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# The Impact of Drop-in Centers on the Long Term Mentally Ill

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**THE IMPACT OF DROP-IN CENTERS ON THE LONG TERM MENTALLY  
ILL**

by

**Marissa Snell**

A Dissertation presented to the College of Psychology  
of Nova Southeastern University  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

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This dissertation was submitted by Marissa Snell under the direction of the Chairperson of the dissertation committee listed below. It was submitted to the College of Psychology and approved in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Clinical Psychology at Nova Southeastern University.

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# **THE IMPACT OF DROP-IN CENTERS ON THE LONG TERM MENTALLY ILL**

**by**

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## **ABSTRACT**

Drop-in centers for individuals with serious and persistent mental illness offer a unique and perhaps under-recognized environment option for adjunct treatment. The current study examines and evaluates components thought to be a part of an enriched drop-in center experience that contribute to positive member outcomes through the effects of empowerment. These components include self-help, peer support, and creative expression. Outcomes were evaluated based on quality of life, self-worth, and symptom reduction. Such data are necessary in promoting the growth and development of drop-in centers and identification of components that contribute to positive member outcomes. Participants (n=101) were administered a series of measures including The Multidimensional Scale of Perceived Social Support, The Empowerment Scale, The Rosenberg Self-Esteem Scale, The World Health Organization Quality of Life-BREF, The BASIS-32™, and a series of questions created for the purposes of the current study regarding creative expression and self-help. The psychometric properties of each measure were evaluated and reviewed. Additionally, mean differences between normative data and participant means were examined and demographic data were analyzed. It was hypothesized from the

literature that self-help, peer support, and creative expression would have significant indirect effects on all of the proposed outcome variables through the effects of empowerment. Results revealed significant indirect relationships between peer support and all of the outcome variables through the effects of empowerment and between self-help and all of the outcome variables through the effects of empowerment. No significant relationships were found between creative expression and any of the outcome variables through the effects of empowerment. These findings suggest that peer support and self-help may be instrumental in achieving positive outcomes through the effects of empowerment. Centers that offer experiences to enhance self-help and peer support will subsequently enhance feelings of empowerment in members, which relates to higher levels of self-worth, higher levels of quality of life, and lower levels of psychiatric symptomatology. Further implications of such findings and suggestions for continuation of this research are discussed in detail.

## **CHAPTER I**

### **Statement of the Problem**

Individuals with a Long Term Mental Illness (LTMI) are often subject to stigmatization and inadequate continuing care. Although serious and persistent mental illness affects 1 in every 17 people (National Institute of Mental Health, n.d.), resources for this population are surprisingly limited.

The deinstitutionalization movement has caused a substantial decline in state psychiatric hospitalizations over the past fifty years. As observed by Davis et. al. (2012), this movement has resulted in an increase in the amount of previously institutionalized individuals who are in need of treatment and resources in the community. Furthermore, Davis et al. (2012), report that those with less serious mental illnesses have the most available community resources and receive higher quality of care. This leaves persons with more serious and persistent long term mental illnesses, such as schizophrenia and bipolar disorder, unsure of where to turn for help in the community.

Given the current trend in shortening length of stay for persons with long term mental illness in need of hospitalization (Rocca et al., 2010), evaluation of alternative community based recovery resources is crucial. In order to facilitate the growth of community centers with positive outcomes, we must first determine what components should be present in such environments in order to produce favorable outcomes. Once these components are identified, such centers can be established more easily and become more readily available to individuals in need.

### *Inpatient Psychiatric Hospitalization*

Individuals receiving inpatient psychiatric care are often discharged too early due to insurance problems or complications (Lee et. al., 2012). Studies have shown that suicide risk upon discharge is significantly greater in inpatient psychiatric patients who receive less than the average length of treatment (Qin & Nordentoft, 2005). Glick, Sharfstein, and Schwartz (2011) suggest that as a result of the trend of “ultrashort” hospitalizations, the length of stay is shortened from months to days and the focus of treatment has been only on safety and stabilization. Patients are no longer receiving the therapeutic care geared towards preparing them for challenges that they will inevitably face in the community. Glick et. al. (2011) compare the current hospitalization trends to an assembly line of sorts. Patients are rushed through diagnostic assessments before they have the chance to stabilize and the atmosphere has come to resemble more of a prison-like environment than an environment fostering stabilization and the beginning stages of recovery. These “ultrashort” hospital stays may actually do more harm than good and patients may be discharged in no better condition than they were admitted.

In addition to affecting the patient themselves, trends in inpatient hospitalizations can also impact families of the patient. Family burden is an important issue to consider as individuals with severe mental illness may need to unexpectedly move back in with their families. However, even the most supportive of family members can experience caregiver burnout. Caregiver burnout is defined as the mental, physical, and emotional exhaustion as a result of an overwhelming amount of caregiver stressors (Kasuya, Polgar-Bailey & Takeuchi, 2000). Such burnout can result in negative consequences (e.g., strained family



relationships, exacerbation of symptoms, neglect) and even increase the chances that the individual will be re-hospitalized.

Overall, the trend of shortening stays in inpatient psychiatric hospitals is leading to premature discharge from the hospital and increased risks of suicide, patient and family burden, and re-hospitalization. Individuals experiencing episodes of severe and persistent mental illness are put in a challenging and frightening position upon discharge from inpatient hospitalization. Patients and their families are left wondering where to turn for additional care and support in the community.

### *Community Resources*

Historically, individuals struggling with serious and persistent mental illness have had a limited amount of resources available in the community. Potential resources may include individual or group therapy at community mental health centers, support groups, and day programs. Such community services can provide support for individuals being discharged from shortened inpatient hospitalizations and decrease the likelihood that re-hospitalization will be necessary (Qin & Nordentoft, 2005, Davis et. al., 2012). Therefore, these community services will be the necessary bridge between shortened inpatient stays and successful recovery in the community, as they offer a solution to deficits in care and support in the community. Community based care can even be argued as a preventative measure, since the availability and usage of these services may reduce the stress put on caregivers and help to prevent relapse of a mental illness.

Despite the knowledge that community support is imperative, there is very little research regarding community mental health services for individuals with a serious and persistent mental illness. Community mental health centers generally provide basic and

necessary elements (e.g., coordinated psychiatric and case management services). These centers may also encourage patients to visit drop-in centers or partner with such centers in order to provide a more comprehensive treatment approach.

It is also important to note that although the community resources may be available, individuals with serious mental illness are not necessarily utilizing all of these services. This could be for a variety of reasons including cost of services, lack of insurance, fear of being stigmatized, or lack of awareness regarding available services. Thus, an environment offering free support for individuals with mental illness in a judgment-free, empowering environment may attract those who cannot or do not want to access more traditional community resources.

### *Drop-in Centers*

Drop-in centers add a unique and perhaps under-recognized option for adjunct treatment. It is evident that transitioning from an inpatient setting back into the community comes with many challenges. While there are some resources available, such as those discussed above, many of the more successful community based resources employ philosophies that emphasize an individual's potential for recovery with a focus on empowerment. Empowerment can be defined as the process by which an individual's sense of autonomy is increased. By engaging in empowering experiences, individuals gain or regain confidence and control, increasing their abilities to make important life decisions. A drop-in center is typically a center run by the members of the centers themselves that operates under the principles of the recovery model, which is discussed in detail in the review of the literature. These centers offer a judgment and cost free

environment that addresses some of the reasons, such as stigma and finances, that prevent people from seeking out more traditional resources.

Empowerment is thought to be a central component of the drop-in center experience. Unfortunately, individuals with serious mental illness often succumb to the patient role and lose their sense of autonomy. A more comprehensive exploration of this essential component can be found in the review of the literature.

Appropriate support systems such as those provided by drop-in centers can promote both a decrease in need for hospital visits among the LTMI population and ensure more positive outcomes. Studies have shown that community integration is a key component in recovery from a serious and persistent mental illness (Yasui & Berven, 2008), and such integration may be fostered by the components thought to be present in the drop-in center environment. Providing adequate levels of community support through drop-in centers may also help to decrease re-hospitalization and facilitate a faster and more stable recovery.

Drop-in centers provide a level of support above and beyond that typically received from traditional community mental health center organizations and the medical and social services they provide. These centers offer a supportive environment for socialization, self-expression, and the journey of recovery. Thus, the drop-in center model poses a potential contribution to reducing the problem of inadequate continuing care. However, a review of current literature reveals a shortage of outcome data on the drop-in center model as a tool for supporting individuals with LTMI. While there are some studies showing various benefits of this model, such as preparing persons with a LTMI for the workforce (Howard, 1992), the literature lacks a comprehensive review of

the many aspects involved in this model and focuses more on the traditional idea of a drop-in center as opposed to newer, more innovative centers. A detailed exploration of the differences between traditional and more innovative drop-in centers can be found in the review of the literature. Research providing empirical support for drop-in center programs is equally as scarce. Such a shortage in research limits the recognition and expansion of innovative drop-in centers as an adjunct for continuing care.

In order to promote the growth of innovative drop-in centers, research must be conducted that demonstrates their efficacy and highlights key components of these programs. The first stages of such research should include the evaluation of commonly observed components of drop-in centers with regard to their impact on a variety of desired outcomes. Such research would provide the foundation for an area of research focusing on the efficacy of drop-in centers.

The current study examines common components of an enriched drop-in center that have been identified in the literature and that may contribute to positive member outcomes. A theoretical model identifying these components will be proposed and relationships between each of the components and important patient outcomes will be evaluated. Literature suggests that the drop-in center experience is comprised of a variety of enriching experiences; however, these experiences have yet to be empirically examined and evaluated with regard to their relationship to desired outcomes for individuals with serious mental illness. The components evaluated in the current study will include self-help, peer support, and creative expression. It is proposed that each of these three components leads to increased empowerment, which will in turn contribute to more favorable outcomes, including quality of life, self-worth, and symptom reduction.

Such data are a necessary step in building a foundation of literature on the drop-in center experience, promoting the growth and development of drop-in centers, and identification of components that contribute to the success of these centers and their relationships to critical patient outcomes.

## CHAPTER II

### Review of the Literature

Chapter I provided an overview of the problem regarding the need for community support for individuals with serious and persistent mental illness. Chapter II will present a comprehensive review of current literature surrounding this problem, including a detailed review of the recovery model and the drop-in center philosophy. A conceptual framework for understanding the key components of drop-in centers and their impact on the recovery process will be provided.

The following section will examine different models of community support including the clubhouse model, psychiatric rehabilitation, and the recovery model. Each of these models has made a substantial contribution to community mental health and has helped to shape the innovative drop-in centers that are the subject of the current study.

#### *Clubhouse Model Beginnings*

The inception of the clubhouse framework can be traced back to the founding of Fountain House in 1948. Fountain House, which was located in New York City, was based on the notion that individuals with mental illness could become “members” of a supportive program and benefit greatly from efforts of rehabilitation, community, and reciprocal relationships. At that time, such an idea was considered quite radical in its distinction from the medical model (Clubhouse International, 2013). Beard et. al. (1982) described Fountain House as “an intentional community designed to create a restorative environment.” This environment was designed specifically to help individuals struggling with a severe mental illness gain or regain the confidence and skills necessary to lead productive and satisfying lives (Beard et. al., 1982). After gaining much attention and a

grant from the National Institute of Mental Health, Fountain House subsequently established a three-week training program for the clubhouse model in 1977. The training provided an overview of the clubhouse framework and helped plant the seed for the National Clubhouse Expansion Project of 1987 (Clubhouse International, 2013). Beard and colleagues (1982) highlighted four important messages that the Fountain House seeks to convey, helping to set the stage for clubhouse expansion: 1) all participants are referred to as “members” as opposed to patients or clients, 2) all members are made to feel that their presence is expected and that they are always welcome, 3) all program elements are constructed in a manner that reflects the contributions and importance of all members, and 4) all members should not only feel wanted, but also needed in the program. In addition to these four important messages, Beard and colleagues (1982) also highlighted four fundamental beliefs upon which the model is formed: 1) the most severely disabled psychiatric patient has potential for productivity, 2) work is a key “generative and re-integrative” force, 3) people require opportunities for social interactions, 4) living situations of members must be addressed and an apartment program is available to members. In 1988, a Faculty for Clubhouse Development was created and International Standards for Clubhouse Programs (1989) was developed soon thereafter. Clubhouse International was established in 1994, continuing this trajectory towards clubhouse expansion and an established framework. Clubhouse International continues to grow today. The 2012 Annual Report reveals that 51 clubhouses in 12 countries achieved accreditation in 2012 (Clubhouse International, 2012).

### *Psychiatric Rehabilitation*

The philosophy of psychiatric rehabilitation is often incorporated into the various community services (e.g., clubhouses) for individuals with a serious and persistent mental illness. Psychiatric rehabilitation can be defined as a process that promotes recovery, community integration, and improved quality of life for individuals with mental illness. The focus is on developing skills and acquiring necessary resources to increase one's capacity to lead a successful, satisfying life with a collaborative, person directed, and individualized approach (Anthony & Farkas, 2009). Psychiatric rehabilitation can be explained as a Diagnosis-Planning-Intervention (DPI) process. In the diagnostic phase, the focus is on evaluating and developing one's readiness for rehabilitation, helping individuals to determine goals, identifying the skills required to achieve these goals, and identifying both current and necessary supports and resources. Anthony and Farkas (2009) suggest that readiness for rehabilitation should be assessed based on five separate dimensions: (1) need for change, (2) commitment to change, (3) personal closeness, (4) self-awareness, and (5) environmental awareness. In the planning phase, individuals formulate a plan of action that identifies how to develop the necessary skills and supports. Finally, in the intervention phase, the rehabilitation plan is implemented and individuals are helped to develop the identified skills and supports in order to reach their desired goals (Anthony & Farkas, 2009). Additionally, Anthony and Farkas (2009) highlight the importance of keeping specific records at each level of the process and tracking progress. Records enable the individual taking part in the intervention to see the results of their efforts. The process can be implemented in any program, independent of



the model, so long as the target outcome of the program is to increase the satisfaction and success of members within the program.

As psychiatric rehabilitation continues to gain attention in the field of serious and persistent mental illness, studies evaluating the effectiveness of this process are emerging in the literature. Malinovsky et. al (2013) conducted a longitudinal study at a large community psychiatric rehabilitation organization. In order to evaluate the impact of the services provided, Malinovsky & colleagues (2013) assessed objective indicators of recovery, self-report indicators of recovery, indicators of staff competency, and processes that promote recovery. Results of the study revealed that this recovery-oriented program had a positive impact on rates of overnight hospitalization, ability to function in the community, professional skills of employees, and alliance between direct care providers and program residents (Malinovsky et. al. 2013). Such findings promote the use of psychiatric rehabilitation progress as a lower cost alternative to care for individuals with serious and persistent mental illness. Ellison et. al. (2011) conducted a study examining the outcomes of Intensive Psychiatric Rehabilitation (IPR) for individuals with serious and persistent mental illness. The study evaluated rehabilitation outcomes including residential and employment status and earnings by comparing participants who underwent IPR for one year to those that dropped out early (e.g. before 6 months) and those that dropped out later (e.g. 6-12 months). Results indicated that IPR was significantly correlated with improvement in residential and employment status as well as monthly earnings. However, those who stayed in the IPR program typically utilized more mental health services, which did not generally reduce overall cost of services (Ellison et. al., 2011).

### *The Recovery Model*

Recovery can have many meanings. For example, in the medical field, recovery may suggest a return to previous level of functioning or a cure. In the area of mental illness, recovery does not necessarily imply the elimination of all psychiatric symptoms. Instead, recovery is used to describe the self-guided journey through which an individual learns to cope and to manage their mental illness. The Substance Abuse and Mental Health Service Administrations (SAMHSA; 2011), defines recovery as “a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential”.

The recovery model suggests that mental illness is no longer a “prognosis of doom”, emphasizing that there is hope to lead a fulfilling and rewarding life even after one or more episodes of illness. Additionally, this model avoids seeing the individual in the role of a patient. There is little emphasis on diagnosis and more emphasis on viewing the individual as a capable person who is full of potential (Andersen, Oades, & Caputi, 2003; Farkas et. al., 2005).

Andresen et. al. (2003) conducted a review on recovery in individuals with serious mental illness. By reviewing qualitative research, theoretical literature, and consumer articles, the authors identified common themes in order to construct a conceptual model of the experience of recovery. Results of the study indicated that individuals recovering from a serious and persistent mental illness define recovery as psychologically recovering from the consequences of their illness. This definition appears to fall somewhere in between a rehabilitation model and an empowerment model. Additionally, four key processes of recovery were identified: finding hope,

reestablishment of identity, finding meaning in life, and taking responsibility for recovery. After a comprehensive review, Andresen et. al. (2003) identified and named five stages that comprise the recovery journey. The first stage is moratorium, which is characterized by denial, confusion, hopelessness, and withdrawal. After experiencing an episode of major mental illness, which may involve psychosis or other severely disruptive symptoms, the individual is often left in a state of disbelief and despair. It can be difficult to come to terms with having a serious and persistent mental illness, since these diagnoses bring a life-long struggle. The second stage is awareness. At the awareness stage, the individual begins to feel hopeful that recovery is possible. This realization involves recognition that the individual is not simply a 'patient' and that within each person is the capability to recover. In the third stage, preparation, the individual makes a decision to begin the recovery journey. Within this stage, the individual begins to learn about mental illness, available services, skills, and means of connecting with peers. In the fourth stage, rebuilding, the individual works hard towards achieving their goals and learning to manage their illness. This stage may involve overcoming many challenges and setbacks and taking risks to achieve one's fullest potential. Finally, the individual enters the fifth stage of growth. The growth stage can be considered the outcome stage of the recovery process. At this stage, the individual has developed the abilities and skills to manage their illness and lead a meaningful and fulfilling life (Andresen et. al., 2003). While this process is largely dependent on the individual helping themselves, recovery-oriented programs can help encourage the individual and provide support as they embark on their recovery journey. Examples of such programs will be discussed in the coming sections.

Farkas et. al. (2005) identified several critical dimensions of recovery-oriented, evidenced-based programs. These dimensions are suggested to be the underlying principles and guiding values of recovery-based programs. Person orientation, or an understanding of an individual's strengths and weaknesses and their roles beyond that of a patient or client, is proposed as a core value. Other key dimensions include person involvement (e.g., meaningful involvement in planning and delivery of one's own care), self-determination/choice (e.g., choice and partnerships), and growth potential (e.g., hope for the future). In addition, Farkas and colleagues highlight examples of expected outcomes from recovery-centered programs. These outcomes include gaining or regaining one's role, experiencing increased satisfaction and success in this role, reducing or controlling symptoms, increasing sense of empowerment, increasing feelings of well-being, increasing number or quality of interpersonal relationships, improving physical health, and increasing self-esteem.

With the recent movement towards evidence-based practice, the recovery model has been looked upon with an increasingly critical eye. Frese et. al., (2001) suggest that evidenced-based practices can be integrated with the recovery model. While evidence-based practices often rely more heavily on the medical model, Frese suggests that for some levels of pathology this model may be necessary. Furthermore, he suggests that individuals experiencing severe and persistent symptoms of mental illness may lack insight into the nature or severity of their mental illness. In this case, it becomes necessary for the individual to take on a patient role until they become stable enough to benefit from a more recovery oriented treatment (Frese et. al., 2001). Viewing treatment and recovery on such a continuum paves the way for further research on recovery based

programs. Recovery programs are difficult to research due to the largely subjective nature of these treatments. However, research providing empirical support to recovery based programs may help gain the support of mental health professionals and encourage the use of such programs for individuals who are capable of making rational decisions and taking back control. A combination of evidenced-based treatment interventions and recovery-oriented programs may be a good option for individuals who fall somewhere in between on this spectrum of impairment.

### *Drop-in Center Model*

Drop-in centers, which can also be conceptualized as a clubhouse model approach to treatment, have proven to be efficacious in the treatment of persons with long term mental illness when adequately designed. The drop-in center philosophy typically follows the recovery model, and allows members to come and go as they please, participating in an array of offered groups and activities (Mowbray, Lewandowski, Holter & Bybee, 2006). However, there is high variability in both the implementation and efficacy of such centers. Many of these centers employ a self-help point of view, in which the facility is run by the members themselves. Availability of programs and opportunities differ between centers, ranging from innovative centers for creativity to a place to stop in for a coffee (Holter & Mowbray, 2005). While such centers have long been viewed as a secondary alternative to therapy, recent efficacy studies and developments suggest that drop-in centers become a more available supplementary treatment for persons with severe and persistent mental illnesses.

Holter and Mowbray (2005) conducted a series of telephone surveys to assess the

operations and costs of 32 member run drop-in centers. Results of the surveys revealed high heterogeneity in the types of services, as well as member involvement. Additionally, results revealed average annual operating costs to be \$68,407, ranging from \$2,080-\$254,820 depending on amount of funding provided. Centers with access to more funds provided more services to members, which is positively correlated with positive outcomes (Segal, Silverman & Temkin, 2010). The need for adequate funding is an issue faced by many struggling drop-in centers. However, research demonstrating the efficacy and positive outcomes of these drop-in centers will likely result in easier access to funding. Holter and Mowbray (2005) also tested for the influence of neighborhood on drop-in centers. Results showed that drop-in centers located in or near average or below average neighborhoods tended to have higher numbers of daily members served, suggesting that people often turn to the drop-in center environment to remove themselves from unfavorable neighborhood environments.

Mowbray et al., (2006) surveyed over 2,000 members of 30 statewide clubhouse model drop-in centers in Michigan. Mowbray and colleagues sought to provide evidence that clubhouse models, which are viewed as a form of psychosocial rehabilitation, have empowering properties for active members. Member involvement, support and problem solving assistance, and total specialized services were used as the dependent variables to measure empowerment. Predictors of empowerment included community context variables, consumer characteristics, community resource levels, and internal organizational characteristics. Results of hierarchical regression analyses showed that all of the predictor variables were significantly correlated with empowerment of members. However, the results showed that some centers had much better member outcomes than

others. Drop-in centers scoring higher on the dependent measures (e.g., member involvement) revealed higher member satisfaction, opportunities, and improvement. (Mowbray et al., 2006). Such findings help to identify the most beneficial structure for current and developing drop-in centers and encourage funding of such sites. These results must still be viewed with caution, given that they represent only one state (Michigan) and generalization may be threatened due to selection bias. Still, they provide useful, scarce data on a relatively large sample of member-run drop-in centers and encourage further data collection on drop-in center member outcomes.

In a more recent study conducted by Corrigan, Sokol, and Rüsch (2013), the impact of mutual help programs on quality of life of individuals with a serious mental illness was evaluated. The authors define mutual help programs (MHPs) as “informal services developed and operated by people with serious mental illnesses for peers with these illnesses”. Many of the components of the drop-in center model fall within this definition (i.e., informal support groups and member initiated projects). Participants were interviewed by trained research assistants and were administered the Internalized Stigma of Mental Illness Scale (ISMIS) and the Empowerment Scale ( $n= 85$ ). Results revealed that individuals who are more satisfied with their participation in MHPs experience a decrease in self-stigma and an increase in quality of life. Additionally, a significant relationship was found between satisfaction and both group identification and social support (Corrigan, Sokol, and Rüsch, 2013). Such findings lend support to the positive impact of consumer-run programs for individuals with long term mental illness.

The apparent heterogeneity of these drop-in centers speaks to the importance of identifying an underlying framework, which highlights essential components of a

successful drop-in center. More specifically, the development of a comprehensive model to represent innovative drop-in centers can encourage re-creation of a more homogeneous center that incorporates each key component. The following section will explore several key components of the drop-in center model. These components are thought to be essential in the recovery process and include self-help, peer support, creative expression, and the empowerment resulting from combining these experiences.

### *Self-help*

Self-help is defined as relying on and using one's own resources and efforts to achieve a goal. The process of self-help can be conceptualized as a self-guided journey towards improvement. While the overall goal for members at a drop-in center generally relates to effectively managing mental illness, individual goals may vary from person to person. In a social environment such as a drop-in center, self-help is often integrated with helping others as well.

A recent study by Segal, Silverman, & Temkin (2010) examined the effects of a self-help component of community mental health care for a population with long term mental illness. Self-help agencies are defined as agencies that subscribe to the member run clubhouse philosophy. Participants were randomly assigned to receive care from regular community mental health agency services (CMHA) or to receive care from CMHA and to also become involved in self-help agencies (SHA; N= 505). Results showed much higher benefits for the combined CMHA-SHA group than for the group that received CMHA alone, indicating that self-help adds a beneficial component to community care. Such findings help to exemplify the need of member run drop-in centers for the seriously mentally ill. Self-help is facilitated by an experience or atmosphere that



fosters the individual's ability to engage in the self-help process. Thus, the dynamic between individuals (e.g., peer support) who are involved in the center is also an important element of the drop-in center model.

### *Peer Support*

Peer support is an essential component of the more innovative drop-in center models. Davidson et. al. (2006) describe the philosophy of peer support as "the belief that people who have faced, endured, and overcome adversity can offer useful support, encouragement, hope, and perhaps mentorship to others facing similar situations." The philosophy of peer support has been applied in many areas including substance abuse and medical illness. In recent years, programs emphasizing peer support are becoming increasingly common in the area of severe and persistent mental illness. Peers are defined as individuals who are in the recovery stage of a mental illness and provide assistance to others experiencing mental illness who are not as far along in their recovery (Davidson et. al., 2006).

There is a newly emerging body of research working to evaluate the efficacy of self-help and peer support recovery-oriented services. In one such study conducted by Cook et. al. (2011), the use of Wellness Recovery Action Planning (WRAP) for individuals with severe and persistent mental illness was evaluated. WRAP is a peer-led self-management intervention that is often used in outpatient community mental health settings. The authors compared individuals assigned to an 8-week WRAP intervention with individuals in a wait list control condition. Results indicated that individuals receiving the peer-led intervention reported greater symptom reduction, higher levels of hopefulness, and greater enhancement in quality of life (Cook et.al., 2011). The findings

of this study lend support to the importance of the peer-led component of recovery-based services.

It is important to note, however, that many studies have been unable to state clear findings regarding the impact of peer support. Davidson et. al. (2006) suggest that this is due, in part, to the fact that formally applying peer support to mental illness is a relatively new construct that is difficult to conceptualize and measure. These findings highlight the importance of considering the other factors at play in the drop-in center model.

### *Creative Expression*

Creative domains (e.g., arts, music, and dance) have been shown to benefit persons with mental illnesses. Grocke, Bloch, and Castle (2009) used a 10-week music therapy intervention to show these positive effects. Results of the interventions revealed significant improvement for participants (Grocke, Bloch, & Castle, 2009). Additionally, an inherent healing property has been identified in creating works of art, finding that the process allows the objectification of distress and cathartic release (Coulson & Stickley, 2006). The benefits of these processes have long been demonstrated in a variety of populations include children, terminally ill patients, and the elderly (Isenberg & Jalongo, 1993; Bailey, 1984; Fritsch et. al., 2009) However, very little literature exists on the application of such processes to the long term mentally ill.

### *Empowerment*

While the concept of empowerment continues to receive recognition as the recovery model gains support, defining such a construct is not an easy task. Empowerment refers to increasing an individual's sense of autonomy. More specifically, empowerment is the process by which individuals gain the confidence, control, and

ability to make important decisions about their lives. Often, individuals who are hospitalized or receiving extensive treatment for mental illness succumb to the role of "patient" and lose sight of their own individual abilities (Harp, 1994; Rogers et. al., 1997). Recovery treatment programs focus on restoring this ability by promoting autonomy and self-care.

In an article published by a self-proclaimed "former mental health patient," Harp (1994) highlights essential components of his personal experience. He highlights four levels on which empowerment should occur: (1) freedom of choice regarding one's individual services, (2) a role in the operation and decision making structure of programs providing these services, (3) participation in the planning, evaluation, and decision making on a system-wide level, and (4) participation in civic issues on community, city, county, state, and federal levels. The drop-in center model provides opportunities for individuals to experience empowerment on all of these levels. Members are given the choice regarding whether or not to come to the center, to attend meetings, and to participate in activities. Additionally, members have the opportunity to create support groups, classes, and events. Members may become staff in paid positions at the centers and are entitled to involvement and participation in both internal and external issues that may affect the center. This meaningful role ensures that members are receiving the services that they want and increases the likelihood of positive outcomes (e.g. increased quality of life, increased self-worth, and decreased psychiatric symptoms).

Rogers et. al. (1997) developed a scale to measure the construct of empowerment. In developing this scale, the authors began by surveying a selected board of ten mental health consumers who were actively involved in the consumer-survivor movement. These

board members worked to develop a clear, more representative definition of empowerment. The measure was developed and administered in conjunction with several other measures (i.e. checklist of mental health services used, self-help scales, satisfaction with program, community activity checklist, demographic questionnaire) in order to explore potential relationships and begin to evaluate psychometric properties. Results revealed a significant relationship between community involvement and empowerment. Additionally, results suggested an inverse relationship between the use of traditional mental health services and empowerment. Interestingly, this early research did not demonstrate a significant relationship between self-help and empowerment. However, later research has shown a much stronger relationship between these constructs and has demonstrated additional significant correlations between empowerment and decreased psychiatric symptoms as well as empowerment and social inclusion or acceptance (Rogers, Ralph, & Salzer, 2010). These relationships are of particular relevance to the current study as they demonstrate the potential impact of a community based, more innovative service on empowerment.

### *Summary, Purpose, and Hypotheses*

Persons with Long Term Mental Illness (LTMI) are often subject to stigmatization and inadequate continuing care. While inpatient hospital stays are all too familiar to LTMI patients, they are often left needing more care and support in the community after their stay at the hospital concludes. Additionally, appropriate support systems in the community can promote a decrease in need for hospital visits among the LTMI population and more positive outcomes. The need for adequate community mental health treatment and support combined with the difficulty accessing such services

highlights the need for alternative programs. The drop-in center is proposed as a potential solution to this problem.

The history of the clubhouse model dates back to 1948 with the development of the Fountain House. Clubhouses have continued to expand and evolve throughout the years, paving the way for the innovative and enriched clubhouses of today (Clubhouse International, 2012; Beard et. al.,1982). The recovery model serves as a guiding framework by which clubhouses operate (Andresen et. al.,2003). Principles of psychiatric rehabilitation may also be incorporated into the drop-in center philosophy (Anthony & Farkas, 2009). While the underlying framework of the clubhouse model or drop-in center is a strong one, a review of current literature reveals a shortage in data on these centers as an adjunctive treatment for individuals with a LTMI. While there are some studies showing various benefits of this model such as preparing persons with a LTMI for the workforce (Mowbray, Holter, Mowbray, & Bybee, 2005), the literature lacks a comprehensive review of the many aspects involved in this model. A move towards evidence based practice and a lack of an identified structure poses a threat to the growth of successful drop-in centers. Thus, it becomes necessary to evaluate the structure of such programs in order to identify key components of the model and encourage replication of successful clubhouse structures.

Self-help, peer support, creative expression, and empowerment have all consistently demonstrated positive outcomes in the literature (Segal, Silverman, & Temkin, 2010; Cook et. al., 2011; Coulson & Stickley, 2006; Harp, 1994). However, the literature lacks a comprehensive model of the drop-in center experience that incorporates these key components.

The current study seeks to address the lack of understanding of key elements that contribute to success of drop-in centers by proposing a theoretical model to represent the consumer experience at these centers. The study will be conducted at a drop-in center located in South Florida. This site is considered to be an enriched drop-in center whose primary goal is for members to create a safe and happy environment for self-expression and growth, rather than focusing on vocational goals. This is done through a series of member-run art classes, support groups, and musical explorations. The philosophy focuses on normalization, in that it takes the medical focus off of the experience of treatment for the severely mentally ill. It is a recovery model in which emphasizing strengths is seen as more beneficial than focusing on weaknesses.

### ***Hypotheses***

Self-help, peer support, and creative expression are being evaluated in the current study as literature has suggested that these components play an important role in the drop-in center experience. The study hypothesizes that these three components (independent variables) of the drop-in center experience will contribute to higher levels of empowerment (mediator). Individuals with a severe and persistent mental illness who experience an increase in empowerment will subsequently experience a higher quality of life, an increase in self-worth, and an overall reduction in symptoms (dependent variables). Thus, the proposed model posits that each of these independent variables has an indirect effect on the dependent variables through the mediating effects of empowerment. A mediator variable is a variable that explains the relationship between the independent and dependent variables. Furthermore, the proposed model suggests that empowerment is a necessary mediator and that no direct relationships between

independent and dependent variables will exist. Empowerment is thought to be an essential component to the process of recovery and extensive research has demonstrated the value of empowering individuals with mental illness. The increase in autonomy facilitated by empowerment is instrumental in obtaining positive outcomes.

The hypotheses are represented as the following:

Hypothesis 1:

- a. Self-help will have a positive indirect relationship with quality of life through the effects of empowerment.
- b. Peer support will have a positive indirect relationship with quality of life through the effects of empowerment.
- c. Creative expression will have a positive indirect relationship with quality of life through the effects of empowerment.

Hypothesis 2:

- a. Self-help will have a positive indirect relationship with self-worth through the effects of empowerment.
- b. Peer support will have a positive indirect relationship with self-worth through the effects of empowerment.
- c. Creative expression will have a positive indirect relationship with self-worth through the effects of empowerment.

Hypothesis 3:

- a. Self-help will have a negative indirect relationship with symptoms (e.g., a reduction in symptoms) through the effects of empowerment.

- b. Peer support will have a negative indirect relationship with symptoms (e.g., a reduction in symptoms) through the effects of empowerment.
- c. Creative expression will have a negative indirect relationship with symptoms (e.g., a reduction in symptoms) through the effects of empowerment.

Note: All hypotheses suggest that no direct relationship between independent and dependent variables will exist.

**Figure 1**

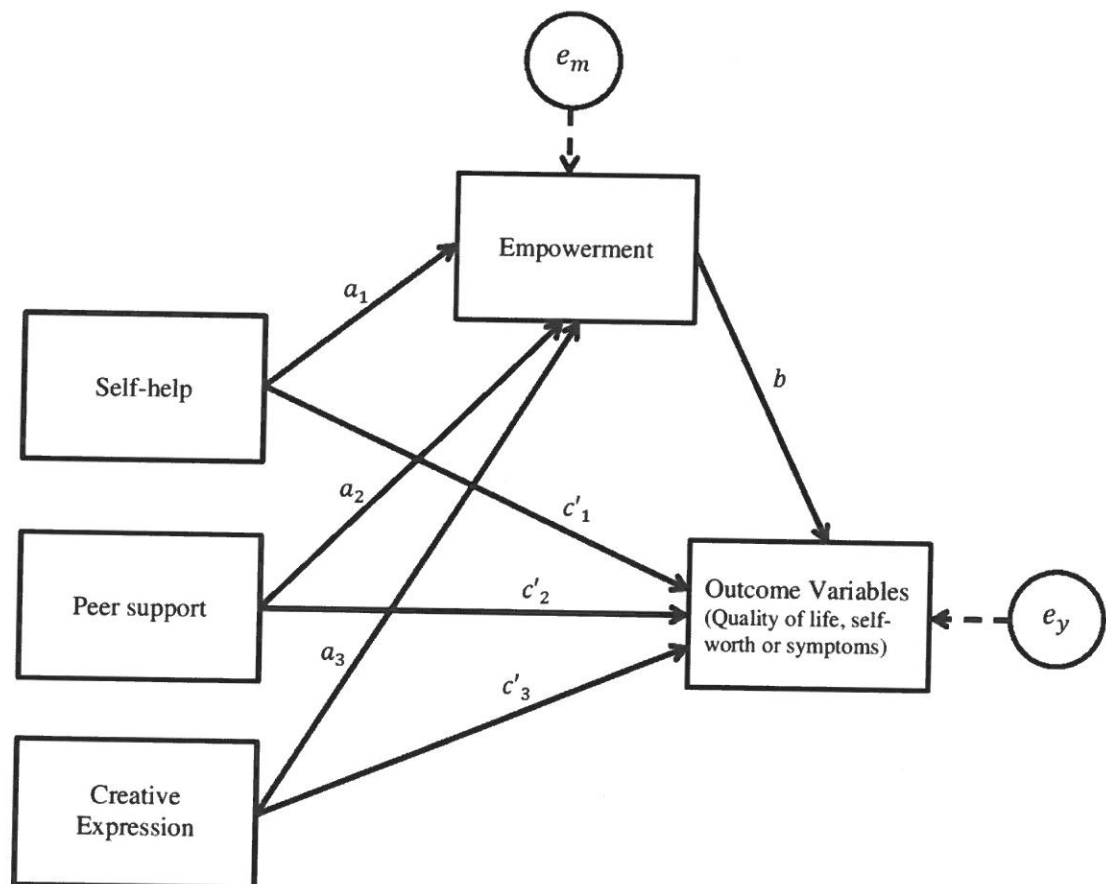


Figure 1. A mediation model with 3 antecedent X variables (self-help, peer support, and creative expression) shown with each of the different outcome variables; separate models have been designed for each specific variable (quality of life, self-worth, symptoms)



## CHAPTER III

### Methods

#### *Participants*

Participants are members of the drop-in center in South Florida ( $N = 101$ ). All participants have a diagnosis of a long term mental illness, such as schizophrenia or bipolar disorder, according to the Diagnostic and Statistical Manual of mental disorders-5<sup>th</sup> edition (DSM-5; American Psychiatric Association, 2013). In general, a diagnosis of mental illness is typically the only salient membership criterion for drop-in centers. Much of the demographic information for this specific population is unknown and dependent upon location. Demographics for the current study site will be provided in the results section.

#### *Measures*

##### *Self-help*

For the purposes of this study, self-help is defined as the use of one's own resources and efforts to achieve a goal. There is a shortage of measures that assess the degree to which an individual engages in self-help. Thus, in order to assess the self-help component of the proposed model, participants were asked to answer a series of three questions that explicitly inquire about involvement in self-help services: (1) I engage in any of the following behaviors: self-help groups, support groups, educational groups, inspirational activities (2) I am helping myself get better, (3) I rely on other people to help me get well (Appendix A). The items are measured on a five point Likert scale: "never, rarely, sometimes, often, always". These items were carefully selected in an effort to reduce overlap between construct measures.

### ***Peer Support***

The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et. al., 1988) was utilized to assess peer support. The MSPSS consists of 12 items designed to measure support from family, friends, and significant others. Each item is rated on a 7-point Likert type scale: “very strongly disagree, strongly disagree, mildly disagree, neutral, mildly agree, strongly agree, or very strongly agree.” Psychometric analyses revealed a total scale reliability of .88 and test-retest reliability of .85. Thus, this scale demonstrated good internal reliability and stability over time (Zimet et al., 1988) The scale has also demonstrated high internal consistency and construct validity in outpatients with a diagnosis of schizophrenia (Vaingankar, Abdin, & Chong, 2012).

### ***Creative Expression***

While many mental health programs promote creative expression through the arts, it is imperative to define this construct as it relates to drop-in centers in particular. For the purposes of this study, creative expression is defined as engaging in activities that allow for sharing one’s thoughts or feelings in an original and imaginative manner. The goal of creative expression is to enjoy the process, whatever the final product may be. There is little emphasis on the final products (e.g., paintings, poems, songs) and strong emphasis on underlying meanings. In order to assess the degree to which each participant engages in aspects of creative expression, five items focusing on this construct were included in the assessment. The items are measured on a five point Likert type scale: “never, rarely, sometimes, often, always”. The items are as follows: (1) I participate in any of the following activities at the center: art, dance, music, writing, performance (circle all that apply), (2) I really enjoy participating in these activities, (3) I feel better when I

participate in these activities, (4) I do not enjoy these activities, (5) I am better able to express myself through these activities (Appendix A).

The Likert scales for self-help and creative expression consist of the same answer choices in order to increase fluency of measures and allow for combination of the items. These Likert scales were selected based on suggested and pre-established Likert type scale response anchors (Vagias, 2006). This group of items has been created for the purposes of the current study to account for the scarcity of preexisting measures to assess these constructs. Items with reverse polarity have been included in these measures in order to identify participants who may be rushing, answering inconsistently, or unable to adequately comprehend the questions.

### ***Empowerment***

The Empowerment Scale (Rogers et. al., 1997) is a widely accepted scale used to measure empowerment as defined by consumers of mental health services. The scale consists of 28 items which have been closely analyzed to reveal five factors: self-efficacy-self-esteem, power-powerlessness, community activism, righteous anger, and optimism-control over the future (Rogers et. al., 1997, Rogers, Ralph, & Salzer, 2010). Items are rated on a four-point Likert scale: "strongly agree, agree, disagree, or strongly disagree". The five factors can be summed and averaged to reach a score that represents overall empowerment. Statistical analyses reveal high internal consistency (Cronbach's  $\alpha = .86$ ) and adequate reliability and validity of the total Empowerment Scale score (Rogers, Ralph, & Salzer, 2010). Thus, this scale was used in the current study in order to measure overall empowerment.

### *Self-worth*

The Rosenberg Self-Esteem Scale (Rosenberg, 1965) was used to assess global self-worth. While this measure was originally developed to assess self-worth in an adolescent population, it has since been tested and validated on a wide variety of adult samples. The selection of this scale was based on relevancy, psychometric strength, and brevity. The scale consists of ten items rated on a four-point Likert scale: “strongly agree, agree, disagree, or strongly disagree”. Items include both positive and negative feelings about the self. There has been an extensive amount of research conducted to evaluate the psychometric properties of the RSE. The internal consistency of the RSE ranges from .77-.88. Test-retest reliability ranges from .82- .85. Additionally, the RSE has been found to have a criterion validity of .55 (Rosenberg, 1965). Findings consistently demonstrate the reliability and validity of the measure, which lends support to its continued use in research studies.

### *Quality of Life*

The World Health Organization Quality of Life-BREF (WHOQOL-BREF) is an internationally recognized measure of quality of life that assesses four broad domains: physical health, psychological health, social relationships, and environment. This measure was used in the current study to assess overall quality of life in each of the participants. The measure consists of 26 items scored on various four-point Likert scales (WHOQOL Group, 1998). This measure is an abbreviated version of the original WHOQOL-100. Skevington, Lofty, and O’Connell (2004), evaluated the psychometric properties of this instrument using cross-sectional data from 23 countries ( $N = 11,830$ ). Analyses revealed good to excellent psychometric properties. Overall total sample

evidenced acceptable internal consistency (Cronbach's  $\alpha > .7$ ). Discriminant validity (i.e., differentiating "sick" population from "well" population) was evident in each of the domains: physical ( $t = 39.2, p < .01$ ), psychological ( $t = 19.9, p < .01$ ), social ( $t = 13.0, p < .01$ ), and environment ( $t = 7.6, p < .01$ ). Additionally, results demonstrated good construct validity on each of the domains (Skevington, Lofty, & O'Connell, 2004).

### ***Symptom Reduction***

The BASIS-32™ (Behavior and Symptom Identification Scale) was used in the current study as an assessment of current symptomatology. This measure assesses current symptom and problem difficulty. The scale consists of 32 items with five subscales: relation to self and others, depression and anxiety, daily living and role functioning, impulsive and addictive behavior, and psychosis. Participants were asked to answer questions on a five-point scale: 0 = no difficulty, 1 = a little difficulty, 2 = moderate difficulty, 3 = quite a bit of difficulty, and 4 = extreme difficulty. This measure has been validated and found reliable in a variety of settings with internal consistency of the subscales ranging from .63 to .80, and a full-scale internal consistency of .89. The test-retest reliability of the subscales ranged from .65 to .81. In addition, analyses of concurrent and discriminant validity showed that scores on the measure successfully categorized patients with different diagnoses, employment statuses, and hospitalization histories (Eisen et al., 1999).

The BASIS-32™ also offers a 10-item demographic questionnaire which was used to collect basic information (e.g., age, sex, marital status, employment status) on each participant. This portion of the assessment was presented at the beginning of the measures in order to maintain a sensible progression in administration.

## *Procedure*

### *Setting*

The study took place at a drop-in center in South Florida, which is centrally located in the community and easily accessible by car or bus. This center offers free membership for persons with a serious mental illness. The center remains open 7 days a week and provides both structured and unstructured activities for members, constituting an enriched drop-in center experience.

### *Preparation*

Participants were recruited for the study upon arrival to the center. Highly trained research assistants approached members and provided a brief description of the study. Interested members were then required to sign an informed consent and were given the opportunity to ask any questions. Research assistants assisted the participants in completing each of the measures and survey questions. All packets were number coded to ensure confidentiality of the participants. Identifiable information (i.e., names linked with number) was stored in a secure filing cabinet. Research assistants visited the site a minimum of twice per week on alternating days in order to recruit incoming members during the data collection phase. Additionally, research assistants underwent a brief training and were provided with clear guidelines to maintain consistency.

### *Implementation and follow-up*

The completion of all measures took 15-25 minutes per participant. Participants were permitted to ask the research assistants for clarification on any of the measures. While completing the measures, participants were given their choice of snack from a variety of pre-purchased options. Participants were then debriefed regarding the nature of

the study and given the opportunity to voice any questions or concerns they may have had about the process.

### *Data Analyses*

The data analyses involved two key steps. In step one of the analysis, the psychometric properties (e.g., reliability and validity) of each of the measures used in the study were evaluated. In step two of the analysis, mediational analyses were conducted using PROCESS, an add-on for SPSS and SAS for statistical mediation, moderation, and conditional process analysis (Hayes, 2013). This mediation model is any causal system in which an antecedent variable (X; X<sub>1</sub> = Self-help, X<sub>2</sub> = Peer Support, X<sub>3</sub> = Creative Expression) is proposed to affect an outcome variable (Y; Quality of Life, Self-Worth, or Symptoms) through an intervening variable (M; Empowerment). While structural equation modeling (SEM) was initially considered, there is substantial literature demonstrating that the OLS regression methods accompanied by Monte Carlo confidence intervals using PROCESS produces very similar results when evaluating mediation between observed variables (Hayes, 2013). Thus, the PROCESS procedure was utilized to evaluate mediation instead of SEM. A brief description of the statistical procedures can be found in the subsequent subsections.

### *Analyses*

The psychometric properties of measures created for the current study (self-help and creative expression), were evaluated to ensure adequate reliability and validity. An in depth discussion of this analysis can be found in Chapter IV. The hypotheses that self-help, peer support, and creative expression will indirectly positively influence quality of life through their effects on empowerment was tested using three separate mediational

analyses using the PROCESS approach. The hypotheses that self-help, peer support, and creative expression will indirectly positively influence self-worth through their effects on empowerment was tested using three separate meditational analyses using the PROCESS approach. The hypotheses that self-help, peer support, and creative expression will indirectly negatively influence symptoms of mental illness through their effects on empowerment was tested using three separate meditational analyses using the PROCESS approach.



## CHAPTER IV

### RESULTS

#### *Descriptive Data*

The sample consisted of members of the drop-in center (N=101). Note that the following percentages are representative only of the participants who responded to the relevant demographic question. Less than 9% of the demographic data were missing. Among the participants who provided demographic data, 62.1% were female. With regard to race, the sample was 19.4 % Black/African American, 66.7% White/Caucasian, 14% Multiracial/Other. Furthermore, participants were 14.7 % Hispanic/Latino. With regard to marital status, participants were 50% never married, 12% married, 9.8% separated, 20.7% divorced, and 7.6% widowed. Additional demographic information can be found in Table 1. Some measures were found to have missing or illegible item responses. This was addressed using mean substitution for cases in which measures were not missing more than 10% of items. Thus, a composite score for each measure was calculated for participants that completed at least 90% of the measure.

**Table 1**  
***Demographic Profile of the Sample***

<u>Variable</u>	<u>n</u>	<u>Percentage</u>
Gender		
Female	59	62.1
Male	36	37.9
Age		
<23	3	3.2
24-29	11	11.8
30-35	13	14.0
36-41	7	7.5
42-47	10	10.8
48-53	8	8.6
54-59	13	14.0

Variable (continued)	n	Percentage
Age		
60-65	15	16.1
66-71	12	12.9
72-77	1	1.1
Ethnicity		
Black/African American	18	19.4
White/Caucasian	62	66.7
Multiracial/Other	13	14
Hispanic/Latino	43	14.7
Marital status		
Never Married	46	50
Married	11	12
Separated	9	9.8
Divorced	46	20.7
Widowed	7	7.6
Schooling Completed		
8 <sup>th</sup> grade or less	4	4.3
Some high school	3	3.2
High school/GED	25	26.9
Some college	36	38.7
4-year college graduate	25	26.9
Living arrangements		
Hospital or detox center	1	1.1
Nursing home/assisted living	5	5.3
Supervised housing	5	5.3
Apartment or house	76	80.9
Shelter/street	2	2.1
Other	5	5.3
Paying job (last 30 days)		
No	64	67.4
Yes, 1-10 hrs/wk	8	8.4
Yes, 11-30 hrs/wk	14	14.7
Yes, more than 30 hrs/wk	9	9.5
Volunteer job (last 30 days)		
No	65	68.4
Yes, 1-10 hrs/wk	26	27.4
Yes, 11-30 hrs/wk	3	3.2
Yes, more than 30 hrs/wk	1	1.1

\*Missing data were <9%

In examining the psychometric properties of the measures created for the current study (e.g., self-help and creative expression), internal consistency was evaluated in order to determine if each measure was reliable. Analyses revealed the need to drop item 4 of the creative expression measure and item 3 of the self-help measure. After removing these items, the self-help scale consisted of 2 items ( $\alpha = .441$ ) and the creative expression scale consisted of 4 items ( $\alpha = .857$ ). A factor analysis was conducted for each of the measures and provided strong evidence for unidimensionality of both measures. In analyzing the measure of self-help, one factor was shown to explain 64.65 % of the variance with the first eigenvalue (1.293) being greater than 1 and relatively larger than the second eigenvalue (.707). In analyzing the measure of creative expression, one factor was shown to explain 70.2% of the variance, with the first eigenvalue (2.808) being greater than 1 and relatively larger than the second eigenvalue (.519). Additionally, upon examination of the scree plots, it also appears as though there is one dimension for each of these measures. Finally, during the development of the items for both self-help and creative expression, content validity was established through concept elicitation from experts and consumers of mental health services. Experts included committee members and staff of the drop-in center. Members of the drop-in center also provided feedback that helped to generate items. A comprehensive review of the literature also played a role in the development of items.

### *Mediation Analyses*

Mediation Analysis using the bootstrap methodology was utilized in order to examine the direct and indirect influence of self-help, peer support, and creative expression on quality of life, self-worth, and symptom reduction through their influence

on empowerment. Nine mediation analyses were performed using PROCESS Procedure 2.15 (Hayes, 2013) in SPSS. Type I error was set at the .05 level. Please refer to Figure 1 for a representation of the proposed model. The statistical models constructed to address the research questions were defined as follows:

$$M = i_1 + a_1X_1 + a_2X_2 + a_3X_3 + e_M$$

$$Y = i_2 + c'_1X_1 + c'_2X_2 + c'_3X_3 + e_Y$$

Where, □

M = Empowerment

Y = Quality of Life, Self-Worth, or Symptom Reduction

□  $i_1, i_2$  = intercepts □

$a_1, a_2, a_3$  = coefficients for  $X_1, X_2, X_3$  on M

$c'_1, c'_2, c'_3$  = coefficients for  $X_1, X_2, X_3$  on Y

$X_1$  = Self-help

$X_2$  = Peer Support

$X_3$  = Creative Expression

□  $e$  = standard error

Figure 1

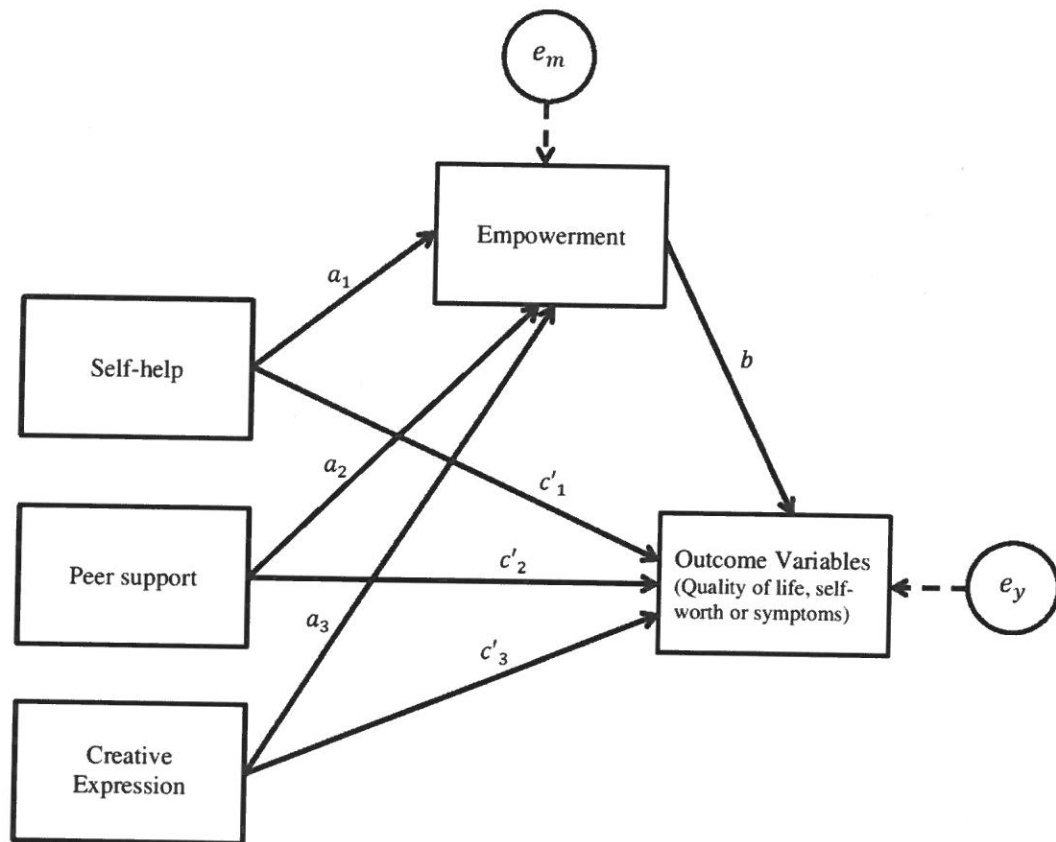


Figure 1. A mediation model with 3 antecedent X variables (self-help, peer support, and creative expression) shown with each of the different outcome variables; separate models have been designed for each specific variable (quality of life, self-worth, symptoms)

### *Hypothesis 1*

Self- Help, Peer Support, and Creative Expression will have an indirect effect on Quality of Life as mediated by Empowerment. Using a 95% bias-corrected bootstrap interval, which was generated from 10,000 samples (.0245-.2784), there was a significant indirect effect of self-help on quality of life through its effect on empowerment ( $ab = .147$ ).

The completely standardized indirect effect suggests that for every standard deviation increase of one unit in self-help, there is a .1536 increase of a standard

deviation in quality of life as a result of the effect of self-help on empowerment ( $a = .0942$   $p = .0242$ ) which subsequently influenced an increase in quality of life ( $b = 1.5619$   $p < .001$ ). The data did not demonstrate a significant direct effect of self-help on quality of life independent of its effect on empowerment ( $c' = -.0715$ ,  $p = .3794$ ). These findings confirm Hypothesis 1a.

Using a 95% bias-corrected bootstrap interval, which was generated from 10,000 samples (.0918- .2260), there was a significant indirect effect of peer support on quality of life through its effect on empowerment ( $ab = .1495$ ).

The completely standardized indirect effect suggests that for every standard deviation increase of one unit in peer support, there is a .3061 increase of a standard deviation in quality of life as a result of the effect of peer support on empowerment ( $a = .0957$ ,  $p < .001$ ) which subsequently influenced an increase in quality of life ( $b = 1.5619$   $p < .001$ ). The data did not demonstrate a significant direct effect of peer support on quality of life independent of its effect on empowerment ( $c' = .0693$ ,  $p = .0936$ ). These findings confirm Hypothesis 1b.

For the final mediation model with quality of life as the outcome variable, mediation analysis revealed that creative expression did not influence quality of life through empowerment nor was there a direct effect of creative expression on quality of life. Thus, hypothesis 1c is not confirmed.

Please see Figure 2 for a schematic representation of the mediation model. Model coefficients and p-values can be found in Table 2.

Figure 2

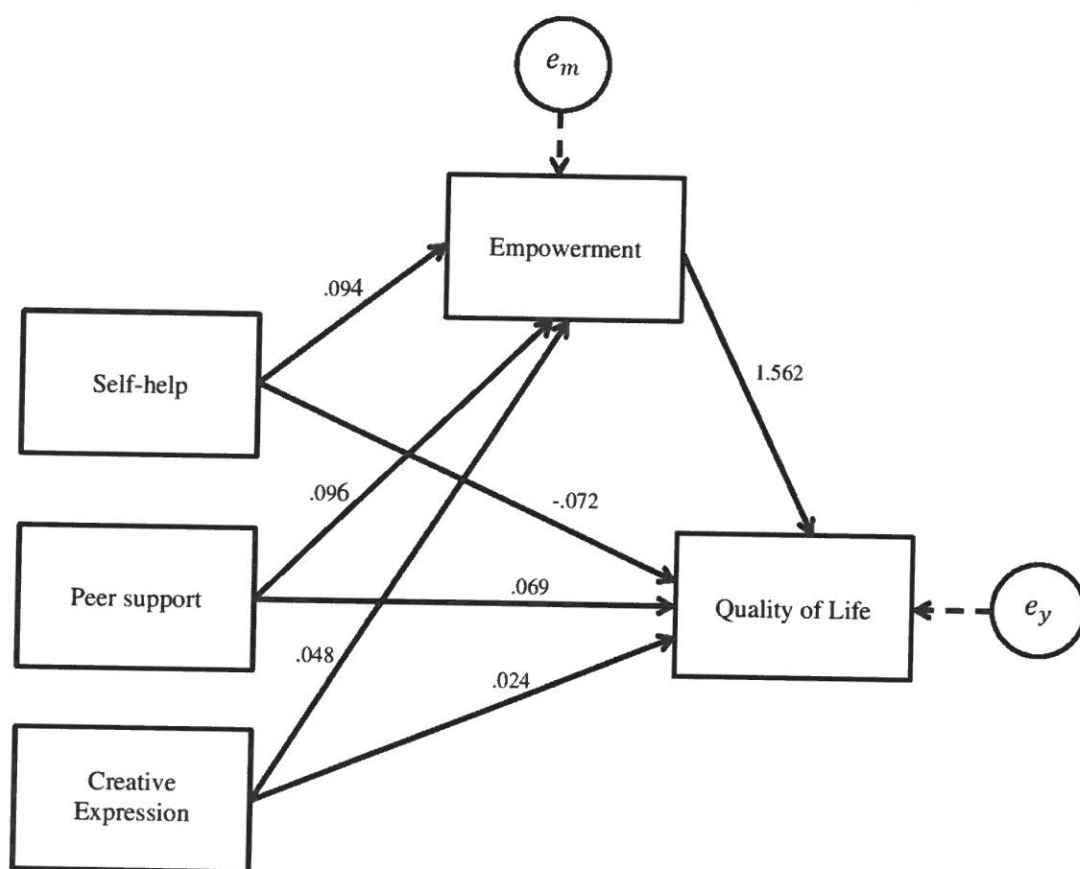


Figure 2. A mediation model with 3 antecedent X variables (self-help, peer support, and creative expression) to quality of life, through empowerment.

**Table 2**  
**Model Coefficients for all Independent Variables and Dependent Variable: Quality of Life**

Antecedent	Consequent					
	M (Empowerment)			Y (Quality of Life)		
	Coefficient	SE	p	Coefficient	SE	p
$X_1$ (Self-help)	<i>a</i>	.094	.024	<i>c'</i>	-.072	.081
M (Empowerment)	—	—	—	<i>b</i>	1.562	.203
constant	<i>i<sub>1</sub></i>	1.90	<.001	<i>i<sub>2</sub></i>	-1.354	.483
						.006
$X_2$ (Peer Support)	<i>a</i>	.096	<.001	<i>c'</i>	.069	.041
						.094
M (Empowerment)	—	—	—	<i>b</i>	1.562	.203
constant	<i>i<sub>1</sub></i>	1.90	<.001	<i>i<sub>2</sub></i>	-1.354	.483
						.006
$X_3$ (Creative Expression)	<i>a</i>	.048	.198	<i>c'</i>	.024	.071
						.742
M (Empowerment)	—	—	—	<i>b</i>	1.562	.203
constant	<i>i<sub>1</sub></i>	1.90	<.001	<i>i<sub>2</sub></i>	-1.354	.483
						.006
Overall model: $R^2 = .407$ $F(3, 89) = 20.332, p < .001$						Overall model: $R^2 = .579$ $F(4, 88) = 30.238, p < .001$



### *Hypothesis 2*

Self- Help, Peer Support, and Creative Expression will have an indirect effect on Self-Worth as mediated by Empowerment. Using a 95% bias-corrected bootstrap interval, which was generated from 10,000 samples (.0241-.2883), there was a significant indirect effect of self-help on self-worth through its effect on empowerment ( $ab = .1438$ ).

The completely standardized indirect effect suggests that for every standard deviation increase of one unit in self-help, there is a .1636 increase of a standard deviation in self-worth as a result of the effect of self-help on empowerment ( $a = .0939$   $p = .0238$ ) which subsequently influenced an increase in self-worth ( $b = 1.5308$   $p < .001$ ) The data did not demonstrate a significant direct effect of self-help on self-worth independent of its effect on empowerment ( $c' = -.0802$ ,  $p = .2573$ ). These findings confirm Hypothesis 2a.

Using a 95% bias-corrected bootstrap interval, which was generated from 10,000 samples (.0954- .2026), there was a significant indirect effect of peer support on self-worth through its effect on empowerment ( $ab = .1460$ ).

The completely standardized indirect effect suggests that for every standard deviation increase of one unit in peer support, there is a .3423 increase of a standard deviation in self-worth as a result of the effect of peer support on empowerment ( $a = .0954$ ,  $p < .001$ ) which subsequently influenced an increase in self-worth ( $b = 1.5308$   $p < .001$ ) The data did not demonstrate a significant direct effect of peer support on self-worth independent of its effect on empowerment ( $c' = .0019$ ,  $p = .9574$ ). These finding confirm Hypothesis 2b.

For the final mediation model with self-worth as the outcome variable, mediation analysis revealed that creative expression did not influence self-worth through empowerment, nor was there a direct relationship between creative expression and self-worth. Thus, Hypothesis 2c was not confirmed.

Please see Figure 3 for a schematic representation of the mediation model. Model coefficients and p-values can be found in Table 3.

**Figure 3**

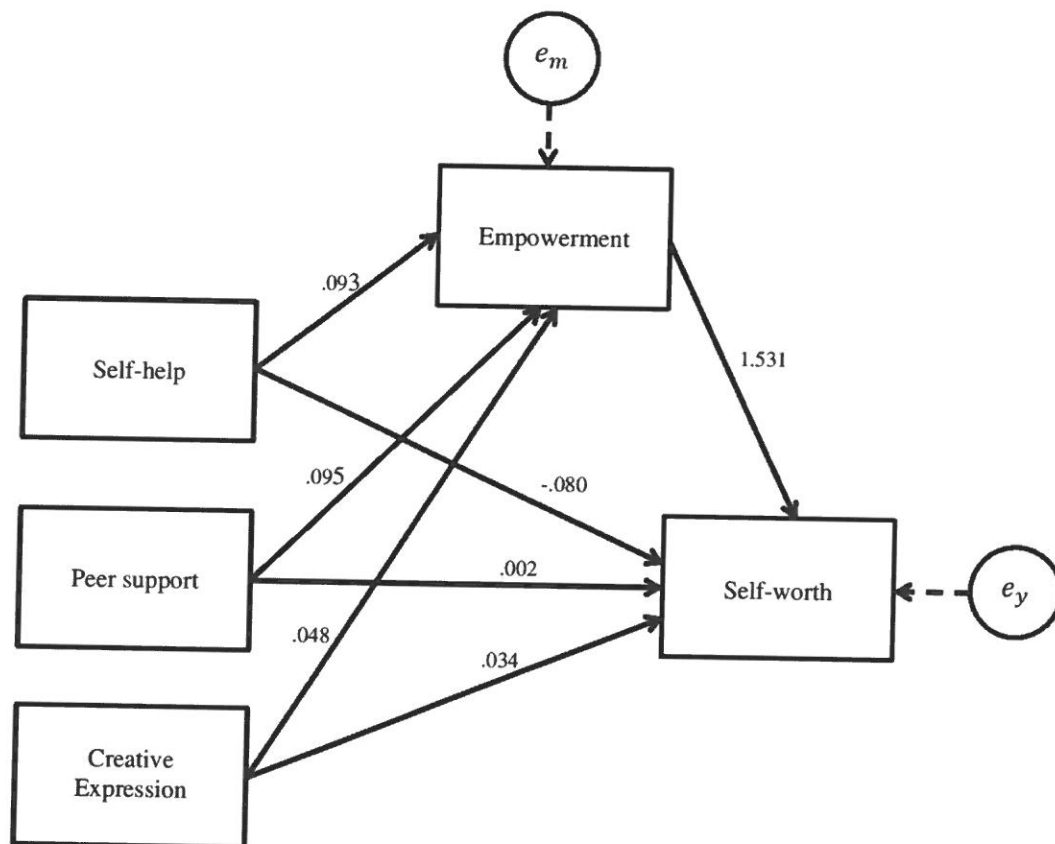


Figure 3. A mediation model with 3 antecedent X variables (self-help, peer support, and creative expression) to self-worth, through empowerment.

**Table 3**  
**Model Coefficients for all Independent Variables and Dependent Variable: Self-worth**

Antecedent	Consequent				
	M (Empowerment)		Y (Self-Worth)		
	Coefficient	SE	<i>p</i>	Coefficient	SE
<i>X</i> <sub>1</sub> (Self-help)	<i>a</i>	.093	.041	<i>c'</i>	-.080
<i>M</i> (Empowerment)	—	—	.024	<i>b</i>	.070
constant	<i>i</i> <sub>1</sub>	1.907	—	<i>i</i> <sub>2</sub>	.176
			<.001		<.001
<i>X</i> <sub>2</sub> (Peer Support)	<i>a</i>	.095	.019	<i>c'</i>	.002
<i>M</i> (Empowerment)	—	—	<.001	<i>b</i>	.036
constant	<i>i</i> <sub>1</sub>	1.907	—	<i>i</i> <sub>2</sub>	.176
			<.001		<.001
<i>X</i> <sub>3</sub> (Creative Expression)	<i>a</i>	.048	.037	<i>c'</i>	.034
<i>M</i> (Empowerment)	—	—	.195	<i>b</i>	.062
constant	<i>i</i> <sub>1</sub>	1.907	—	<i>i</i> <sub>2</sub>	.176
			<.001		<.001
Overall model: $R^2 = .406$ $F(3, 90) = 20.531, p < .001$					Overall model: $R^2 = .574$ $F(4, 89) = 30.022, p < .001$

### *Hypothesis 3*

Indirect Effects of Self-Help, Peer Support, and Creative Expression have a negative indirect effect on Symptoms as mediated by Empowerment. Using a 95% bias-corrected bootstrap interval, which was generated from 10,000 samples (-.2421- -.0112), there was a significant negative indirect effect of self-help on symptoms through its effect on empowerment ( $ab = -.1106$ ).

The completely standardized indirect effect suggests that for every standard deviation increase of one unit in self-help, there is a .1089 decrease of a standard deviation in symptoms as a result of the effect of self-help on empowerment ( $a = .0825$   $p = .0499$ ) which subsequently influenced a decrease in symptoms ( $b = -1.3402$   $p < .001$ ). The data did not demonstrate a significant direct effect of self-help on symptoms independent of its effect on empowerment ( $c' = -.0304$ ,  $p = .7523$ ). These findings confirm Hypothesis 3a.

Using a 95% bias-corrected bootstrap interval, which was generated from 10,000 samples (-.1950 - -.0826), there was a significant negative indirect effect of peer support on symptoms through its effect on empowerment ( $ab = -.1322$ ).

The completely standardized indirect effect suggests that for every standard deviation increase of one unit in peer support, there is a .2610 decrease of a standard deviation in symptoms as a result of the effect of peer support on empowerment ( $a = .0986$ ,  $p < .001$ ) which subsequently influenced a decrease in symptoms ( $b = -1.3402$   $p < .001$ ). The data did not demonstrate a significant direct effect of peer support on symptoms independent of its effect on empowerment ( $c' = -.0615$ ,  $p = .2169$ ). These findings confirm Hypothesis 3b.

For the final mediation model with symptoms as the outcome variable, mediation analysis revealed that creative expression did not influence symptoms through empowerment, nor was there a significant direct effect of creative expression on symptoms. Thus, Hypothesis 3c was not confirmed.

Please see Figure 4 for a schematic representation of the mediation model. Model coefficients and p-values can be found in Table 4.

**Figure 4**

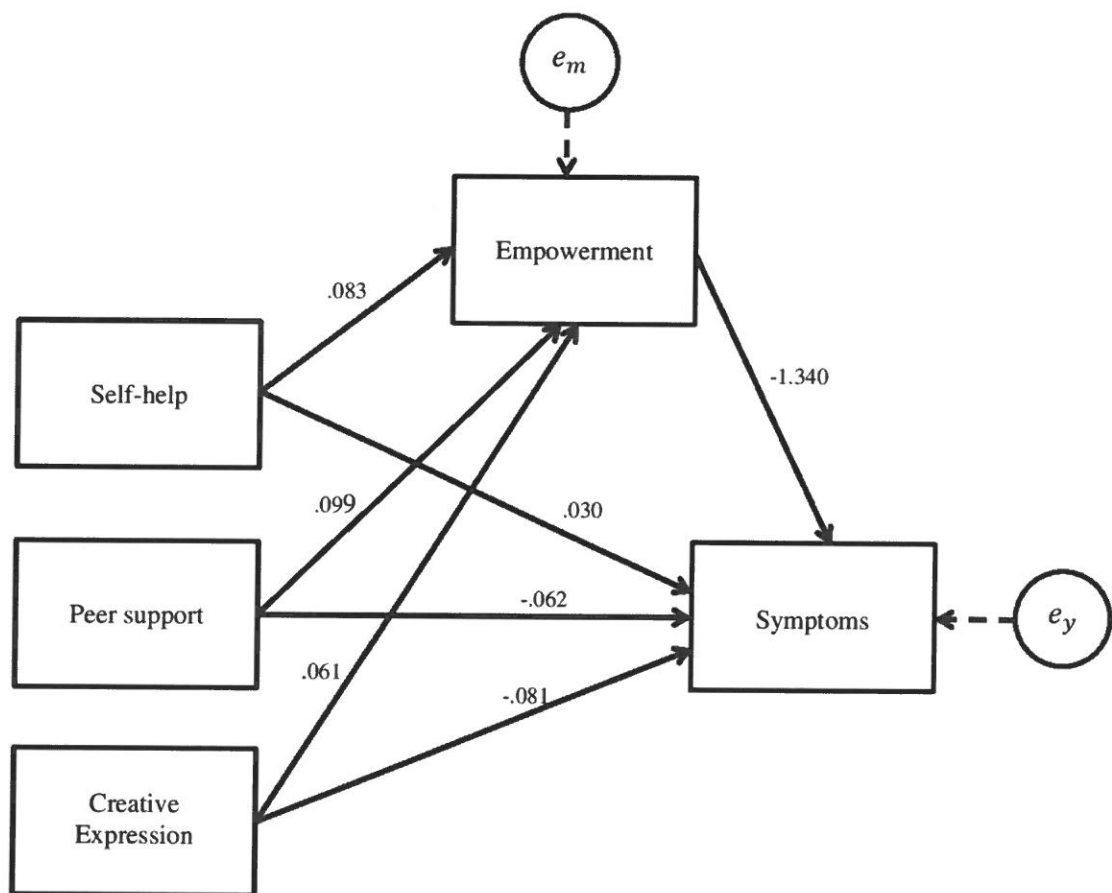


Figure 4. A mediation model with 3 antecedent X variables (self-help, peer support, and creative expression) to symptoms through empowerment.

**Table 4**  
**Model Coefficients for all Independent Variables and Dependent Variable: Symptoms**

Antecedent	Consequent				
	M (Empowerment)		Y (Symptoms)		
	Coefficient	SE	<i>p</i>	Coefficient	SE
<i>X</i> <sub>1</sub> (Self-help)	<i>a</i>	.083	.042	<i>c'</i>	.030
<i>M</i> (Empowerment)	—	—	.050	<i>b</i>	.096
constant	<i>i</i> <sub>1</sub>	1.880	—	<i>i</i> <sub>2</sub>	.242
			< .001		.569
<i>X</i> <sub>2</sub> (Peer Support)	<i>a</i>	.099	.019	<i>c'</i>	-.062
<i>M</i> (Empowerment)	—	—	< .001	<i>b</i>	.242
constant	<i>i</i> <sub>1</sub>	1.880	—	<i>i</i> <sub>2</sub>	.569
			< .001		.217
<i>X</i> <sub>3</sub> (Creative Expression)	<i>a</i>	.061	.038	<i>c'</i>	-.081
<i>M</i> (Empowerment)	—	—	.114	<i>b</i>	.242
constant	<i>i</i> <sub>1</sub>	1.880	—	<i>i</i> <sub>2</sub>	.569
			< .001		.360
Overall model: $R^2 = .420$ $F(3, 87) = 21.027, p < .001$					Overall model: $R^2 = .462$ $F(4, 86) = 18.424, p < .001$

### *Mean Comparisons*

In addition, descriptive statistics (Table 5) were run on each of the measures used for the current study, to be compared with pre-established normative data for similar populations using unpaired t-tests (Table 6).

The normative data used for the Multidimensional Scale of Perceived Social Support (MSPSS) was based on a sample of 144 outpatients with a diagnosis of either schizophrenia or bipolar disorder. ( $N = 144$ ;  $M = 5$ ,  $SD = 1.6$ ; Cecil et. al., 1995). A comparison of the normative data to participant means on the MPSS reveals that individuals in the study reported, on average, slightly lower levels of perceived level of social support ( $M = 4.79$ ,  $SD = 1.6$ ) than the comparison sample. The difference was not statistically significant ( $p=.32$ ).

The normative data used for the Empowerment Scale was based on consumers of mental health services ( $N=1,827$ ;  $M=2.81$ ,  $SD=.32$ ; Rogers, Ralph, & Salzar, 2010) A comparison of the normative data to participant means on the Empowerment Scale reveals that individuals in the study reported, on average, a slightly higher level of empowerment ( $M=2.89$ ,  $SD= .34$ ) than the comparison sample. The difference was statistically significant ( $p=.02$ ).

For the Rosenberg Self-Esteem Scale, scores ranging from 15-25 are suggested to be within the normal range and scores below 15 are suggested to be indicative of low self-esteem. The normative data for the Rosenberg Self-Esteem Scale used for the current study was data overall and across all demographic groups living in the United States ( $N = 503$ ;  $M=22.62$ ,  $SD=5.8$ ; Sinclair et. al., 2010). A comparison of the normative data to participant means on the Rosenberg Self-Esteem Scale reveals that individuals in the

study reported, on average, a lower level of self-esteem ( $M=18.84$ ,  $SD= 6.57$ ). The difference was statistically significant ( $p <.001$ ).

The normative data used for the WHOQOL-BREF was based on baseline measures of mental health patients with schizophrenia ( $N= 241$ ;  $M = 81.82$ ,  $SD =13.94$ ; Mas-Exposito et. al., 2011). A comparison of the normative data to participant means on the WHOQOL-BREF reveals that individuals in the study reported, on average, a slightly higher level of quality of life ( $M=83.11$ ,  $SD= 19.06$ ). The difference was not statistically significant ( $p=.08$ ).

For the BASIS-32, normative data was based on adult psychiatric inpatients diagnosed with bipolar disorder or dysthymia. ( $N=462$ ,  $M= 2.76$ ,  $SD =1.1$ ; Hoffman, Capelli, & Mastrianni, 1997). A comparison of normative data to participant means on the BASIS-32 reveals that individuals in the study reported lower levels of psychiatric symptoms ( $M = 1.17$ ,  $SD = .79$ ). The difference was statistically significant ( $p < .001$ ).

No comparison samples exist for measures of self-help or creative expression. Means have been provided for use in future studies.

**Table 5**  
***Sample Characteristics for Each Measure***

Measure	<i>N</i>	<i>M (range possible)</i>	<i>SD</i>
Self-help	95	3.65 (1-5)	.79
Creative Expression	95	3.82 (1-5)	.85
MSPSS	94	4.79 (1-7)	1.60
The Empowerment Scale	95	2.89 (1- 4)	.34
Rosenberg Self-Esteem Scale	95	18.84 (0-30)	6.57
WHOQOL-BREF	94	83.11 (19-95)	19.06
BASIS-32	92	1.17 (0-4)	.79

Note: MSPSS= Multidimensional Scale of Perceived Social Support; WHOQOL-BREF= The World Health Organization Quality of Life-BREF; BASIS-32= Behavior and Symptom Identification Scale



**Table 6**  
**Mean Comparisons**

Measure	Normative Means*	Participant Means	<i>p</i>
MSPSS	5	4.79	.32
The Empowerment Scale	2.81	2.89	.02 **
Rosenberg Self-Esteem Scale	22.62	18.84	<.001 **
WHOQOL-BREF	81.82	83.11	.08
BASIS-32	2.76	1.17	<.001 **

\*Based on normative data using populations most similar to the current study participants

\*\* Significance levels must be interpreted with caution (see discussion of mean comparisons for more information)

## CHAPTER V

### Discussion

The purpose of the current study was to develop a theoretical model suggesting key components including self help, peer support and creative expression and their relationship to quality of life, self worth and symptom reduction through the effects of empowerment. The establishment of an underlying framework or model that highlights key variables that contribute to favorable outcomes may encourage drop-in centers to implement or enhance these components, which would lead to empirically supported drop- in centers with positive outcomes.

### Findings

#### *Predictor variables as they relate to empowerment and quality of life.*

Results revealed that increased ratings of both self-help and peer support led to increased scores on a measure of empowerment, which subsequently increased ratings of quality of life for members of a drop-in center in South Florida. The indirect effects of self-help and peer support on quality of life were fully accounted for by the effects of empowerment. Thus, while neither self-help nor peer support directly influenced a higher rating of quality of life, each of these variables improved ratings of quality of life through empowering the member, which provides support for Hypotheses 1a and 1b. Creative expression did not evidence any significant relationships with empowerment or quality of life, which does not support Hypothesis 1c, that creative expression is an essential component of the proposed statistical model and will have a positive indirect relationship with the quality of life through empowerment. Findings that self-help and peer support influence quality of life through empowerment suggest that individuals who visit drop-in

centers that offer these components will experience a higher perceived quality of life. Given that literature has demonstrated a lower overall quality of life for individuals with serious and persistent mental illness, the availability of an experience that can increase quality of life for these individuals is particularly encouraging. Results from a study by Marcusson et. al (2010) suggest that services for individuals with serious mental illness can foster both positive and negative changes in quality of life. More specifically, Marcusson et. al. (2010) found that inpatient services led to a decrease in quality of life. This further underscores the importance of providing treatment options in the community that restore and rebuild quality of life for individuals with serious mental illness after experiencing an inpatient hospitalization. The current study has suggested that if a drop-in center provides elements that increase an individual's feelings of self-help and peer support, it can become an environment that can facilitate an increase in perceived quality of life. Such a center would make this an excellent option for adjunctive treatment following discharge from an inpatient facility. Higher quality of life is also linked with lower symptomatology and higher self-worth (Hansson, 2006).

***Predictor variables as they relate to empowerment and self-worth.***

Results indicated that increased scores on measures of both self-help and peer support led to increased scores on a measure of empowerment, which subsequently increased ratings of self-worth of members of a drop-in center in South Florida. The indirect effects of self-help and peer support on self-worth were fully accounted for by the effects of empowerment. Thus, while neither self-help nor peer support directly influenced a higher sense of self-worth, each of these variables improved ratings of self-worth by empowering the member, which provides support for Hypotheses 2a and 2b.

Creative expression did not evidence any significant relationships with empowerment or self-worth, which does not support the Hypothesis 2c that creative expression is an essential component of the proposed statistical model and will have a positive indirect relationship with self-worth through empowerment. These findings that increased ratings of self-help and peer support led to increased ratings of self-worth through empowerment suggest that individuals who partake in the drop-in center experience at a center with these components can have greater feelings of self-worth or self-esteem. Higher self-esteem has long been demonstrated to contribute to overall health and wellbeing. Additionally, the adaptive pursuit of self-esteem can promote favorable outcomes for individuals and society (DuBois & Flay, 2004). The drop-in center can offer a secure, supportive environment in which the development and maintenance of self-esteem can be pursued and offers components of self-help and peer support to foster this development. Improvements in self-esteem have also been shown to contribute to the effectiveness of a range of interventions, including cognitive-behavioral therapy (Shirk, Burwell, & Harter, 2003). Thus, an increase in self-esteem can also help an individual benefit more from therapy.

***Predictor variables as they relate to empowerment and symptom reduction.***

Results also revealed that increased scores on measures of both self-help and peer support significantly increased ratings of empowerment, which subsequently decreased ratings of overall psychiatric symptomatology of members of a drop-in center in South Florida. The indirect effects of self-help and peer support on symptoms were fully accounted for by the effects of empowerment. Thus, while neither self-help nor peer support directly influenced a decrease in psychiatric symptoms, perceived increases on

measures of each of these variables resulted in decreased symptomatology through empowering the member, which provides support for Hypotheses 3a and 3b. Creative expression did not evidence any significant relationships with empowerment or symptoms, which does not support the Hypothesis 3c that creative expression is an essential component of the proposed statistical model and will have a negative indirect relationship with symptoms through empowerment. Findings that self-help and peer support decreased psychiatric symptomatology through the effects of empowerment are quite meaningful. This provides empirical support that an environment that fosters these components, which many drop-in centers do, will also be one in which individuals experience a reduction in psychiatric symptoms. This is a key finding with regard to viewing drop-in centers as an adjunctive treatment, as the goal of many treatments is to reduce and manage symptoms. This relationship suggests that if a drop-in center can provide opportunities for self-help and peer support, psychiatric symptoms will decrease. When the trend and problems of ultra-short hospitalizations are considered, and patients are discharged from the hospital before their symptoms remit, the need for an adjunctive treatment that aids in symptom reduction becomes increasingly evident (Glick et. al., 2011).

### ***Overall mediation findings***

Taken together, these findings demonstrate that two of the three proposed predictor variables (e.g., self-help and peer support) impact each of the outcome variables (e.g., quality of life, self-worth, and symptoms), through their effects on empowerment. These overall findings are quite promising and also yield many important implications as a whole. The proposed model represents a unique conceptualization of the drop-in center

experience and many of the relationships between these components have never been evaluated in the literature. This model introduces new relationships between variables that have not been explicitly linked, which paves the way for additional research and exploration. The results are entirely correlational and only suggest relationships among key variables and outcome measures in this sample. If the model were tested on other cohorts no such relationships might exist. Additionally, the findings cannot be interpreted as representative of the drop-in center experience as no formal data were collected to link these components with the specific experience that individuals receive at the drop-in center.

These overall findings are consistent with research demonstrating that individuals receiving mental health services benefit more from treatment and are more successful in managing their symptoms when they feel empowered (Corrigan, 2002). The importance of empowerment in mental health treatment and recovery is highlighted by the overall findings, as empowerment played an instrumental role in the relationship between self-help, peer support and positive outcomes. Marcusson et. al. (2010) suggest that, while studies often focus on recovery models or empowerment, services that promote these concepts are not available to a large percentage of individuals with mental illness. However, in identifying relationships that demonstrate positive outcomes through the effects of empowerment, recovery-oriented centers have a basic structure to use as a guideline. In other words, a model highlighting key components leading to positive outcomes provides a framework for existing drop-in centers or new facilities to follow. Being that drop-in centers strive to serve individuals with mental illness, integrating the

current model into the drop-in center environment would make services promoting the concepts of recovery and empowerment more readily available to this population.

It is important to note that the model fits nicely with the concepts of recovery, which have long been supported in the literature. As discussed in the review of the literature, Farkas et. al. (2005) identify outcomes consistent with the recovery model philosophy including gaining or regaining one's role, experiencing increased satisfaction and success in this role, reducing or controlling symptoms, increasing sense of empowerment, increasing feelings of well-being, increasing number or quality of interpersonal relationships, improving physical health, and increasing self-esteem. The current model has demonstrated strong relationships with many of these outcomes.

Findings that creative expression does not have a significant relationship with the outcome variables should be interpreted with caution as they may reflect issues with the measure of creative expression created for the study. This potential limitation is discussed in more detail in the subsequent limitations subsection. However, such findings may also reveal that creative expression is not a critical component of empowerment and subsequent positive outcomes. Instead, it may be suggested that elements of creative expression help to create an environment in which the key components of self-help and peer support can exist. More specifically, it is suggested that it is not as important what the specific activities offered are, but rather that they promote self-help and provide opportunities for peer support. This is encouraging for drop-in centers that do not focus on the arts, as it is possible to create this environment without more formal opportunities for creative expression (i.e., painting, drawing, acting, poetry). For example, a drop-in center may feature a fully operational library or café run by members. Such a feature may

also foster an environment in which self-help and peer support may influence empowerment and subsequent positive outcomes can occur. Additionally, it is also possible that the ability to express oneself in a creative manner is more appropriate as an outcome variable as it is possible that this ability is related to feeling more empowered.

### *Current study site*

The drop-in center that served as the current study site creates an environment in which members are able to find or redefine their role in the community by being a critical part of the drop-in center community and engaging in meaningful tasks, interactions, and relationships. Also consistent with the recovery model, the current site employs components of psychiatric rehabilitation such as promoting recovery, community integration, and improved quality of life for individuals with mental illness (Anthony & Farkas, 2009). Early research identifying important messages to convey in creating a clubhouse or drop-in center environment have clearly been incorporated at the current study site. These messages, including that all participants are referred to as “members” as opposed to patients or clients, that all members are made to feel that their presence is expected and that they are always welcome, that all program elements are constructed in a manner that reflects the contributions and importance of all members, and that all members should not only feel wanted, but also needed in the program are ever present at the current study site. This observation is substantiated by positive member feedback and literature linking the variables provided by this center to successful, positive outcomes. Thus, the current model appears to reflect a successful drop-in center that incorporates previous research and guidelines.



### ***Participant feedback***

Participants were given the opportunity to provide optional feedback after completion of the measures. Of the feedback provided, common themes included concern regarding the sensitivity of information being collected and the length of the questionnaire. Additionally, some participants cited the differences in formatting which has been addressed in the subsequent limitations section. The majority of participants who provided feedback reported no difficulties in completing the measures. Additionally, it is of note that many participants commented on their appreciation of the drop-in center and attributed much of their own recovery to being a member of the center. This provides a more subjective perspective on the value of the current study site, which is important to consider in classifying this site as a successful drop-in center.

### ***Mean comparisons***

Mean comparisons were conducted in an attempt to compare means of the participants in the current study to those in the population (Table 7). However, although some differences proved to be statistically significant, such results should be interpreted with much caution. More specifically, although the t-test indicated that participants in the study scored significantly higher than consumers on mental health services on the Empowerment Scale, this is due to the unusually large sample size for the normative data. The difference is negligible from a practical standpoint. Similarly, although the t-test indicated that participants scored significantly lower than the community sample on the Rosenberg Self-Esteem Scale, the normative sample was based on data overall and across all demographic groups in the United States. Thus, it is expected given the challenges associated with serious mental illness, that scores for participants in the current study

may be below this average. However, a more appropriate comparison sample was not available. Finally, although the t-test indicated that participants scored significantly lower than the comparison sample on the BASIS-32, the comparison sample was based on a psychiatric inpatient population. Thus, it is to be expected that participant in the current study, who are all outpatient, would report a lower level of psychiatric symptoms.

**Table 6**  
**Mean Comparisons**

Measure	Normative Means*	Participant Means	<i>p</i>
MSPSS	5	4.79	.32
The Empowerment Scale	2.81	2.89	.02 **
Rosenberg Self-Esteem Scale	22.62	18.84	<.001 **
WHOQOL-BREF	81.82	83.11	.08
BASIS-32	2.76	1.17	<.001 **

\*Based on normative data using populations most similar to the current study participants  
 \*\* Significance levels must be interpreted with caution (see discussion of mean comparisons for more information)

Note: MSPSS= Multidimensional Scale of Perceived Social Support; WHOQOL-BREF= The World Health Organization Quality of Life-BREF; BASIS-32= Behavior and Symptom Identification Scale

### ***Funding Concerns***

As discussed in the statement of the problem, funding for drop-in centers can be difficult to obtain without data to substantiate positive outcomes. It has long been recognized that a decrease in psychiatric symptoms is directly related to a decrease in the need for hospitalization. Given the high cost of psychiatric hospitalization and re-hospitalization, using drop-in centers to mitigate psychiatric symptoms appeals not only to consumers and treatment providers, but also to prospective funders. Additionally, empirical research supporting drop-in centers should increase access to funding, helping these sites to remain a free resource.

### *Limitations*

Findings should be interpreted within the limitations of the current study. One such limitation is the number of participants recruited for the study. Small sample sizes are frequently found throughout similar literature, especially in research focusing on a single facility or center. Membership at the time of data collection was 364 total members. According to this statistic, approximately 28 percent of members participated in the current study. Active members are defined as any qualifying individual who has filled out a membership application during the current fiscal year (June 30<sup>th</sup>-July 1<sup>st</sup>). It is important to recognize that this percentage may actually be higher when accounting for individuals who no longer visited the center at the time of data collection (February-March) and those who visited on minimal occasions or more infrequently than the study design could capture. Differences in rates of attendance were addressed by collecting data over a span of two months on varying days, increasing the likelihood of giving members with less frequent attendance a chance to participate in the study. As with all research, the greater the sample size, the more the results can be generalized to similar populations. Being that there is limited research regarding drop-in centers, it is not possible to compare the findings of the current study to findings of similar studies. Additionally, participation in the study was voluntary. Individuals who agreed to participate in the study may be different than those who did not agree to participate. For example, it is possible that individuals who were more willing to participate were those that were more satisfied with their experience as a whole. Although it was not feasible to randomly select participants, doing so would have reduced these concerns.

In addition to a smaller sample size, and despite monitoring of participants by trained research assistants during completion of the measures, missing items presented as a concern. It is of note that certain items appeared to be missed more often than others. This may be related to the format in which the items were presented. More specifically, one item, which required the members to rate their level of involvement in the center, may have been interpreted to be part of the instructions for the subsequent measure due to its placement and formatting within the questionnaire. This resulted in many study participants skipping this item, causing the need to remove the item from data analysis. The questionnaire included a variety of pre-established measures, which were left in their original format. Continuous changes in format and response scales may have been confusing to the participant and may have interrupted the fluidity of the questionnaire. It is also possible that some participants were reluctant to disclose certain sensitive information. Furthermore, potential difficulties completing the questionnaire in its entirety due to boredom have been recognized as a limitation in similar studies. Snacks were provided as incentive in an attempt to combat potential boredom and provide encouragement to continue (Patel et. al., 2003).

The measures for self-help and creative expression included in the current study were the first to be developed for the variables being measured. These variables are not clear-cut, making it difficult to seek out expected correlations. Thus, convergent and discriminant validity of these self-made measures was not evaluated. Nonetheless, these measures were developed carefully through extensive literature review and concept elicitation to ensure that adequate content validity was established.

While creative expression did not reveal any significant findings, it is possible that the items that comprise this measure were not clear enough. Cognitive interviewing, or asking the participants to describe how they are interpreting and responding to the items, was not included as a part of the administration process. Thus, it is also possible that items were misinterpreted or required further clarification. As mentioned in the discussion, it is also possible that creative expression would be better conceptualized as an outcome variable.

The cross-sectional design utilized in the current study lends itself to an inherent limitation regarding the inference of causality. Data were collected during only one time period, which gives no indication of progress over time with respect to membership. Thus, causality cannot be inferred and findings must be interpreted with this limitation in mind. This design also does not allow for us to infer the directionality of the relationship between the variables. Thus, while it is hypothesized that the directionality is consistent with that proposed in the model, it is also possible that the relationship exists in the opposite direction.

The overall findings of this study have not yet been linked to drop-in centers specifically. However, literature supports that the components of the current model are typically present in the drop-in center environment and are a strong part of the philosophy upon which drop-in centers were constructed. Thus, it is possible that this model is representative of the drop-in center experience, but further exploration is necessary to suggest such a relationship. While the current study site likely does provide opportunities for self-help and peer support, conclusions regarding outcomes due to member experiences at this center cannot be made. It is necessary to first assess whether these

independent variables are present at drop-in centers and, if so, to what degree. Furthermore, it is crucial to determine if positive outcomes increase with respect to level of involvement and participation in the center. Suggestions for ways in which to conduct such a study can be found in the suggestions for future research.

### ***Recommendations and Suggestions for Future Research***

The current study paves the way for future research on the proposed components of the model and on the drop-in center experience. Suggestions for future research begin with further evaluation of the proposed model. In order to link the current data to the drop-in center experience, research must measure if the three proposed independent variables (self-help, peer support, and creative expression) are present at drop-in centers, to what degree they are present, and if outcomes are more favorable the more often that people attend. Applying the model to other drop-in centers could help provide additional support for the model and for the drop-in center experience. Eventually, future research should explore the application of the model to the development and implementation of a new drop-in center.

Additional data and subsequent analyses would also be beneficial. Future studies may incorporate staff and participant ratings of level of involvement. Additionally, analysis of potentially moderating factors such as age, gender, diagnosis, or specific symptom presentation could add valuable contributions to the literature. One important aspect of serious mental illness and recovery that was not addressed in the current study is the effects of stigma. Subsequent studies should assess for perceived stigma and evaluate the relationship of stigma on each of the components of the model. Studies have also demonstrated a relationship between meaningful employment and positive outcomes.

Thus, it may be beneficial to explicitly evaluate the outcomes of paid member employees at these centers. Furthermore, the relationships between outcome variables were not explored, although research has suggested that these variables impact one another. Post hoc analyses and additional studies evaluating these relationships are suggested.

Although the feasibility of implementing a similar study with a longitudinal design and a control group of individuals who do not belong to a drop-in center may be low, such a study would provide valuable findings. Following members of a drop-in center over the course of several years would highlight the process of recovery and create a link between the data collected and the specific experience of a drop-in center. Such a study could also provide valuable data regarding the optimal rate of attendance and level of participation at such a center. Evaluating outcome measures over time could also provide more causal data and additional support for drop-in centers as an adjunctive treatment option.

Finally, future research may seek to further break down various components of the model. For example, an analysis of the five factors of empowerment (self esteem/self-efficacy, power-powerlessness, community activism and autonomy, optimism and control over the future, righteous anger) with regard to relationships within the model would be both interesting and informative. Similarly, quality of life could be separated into physical health, psychological health, social relationships, and environment. Determining the specific factors of each component that are most influential would highlight the most important parts of each factor to replicate when seeking positive outcomes.

### References

- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Andresen, R., Oades, L. & Caputi, P. (2003). The experience of recovery from schizophrenia: towards an empirically validated stage model. *Australian and New Zealand Journal of Psychiatry*, 37, 586-594.
- Anthony, W.A. & Farkas, M.D. (2009). Primer on the psychiatric rehabilitation process. Boston: Boston University Center for Psychiatric Rehabilitation.
- Bailey, L. M. (1984). The use of songs in music therapy with cancer patients and their families. *Music Therapy*, 4(1), 5-17.
- Beard, J.H., Propst, R.N. & Malamud, T.J. (1982). The fountain house model of psychiatric rehabilitation. *Psychosocial Rehabilitation Journal*, 5(1), 1-13.
- Cecil, H., Stanley, M. A., Carrion, P. G., & Swann, A. (1995). Psychometric properties of the MSPSS and NOS in psychiatric outpatients. *Journal of Clinical Psychology*, 51(5), 595-602.
- Clubhouse International (2012). Clubhouse International Annual Report. *ICCD.org*. Retrieved May 4, 2014 from [http://www.iccd.org/images/2012\\_Clubhouse\\_International\\_annual\\_report.p](http://www.iccd.org/images/2012_Clubhouse_International_annual_report.p)
- Clubhouse International (n.d). History of Clubhouse International. *ICCD.org*. Retrieved May 2, 2014 from [www.iccd.org/history.html](http://www.iccd.org/history.html)



- Cook, J., Copeland, M. E., Jonikas, J., Hamilton, M., Razzano, L., Grey, D., Floyd, C., Hudson, W., Mackfarlane, R., Carter, T. & Boyd, S. (2011). Results of a randomized controlled trial of mental illness self-management using wellness recovery action planning, *Schizophrenia Bulletin*, 38(4), 881-891.
- Corrigan, P.W. (2002). Empowerment and serious mental illness: treatment partnerships and community opportunities. *Psychiatric Quarterly*, 73(3), 217-228.
- Corrigan, P. W., Sokol, K. A., & Rüsch, N. (2013). The impact of self-stigma and mutual help programs on the quality of life of people with serious mental illnesses. *Community Mental Health Journal*, 49(1), 1-6.
- Coulson, P., Stickley, T. (2006). Finding a voice—artistic expression and practice development. *Practice Development in Health Care*, 1(2), 85-97. doi: 10.1002/pdh.67
- Davis, L., Fulginiti, A., Kriegel, L. & Brekke, J.S. (2012). Deinstitutionalization? Where have all the people gone? *Current Psychiatric Reports*, 14(3), 259-269. doi:10.1007/s11920-012-0271-1
- Dorio, J. (2004). Tying it all together-the pass to success: A comprehensive look at promoting job retention for workers with psychiatric disabilities in a supported employment program. *Psychiatric Rehabilitation Journal*, 28(1), 32-39.
- DuBois, D. L., & Flay, B. R. (2004). The healthy pursuit of self-esteem: Comment on and alternative to the crocker and park (2004) formulation. *Psychological Bulletin*, 130(3), 415-420.

- Eisen, S. V., Wilcox, M., Leff, H. S., Schaefer, E., & Culhane, M. A. (1999). Assessing behavioral health outcomes in outpatient programs: Reliability and validity of the BASIS-32. *The Journal of Behavioral Health Services & Research*, 26(1), 5-17.
- Ellison, M. L., Rogers, E. S., Lyass, A., Massaro, J., Wewiorski, N. J., Hsu, S., & Anthony, W. A. (2011). Statewide initiative of intensive psychiatric rehabilitation: Outcomes and relationship to other mental health service use. *Psychiatric Rehabilitation Journal*, 35(1), 9-19.
- Farkas, M., Gagne, C., Anthony, W. & Chamberlin, J.(2005). Implementing recovery oriented evidence based programs: Identifying the critical dimensions. *Community Mental Health Journal*, 41, 141–158.
- Frese, F. J., Stanley, J., Kress, K., Vogel-Scibilia, S. (2001). Integrating evidence-based practices and the recovery model. *Psychiatric Services*, 52(11),1462-1468
- Fritsch, T., Kwak, J., Grant, S., Lang, J., Montgomery, R. R., & Basting, A. D. (2009). Impact of TimeSlips, a creative expression intervention program, on nursing home residents with dementia and their caregivers. *The Gerontologist*, 49(1), 117-127.
- Glick, I.D., Sharfstein, S.S. & Schwartz, H.I. (2011). Inpatient psychiatric care in the 21<sup>st</sup> century: the need for reform. *Psychiatric Services*, 62(2), 206-209.
- Goldberg, B., Britnell, E.S. & Goldberg, J. (2002). The relationship between engagement in meaningful activities and quality of life in persons disabled by mental illness. *Occupational Therapy in Mental Health*, 18(2), 17-44.

- Grocke, D., Bloch, S., & Castle, D. (2009). The effect of group music therapy on quality of life for participants living with a severe and enduring mental illness. *Journal of Music Therapy*, 46(2), 90-104.
- Hansson, L. (2006). Determinants of quality of life in people with severe mental illness. *Acta Psychiatrica Scandinavica*, 113, 46–50. doi: 10.1111/j.1600-0447.2005.00717.x
- Hayes, A. (2013). *Introduction to mediation, moderation, and conditional process analysis*. New York: The Guilford Press.
- Hoffmann, F. L., Capelli, K., & Mastrianni, X. (1997). Measuring treatment outcome for adults and adolescents: Reliability and validity of BASIS-32. *Journal of Mental Health Administration*, 24(3), 316-331.
- Holter, M. C., & Mowbray, C. T. (2005). Consumer-run drop-in centers: Program operations and costs. *Psychiatric Rehabilitation Journal*, 28(4), 323-331. doi:10.2975/28.2005.323.331
- Isenberg, J. P., & Jalongo, M. R. (1993). *Creative expression and play in the early childhood curriculum*. Merrill.
- Kasuya, R.T., Polgar-Bailey, P. & Takeuchi, R. (2000). Caregiver Burden and Burnout – A guide for primary care physicians. *Postgrad Med*, 108(7), 119-123.
- Lee, S., Rothbard, A. B., & Noll, E. L. (2012). Length of inpatient stay of persons with serious mental illness: Effects of hospital and regional characteristics. *Psychiatric Services*, 63(9), 889-95.

- Malinovsky, I., Lehrer, P., Silverstein, S. M., Shankman, S. A., O'Brien, W., Samuelson, T., & Van Nostrand, G. (2013). An empirical evaluation of recovery transformation at a large community psychiatric rehabilitation organization. *Psychological Services, 10*(4), 428-441. doi:<http://dx.doi.org/10.1037/a0032747>
- Marcussen, K., Ritter, C., & Munetz, M. R. (2010). The effect of services and stigma on quality of life for persons with serious mental illnesses. *Psychiatric Services, 61*(5), 489-94.
- Mas-expósito, L., Amador-campos, J., Gómez-benito, J., & Lalucat-jo, L. (2011). The world health organization quality of life scale brief version: A validation study in patients with schizophrenia. *Quality of Life Research, 20*(7), 1079-89.
- Mowbray, C. T., Holter, M. C., Mowbray, O. P., & Bybee, D. (2005). Consumer-run drop-in centers and clubhouses: Comparisons of services and resources in a statewide sample. *Psychological Services, 2*(1), 54-64. doi:10.1037/1541-1559.2.1.54
- Mowbray, C. T., Lewandowski, L., Holter, M., & Bybee, D. (2006). The clubhouse as an empowering setting. *Health & Social Work, 31*(3), 167-79.
- National Institutes of Health, National Institute of Mental Health. (n.d.). Statistics: Any Disorder Among Adults. Retrieved May 4, 2014, from [http://www.nimh.nih.gov/statistics/1ANYDIS\\_ADULT.shtml](http://www.nimh.nih.gov/statistics/1ANYDIS_ADULT.shtml)
- Patel, M. X., Doku, V., & Tennakoon, L. (2003). Challenges in recruitment of research participants. *Advances in Psychiatric Treatment, 9*(3), 229-238.
- Qin, P. & Nordentoft, M. (2005). Suicide risk in relation to psychiatric hospitalization. *JAMA Psychiatry, 62*(4), 47-432.

- Reynolds, K. & West, S. G. (1988). A multiplist strategy for strengthening nonequivalent control group designs. *Evaluation Review*, 11(6), 691-714.
- Rocca, P., Mingrone, C., Mongini, T., Montemagni, C., Pulvirenti, L., Rocca, G., & Bogetto, F. (2010). Outcome and length of stay in psychiatric hospitalization, the experience of the university clinic of turin. *Social Psychiatry and Psychiatric Epidemiology*, 45(6), 603-610. doi:10.1007/s00127-009-0091-8
- Rogers, E.S., Chamberlin, J. & Ellison, M.L. (1997): A consumer-constructed scale to measure empowerment among users of mental health services. *Psychiatric Services* 48(8), 1042-1047.
- Rogers, E. S., Ralph, R. O., & Salzer, M. S. (2010). Validating the empowerment scale with a multisite sample of consumers of mental health services. *Psychiatric Services*, 61(9), 933-6.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- SAMHSA (2011) SAMHSA announces a working definition of "recovery" from mental disorders and substance use disorders, [www.samhsa.gov/newsroom/advisories/1112223420.aspx](http://www.samhsa.gov/newsroom/advisories/1112223420.aspx).
- Segal, S.P., Silverman, C. J. & Temkin, T.L. (2010). Self-help and community mental health agency outcomes: A recovery-focused randomized controlled trial. *Psychiatric Services*, 61(9), 905-10.
- Shirk, S., Burwell, R., & Harter, S. (2003). Strategies to modify low self-esteem. Cognitive therapy with children and adolescents: A casebook for clinical practice (pp. 189–213). New York: Guilford Press.

- Sinclair, S. J., Blais, M. A., Gansler, D. A., Sandberg, E., Bistis, K., & LoCicero, A. (2010). Psychometric properties of the Rosenberg self-esteem scale: Overall and across demographic groups living within the united states. *Evaluation & the Health Professions*, 33(1), 56.
- Skevington, S. M., Lofty, M., O'Connell, K.A. (2004). The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. *Quality of Life Research*, 13, 299-310.
- Vaingankar, J. A., Abdin, E., & Chong, S. A. (2012). Exploratory and confirmatory factor analyses of the Multidimensional Scale of Perceived Social Support in patients with schizophrenia. *Comprehensive Psychiatry*, 53(3), 286-291.
- Vagias, W. M. (2006). Likert-type scale response anchors. Clemson International Institute for Tourism & Research Development, Department of Parks, Recreation and Tourism Management. Clemson University.
- WHOQOL Group. (1998). The World Health Organization quality of life assessment: development and psychometric properties. *Social Sciences & Medicine*, 46(12), 1569- 1585.
- Yasui, N. Y. (2008). Community integration for people in recovery in mental illness: A qualitative study of experiences and expectations. *ProQuest Dissertations and Theses*.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, 52(1), 30-41.

## APPENDIX A

### Self-help and Creative Expression Items

*Please answer the following questions about the time you spend at 9 Muses (circle one response):*

#### *Self-help*

**I engage in any of the following activities: self-help groups, support groups, educational groups, inspirational activities, other**

Never	Rarely	Sometimes	Often	Always
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**I am helping myself get better**

Never	Rarely	Sometimes	Often	Always
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**I rely on other people to help me get well**

Never	Rarely	Sometimes	Often	Always
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#### *Creative Expression*

**I participate in creative activities: art, dance, music, writing, other**

Never	Rarely	Sometimes	Often	Always
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**I really enjoy participating in these activities**

Never	Rarely	Sometimes	Often	Always
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**I feel better when I participate in these activities**

Never	Rarely	Sometimes	Often	Always
-------	--------	-----------	-------	--------

**I do not enjoy these activities**

Never	Rarely	Sometimes	Often	Always
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**I am better able to express myself through these activities**

Never	Rarely	Sometimes	Often	Always
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**APPENDIX B**

Consent Form for Participation in the Research Study Entitled The Impact of  
Drop-in Centers on the Long Term Mentally Ill

Funding Source: None.

IRB protocol #: 07301510Exp

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For questions/concerns about your research rights, contact:  
Human Research Oversight Board (Institutional Review Board or IRB)  
Nova Southeastern University  
(954) 262-5369/Toll Free: 866-499-0790  
[IRB@nsu.nova.edu](mailto:IRB@nsu.nova.edu)

**Site Information:**

9Muses Art Center  
7145 West Oakland Park Blvd.  
Lauderhill, Florida, 33313-1012  
(954)746-2055

**What is the study about?**

You are invited to participate in a research study. The goal of this study is to determine how drop in centers work and identify the different parts of the drop in center experience that result in members having a positive experience.

**Why are you asking me?**

We are inviting you to participate because you are a member of 9Muses. There will be approximately 200 participants in this research study.



**What will I be doing if I agree to be in the study?**

You will be asked to complete a packet of questions that should take you no more than 30 minutes to complete. You will be asked general background questions as well as questions about your mental health and the symptoms you are currently experiencing.

**Is there any audio or video recording?**

There will be no audio or video recording in this study.

**What are the dangers to me?**

Risks to you are minimal, meaning they are not thought to be greater than other risks you experience everyday.

Sharing information of your mental health may make you feel a range of emotions such as sad, anxious, embarrassed, or angry. You may stop participation at any time and a trained research study will be available to debrief when necessary. It is possible that members may recognize that you are participating in a research study, which poses a risk of possible loss of subject confidentiality. You will be given a quiet, private area to complete the study. Additionally, your participation in the study may result in you missing a scheduled activity at 9Muses. The study will be conducted as efficiently as possible and should take no longer than 30 minutes to complete.

If you have any questions about the research, your research rights, or have a research-related injury, please contact Dr. William Dorfman at 262-5710. You may also contact the IRB at the numbers indicated above with questions as to your research rights."

**Are there any benefits for taking part in this research study?**

There are no direct benefits for taking part in this research study.

**Will I get paid for being in the study? Will it cost me anything?**

There are no costs to you for participating in this study. You will not be paid for being in the study.

**How will you keep my information private?**

You will be identified in the study by a number that is randomly assigned to you. The deidentified documents will be stored in a locked filing cabinet at Nova Southeastern University and retained for a minimum of 36 months after the completion of the study. The data collected in the study will be kept in a password protected file within a password protected computer. Only research team members will have access to this information. The electronic, deidentified data will be retained indefinitely for future research.

The IRB, regulatory agencies, or any of the investigators may review research records. All information obtained in this study is strictly confidential unless

disclosure is required by law.

**What if I do not want to participate or I want to leave the study?**

You have the right to leave this study at any time or refuse to participate. If you do decide to leave or you decide not to participate, you will not experience any penalty or loss of services you have a right to receive. If you choose to withdraw, any information collected about you **before** the date you leave the study will be kept in the research records for 36 months from the conclusion of the study and may be used as a part of the research.

**Other Considerations:**

If significant new information relating to the study becomes available, which may relate to your willingness to continue to participate, you will be told of this information.

**Voluntary Consent by Participant:**

By signing below, you indicate that

- this study has been explained to you
- you have read this document or it has been read to you
- your questions about this research study have been answered
- you have been told that you may ask the researchers any study related questions in the future or contact them in the event of a research-related injury
- you have been told that you may ask Institutional Review Board (IRB) personnel questions about your study rights
- you are entitled to a copy of this form after you have read and signed it
- you voluntarily agree to participate in the study entitled *The Impact of Drop-in Centers on the Long Term Mentally Ill*

Participant's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Participant's Name: \_\_\_\_\_ Date: \_\_\_\_\_

Authorized Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Authority of Representative is based on: \_\_\_\_\_

Signature of Person Obtaining Consent: \_\_\_\_\_

Date: \_\_\_\_\_