, *11*(4), 61.

Conrad-Garrisi, D. L., & Pernice-Duca, F. (2013). The relationship between sense of mattering, stigma, and recovery: An empirical study of clubhouse participants in the US midwest. *International Journal of Self Help and Self Care*, *7*(1), 41-57.

Couper, M. P., Tourangeau, R., Conrad, F. G., & Singer, E. (2006). Evaluating the effectiveness of visual analog scales a web experiment. *Social Science Computer Review*, *24*(2), 227-245.

Couture, S., & Penn, D. (2003). Interpersonal contact and the stigma of mental illness: A review of the literature. *Journal of mental health*, *12*(3), 291-305.

Corrigan, P. W., & Phelan, S. M. (2004). Social support and recovery in people with serious mental illnesses. *Community mental health journal*, *40*(6), 513-523.

Dickert, N., & Sugarman, J. (2005). Ethical goals of community consultation in research. *American journal of public health*, *95*(7), 1123-1127.

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, *49*(1), 71-75.

Dougherty, S., Hastie, C., Bernard, J., Broadhurst, S., & Marcus, L. (1992). Supported education: A clubhouse experience. *Psychosocial Rehabilitation Journal*, *16*(2), 91.

Dunn, E. C., Wewiorski, N. J., & Rogers, E. S. (2008). The meaning and importance of employment to people in recovery from serious mental illness: results of a qualitative study. *Psychiatric rehabilitation journal*, *32*(1), 59.

Fitzgerald, S., Umucu, E., Arora, S., Huck, G., Benton, S. F., & Chan, F. (2015). Psychometric validation of the Clubhouse climate questionnaire as an autonomy support measure for people with severe mental illness. *Journal of Mental Health*, *24*(1), 38-42.

France, M. K., & Finney, S. J. (2009). What matters in the measurement of mattering? A construct validity study. *Measurement and Evaluation in Counseling and Development*, *42*(2), 104-120.

Gold, P. B., Macias, C., & Rodican, C. F. (2014). Does competitive work improve quality of life for adults with severe mental illness? Evidence from a randomized trial of supported employment. *The journal of behavioral health services & research*, 1-17.

Goering, P. N., Streiner, D. L., Adair, C., Aubry, T., Barker, J., Distasio, J., ... & Zabkiewicz, D. M. (2011). The At Home/Chez Soi trial protocol: a pragmatic, multi-site, randomised controlled trial of a Housing First intervention for homeless individuals with mental illness in five Canadian cities. *BMJ open*, *1*(2), e000323.

Hall, M. A., Camacho, F., Dugan, E., & Balkrishnan, R. (2002). Trust in the medical profession:

conceptual and measurement issues. *Health services research*, *37*(5), 1419-1439.

Hancock, N., Bundy, A., Honey, A., Helich, S., & Tamsett, S. (2013). Measuring the later stages of the recovery journey: Insights gained from Clubhouse members. *Community mental health journal*, *49*(3), 323-330.

Hays, R. D., & DiMatteo, M. R. (1987). A short-form measure of loneliness. *Journal of personality assessment*, *51*(1), 69-81.

Henry, A. D., Barreira, P., Banks, S., Brown, J. M., & McKay, C. (2001). A retrospective study of clubhouse-based transitional employment. *Psychiatric Rehabilitation Journal*, *24*(4), 344.

Iyer, S. N., Rothmann, T. L., Vogler, J. E., & Spaulding, W. D. (2005). Evaluating outcomes of rehabilitation for severe mental illness. *Rehabilitation Psychology*, *50*(1), 43.

Jung, S. H., & Kim, H. J. (2012). Perceived stigma and quality of life of individuals diagnosed with schizophrenia and receiving psychiatric rehabilitation services: a comparison between the clubhouse model and a rehabilitation skills training model in South Korea. *Psychiatric rehabilitation journal*, *35*(6), 460.

Macias, C., Jackson, R., Schroeder, C., & Wang, Q. (1999). What is a clubhouse? Report on the ICCD 1996 survey of USA clubhouses. *Community Mental Health Journal*, *35*(2), 181-190.

Malone, G. P., Pillow, D. R., & Osman, A. (2012). The general belongingness scale (GBS): Assessing achieved belongingness. *Personality and individual differences*, *52*(3), 311-316.

Mandiberg, J. M., & Edwards, M. (2013). Collective identity formation in the mental health Clubhouse Community. *Int J Self-Help Self-Care*, *7*, 19-39.

McKay, C., Johnsen, M., & Stein, R. (2005). Employment outcomes in Massachusetts Clubhouses. *Psychiatric rehabilitation journal*, *29*(1), 25.

Mueser, K. T., Bond, G. R., Drake, R. E., & Becker, D. R. (1997). An update on supported employment for people with severe mental illness. *Psychiatr Serv*, *48*, 335.

Nelson, G., Ochocka, J., Griffin, K., & Lord, J. (1998). "Nothing About Me, Without Me": Participatory Action Research with Self-Help/Mutual Aid Organizations for Psychiatric Consumer/Survivors. *American journal of community psychology*, *26*(6), 881-912.

Nelson, G., Sylvestre, J., Aubry, T., George, L., & Trainor, J. (2007). Housing choice and control, housing quality, and control over professional support as contributors to the subjective quality of life and community adaptation of people with severe mental illness. *Administration and Policy in Mental Health and Mental Health Services Research*, *34*(2), 89-100.

Pawson, R., & Tilley, N. (1997). *Realistic evaluation*. Sage.

Pernice-Duca, F. M. (2008). The structure and quality of social network support among mental health consumers of clubhouse programs. *Journal of Community Psychology*, *36*(7), 929-946.

Pernice-Duca, F., & Onaga, E. (2009). Examining the contribution of social network support to the recovery process among clubhouse members. *American Journal of Psychiatric Rehabilitation*, *12*(1), 1-30.

Pernice-Duca, F., Markman, B., & Chateauvert, H. (2013). Recovery in the Clubhouse environment: Applying ecological and social cognitive theories. *International Journal of Self Help & Self Care*, *7*(2), 151-165.

Raeburn, T., Schmied, V., Hungerford, C., & Cleary, M. (2014). Clubhouse model of psychiatric rehabilitation: How is recovery reflected in documentation?. *International journal of mental health nursing*, *23*(5), 389-397.

Rouse, J., & McShane, K. (2015, July). Final Report: Conceptualizing the Role of Progress Place in the Lives of Members. Report prepared for Progress Place.

Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of personality assessment*, *66*(1), 20-40.

Schonebaum, A. D., Boyd, J. K., & Dudek, K. J. (2006). A comparison of competitive employment outcomes for the clubhouse and PACT models. *Psychiatric services*.

Scheier, M. F., Wrosch, C., Baum, A., Cohen, S., Martire, L. M., Matthews, K. A., ... & Zdaniuk, B. (2006). The life engagement test: Assessing purpose in life. *Journal of behavioral medicine*, *29*(3), 291-298.

Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological reports*, *51*(2), 663-671.

Substance Abuse and Mental Health Services Administration. (2013). *Behavioral Health, United States, 2012*. HHS Publication No. (SMA) 13-4797. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Tanaka, K., Craig, T., & Davidson, L. (2015). Clubhouse community support for life: Staff–member relationships and recovery. *Journal of Psychosocial Rehabilitation and Mental Health*, *2*(2), 131-141.

Tanaka, K., & Davidson, L. (2015). Meanings associated with the core component of clubhouse life: the work-ordered day. *Psychiatric Quarterly*, *86*(2), 269-283.

Taylor, M. F. & Lorenzo-Schibley, J. (2010). Academia and Mental Health Practice Evaluation Partnerships: Focus on the Clubhouse Model. *Social Work in Mental Health, (8)*2, 134-139.

Tsang, A. W., Ng, R. M., & Yip, K. C. (2010). A six-month prospective case-controlled study of the effects of the clubhouse rehabilitation model on Chinese patients with chronic schizophrenia. *East Asian Archives of Psychiatry*, *20*(1), 23.

Zakrajsek, A. G., Mirza, M., Chan, N. K. C., Wilson, T., Karner, M., & Hammel, J. (2014). Supporting institution-to-community transitions for people with psychiatric disabilities: findings and implications from a participatory action research project. *Disability Studies Quarterly*, *34*(4).