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The Outcomes of Illness Management and Recovery on Severe Mental Illness: A Client's Perspective

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The Outcomes of Illness Management and Recovery on Severe Mental Illness:
A Client's Perspective

Submitted by Angela I. Thoreson
May, 2012

MSW Clinical Research Paper

The Clinical Research Project is a graduation requirement for
MSW students at St. Catherine University/University of St.
Thomas School of Social Work in St. Paul, Minnesota and is
conducted within a nine-month time frame to demonstrate facility
with basic social research methods. Students must independently
conceptualize a research problem, formulate a research design that
is approved by a research committee and the university
Institutional Review Board, implement the project, and publicly
present their findings. This project is neither a Master's thesis nor
a dissertation.

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Abstract

This research project asked the question: What perceptions do individuals diagnosed with severe mental illness have of the treatment outcomes for the Illness Management and Recovery curriculum? This study confirms that individuals found the illness management and recovery curriculum had a positive impact on their treatment outcomes in the domains of coping skills and self-management, social functioning, along with recovery outcomes such as goal setting and obtainment, and dual recovery. This research project used a cross-sectional survey research design. The qualitative data collected utilized a structured interview; these items focused on perceptions of treatment outcomes. The research project sampled adults with severe mental illness who received IMR education based on the modules and handouts in the past. A non-probability, convenience sampling method was used. The primary strength of this design is that it was qualitative in nature and provided deeper understanding of outcomes of the IMR curriculum for the participants involved. The limitation associated with this is that the sample size was small (nine participants) and located in a small geographic location. Also the survey used is limited to face-validity, as the validity has not been tested internally, using test and retest, or comparability. Through the analysis of the data, seven inter-related themes were identified. These themes included: education, goals, improved mental health stability, increased self-value, improved relationships, more community involvement, and preexisting knowledge. There are multiple implications for social work practice, policy, and research.

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Introduction

This research project asked the question: What perceptions do individuals diagnosed with severe mental illness have of the treatment outcomes for the Illness Management and Recovery curriculum? It was expected that individuals found the illness management and recovery curriculum had a positive impact on their treatment outcomes in the domains of coping skills and self-management, social functioning, recovery outcomes such as goal setting and obtainment, and dual recovery. While other studies have noted improvements in cognitive functioning (Roe, Hasson-Ohayon, Salyers, & Kravetz, 2009), this project did not focus on these outcomes.

Illness management and recovery (IMR) curriculum is an evidenced-based practice that is a based on other evidenced-based practices such as cognitive-behavioral, psycho-education, and motivational interviewing strategies (Mueser, et al., 2006; Substance Abuse and Mental Health Service Administration, 2006). IMR is rooted in the recovery movement which seeks to empower individuals with mental illness to give them hope for building a meaningful life that encompasses their mental illness, but is not centered around it (Bond & Campbell, 2008; President's New Freedom Commission on Mental Health, 2004). The need for a standardized program teaching symptom management and relapse prevention was identified at the Robert Wood Johnson Foundation Consensus conference of National Institute of Mental Health staff, service researchers, advocates, and the Schizophrenia Patient Outcomes Research Team in 1997. After the need was identified the National Implementing Evidence-Based Practices Project developed IMR curriculum and implemented it (Mueser, et al., 2006).

A severe mental illness has been defined as a mental, behavioral or emotional disorder that meets criteria of the *Diagnostic and Statistical Manual of Mental Disorders*. To meet the criteria an individual must have been diagnosed as meeting criteria for a disorder, not including developmental and substance use disorders, in the past year. The disorder must have resulted in functional impairments in at least one meaningful life domain (National Institute of Mental Health, 2011a). Approximately one in four adults will experience a mental disorder in a given year; however, six percent of the population, or approximately one in seventeen, suffers from a severe mental illness (National Alliance on Mental Illness, 2011b).

Historically individuals with severe mental illness were left in the care of their family members. Care included locking individuals in room and when this no longer sufficed, individuals were brought to public facilities where the conditions were subhuman. Dorothea Dix, a well known woman from social work history was the first to advocate locally, statewide in Massachusetts, and nationally for better treatment of the mental ill from 1841 until her death in 1887. The early 1900s saw advancements in the study and treatment of mental illness; this occurred due in part to the mental hygiene movement began when Clifford Beers wrote about his treatment and soldiers returning from World War I with 'battle fatigue.' By this time social workers were common figures in hospitals (Day, 2009). Since 1963 the federal government has formally been working toward deinstitutionalization and more community based treatment for individuals with mental illness. This has led to a sharp decline in the number of individuals in state run hospitals, but has not necessary given rise to the community supports these individuals need (Gronfein, 1985).

Psychiatric rehabilitation can be seen in treatment beginning as early as the 1940s. Social workers in urban community centers used groups to teach individuals recently returned home from psychiatric hospitals social skills in order to become more integrated in the community. While professionals were instrumental in the development of the recovery policy, individuals suffering from mental illness and their families were also prominent. During the 1970s individually and in groups, many of these individuals began to voice their concerns about the effectiveness of treatment and patient rights (Stromwell & Hurdle, 2003; Bledsoe, Lukens, Onken, Bellamy & Cardillo-Geller, 2008). These groups eventually gave rise to the National Alliance for the Mentally Ill in 1979. Also, in the mid-1970s, the National Institute of Mental Health piloted a Community Support Program providing funding to community mental health centers to offer services that were generally rehabilitative in nature to individuals with serious and persistent mental illness living in the community (Stromwell & Hurdle, 2003).

The current treatment environment is voicing a strong preference for evidence-based practices. These practices are supported by empirical research as being effective treatments for disorders (Bond & Campbell, 2008). With more states looking toward managed care to contain the costs of health care for the poor, disabled, and individuals with severe mental illness the importance of utilizing evidenced based services is being recognized (National Alliance on Mental Illness, 2011).

The National Association of Social Worker's (1999) code of ethics begins with a preamble that states "the primary mission of the social work profession is to enhance human wellbeing" (p. 1). It goes on to state that social workers place value on service, social justice, dignity and worth of the person, the importance of human relationships,

integrity, and competence. Every one of these values applies to the treatment of

individuals including those with severe mental illness. Currently the percentage of social

workers working in the mental health and substance abuse field is 21.4percent (US

Census Bureau, 2010-11). These social workers are charged with the responsibility to

provide competent services to individuals who are historically and currently vulnerable

and oppressed. In addition, social workers are to promote the dignity and worth of a

person and stress the importance of their human relationships. These values are at the

heart of the recovery model and the IMR conceptual framework (Muesser, at el., 2006;

Substance Abuse and Mental Health Services Administration, 2006).

     This study seeks to build on a body of knowledge exploring the outcomes of IMR

curriculum on severe mental illness. The purpose of this research project is to have

individuals with severe mental illness describe the outcomes they have experienced as a

result of participating in the IMR curriculum. In the research reviewed primarily positive

outcomes were found for the IMR curriculum. A few studies found no difference in pre

and post treatment or found no significant differences between standard treatment and

IMR curriculum interventions in some outcome domains (Färdig, Lewander, Melin,

Folke, & Fredrikssom, 2011; Hasson-Ohayon, Roe, & Kravetz, 2007; Levitt, et al., 2009;

Mueser, er al., 2006). It is important to note that no negative effects of IMR curriculum

were noted in any outcome domains. While this study will not address all of the research

needs identified, it does seek to build upon the IMR research already completed. This

research project explores the question what are the perceptions of the treatment outcomes

of the IMR curriculum for individuals diagnosed with severe mental illness? It utilized

an interview process that collects qualitative data that focuses on the outcomes the

participants' experience as a result of the program. Positive outcomes were found in the areas of coping skills and self-management, social functioning, recovery outcomes such as goal setting and obtainment, and dual recovery. Secondary outcomes in the area of cognitive improvements were not seen, but these outcomes were not being directly explored by this project. Some demographic data was collected. This focused on the participant's involvement in the IMR curriculum among other demographics. Overall the impact of IMR on symptoms and outcomes has had mixed results and further exploration is needed to explore these outcomes and the potential reasons for the varying results. This current study reviews current literature and conceptual and theoretical underpinnings prior to exploring methodology.

Literature Review

This literature review defines mental health recovery as it is important to the conceptual underpinnings of Illness Management and Recovery (IMR) curriculum. Recovery themes and assumptions, as well as the recovery process and recovery outcomes are reviewed. IMR is defined and the specific components of the IMR curriculum are discussed. The curriculum topics cover the areas of recovery vision, psycho-education, social supports, using medications, dual recovery, relapse prevention, and coping skills. After defining the important components of IMR a brief review of recovery studies and evidence based practices is completed. The literature review ends with a review of the empirical outcomes of IMR. Outcomes that the research review identified include coping skills and self management, social functioning, recovery related, and cognitive improvements. Limitations of these studies are noted as well.

Mental Health Rehabilitation and Recovery

Mental health rehabilitation, frequently referred to as 'psychiatric rehabilitation' in literature, is the belief that individuals suffering from severe mental illness can learn to manage their illness and lead meaningful and productive lives (Bond & Campbell, 2008; President's New Freedom Commission on Mental Health, 2004). From the concept of mental health rehabilitation has grown the term 'recovery.' Recovery from a mental illness is defined essentially the same as mental health and psychiatric rehabilitation. The concept of recovery, however, is ripe with its own richer, more complex definitions, assumptions, themes, dimensions, and outcomes.

Recovery has been defined in several different ways, particularly because recovery for each individual suffering from a mental illness is defined by that person

(Jacobson, 2001; Llyod, Waghorn, &Williams, 2008; President's New Freedom

Commission on Mental Health, 2004; Torrey, Rap, Van Tosh, McNabb, & Ralph, 2005).

A commonly used definition comes from Patricia Deegan (as cited in Torrey, et al.,

2005), who is a psychologist and diagnosed with schizophrenia. She defines recovery as

> a process, a way of life, an attitude, and a way of approaching the day's
> challenges. It is not a perfectly linear process. At times our course is erratic and
> we falter, slide back, and start again...The need is to meet the challenge of the
> disability and to re-establish a new and valued sense of integrity and purpose
> within and beyond the limits of the disability; the aspiration is to live, work, and
> love in a community in which one makes a significant contribution (p.15).

Deegan's definition expands on learning to manage an illness and leading meaningful and

productive lives to define a process or journey that is likely to be a life-long pursuit.

Another commonly used definition comes from Anthony (1993):

> Recovery is described as a deeply personal, unique process of changing one's
> attitudes, values, feelings, goals, skills and/or roles. It is a way of living a
> satisfying, hopeful, and contributing life even with limitations caused by illness.
> Recovery involves the development of new meaning and purpose as one grows
> beyond the catastrophic effects of mental illness (p. 2).

Both definitions explicitly state that a significant part of recovery is within an individual's

own perceptions, and these perceptions play a significant role in that individual finding a

purpose and meaning in life.

Recovery themes and assumptions. While this complexity may initially be seen

as blaming the individual (the individual with mental illness is suffering because they do

not have the right attitude), according to the literature reviewed recovery is clearly meant

to empower individuals not blame them (Anthony, 1993; Campbell, J., 1997; Iyer, S.,

Rothmann, T., Vogler, J., & Spaulding, W., 2005; Torrey et al., 2005). Empowerment is

a theme that is recurrent in recovery literature, as individuals suffering from mental

illness frequently feel powerless over a severe illness and historically have had few

significant life choices (Torrey, et al., 2005). Anthony (1993) states that the first assumption of recovery is that the individuals hold the key to recovery, not the professionals. Professionals are not even required for recovery to occur, if they are part of an individual's recovery, by the individual's request, then they are to fill a supportive role. Having supports that believe in and can encourage an individual, even when they themselves do not, is also assumed to be an important part of recovery. These supports offer what an individual suffering from mental illness sometimes lack, hope. Hope, like empowerment, is a theme that is recurrent in recovery literature. Hope is intertwined with another theme for recovery, meaningful life activity. Individuals suffering from mental illness suffer higher rates of suicide, involuntary interventions, trauma, homelessness, incarceration, poverty, loss of child custody, and unemployment (Torrey, et al., 2005). Due to increased occurrences of these negative life events, it is evident then that individuals suffering from mental illness must take steps to bring meaning back into their lives. Empowerment, hope, hope for a meaningful life, and meaningful life activities are all stepping stones from these life experiences toward recovery.

Anthony (1993) lists six more assumptions about recovery. It is assumed that recovery can occur without endorsement of a specific cause of the illness and with relapses of or ongoing symptoms. Building on this it is also assumed that recovery itself impacts the course of the disorder and the symptoms experienced by an individual. As endorsed by Deegan's (1988) definition, recovery is not assumed to follow a linear process. Also, it is assumed that recovery from the consequences of the illness can be harder than recovery from the illness. Finally, it needs to be assumed that individuals who have recovered are not an anomaly, but as the experts for recovery.

Recovery process. Deegan (1988) defines recovery as a process. While this process is unique to each individual, common phases in this process have been identified in literature. Jacobson (2001), found four phases after analyzing thirty narratives on recovery. The first phase consists of defining the problem; the individual must identify what happened (name the illness), its causes, and the solution. Defining the problem is important as it helps the individual understand what has happened and what directions (road to recovery) they need to take. As part of identifying the solution the individual must take inventory of themselves: their identity, attitudes, knowledge, belief systems, roles, and health, as well as the others involved in their lives (their supports or others they interact with on a regular basis) including: family members, friends, peers, coworkers, bosses, and providers. Whether part of the problem or the solution, other factors that come into play are diagnosis, medications, facilities, programs, providers, treatment model, and legal factors (i.e. whether or not someone is legally required to take medications). The second phase is transforming of the self, in which the individual integrates the narrative, taken from defining the problem, with themselves and their personal recovery. Ridgeway (as cited in Torrey et al., 2005) defines this process as:

> a series of journeys that include: a reawakening of hope after despair; a movement to active participation in life from withdrawal; a shift to engagement and active coping rather than passive adjustment; a move away from viewing oneself as primarily a person with a psychiatric disorder to reclaiming a positive sense of self; and a transformation from alienation to a sense of meaning and purpose (p. 93).

What this describes is the internal shifts that take place within an individual, and are sometimes observable by others, as the individual moves through this phase. Jacobson (2001) identifies the third phase as reconciling with the system where the individual is able to use professional resources in a way that enables them to move forward in their

recovery. The last phase identified is sharing their recovery and their personal process of recovery with others to give others hopes and demonstrate it is possible.

  Recovery outcomes. Recovery literature looks at several different domains when exploring the outcomes of recovery and the recovery process.   These domains include reduction of psychiatric symptoms, reduction in service utilization, cognitive improvements, increased ability to set and attain goals, improvements in social skills and supports, improved functioning in day to day life, and abstinence from or reduction in using nonprescribed mood altering substances.

   Reduction of psychiatric symptoms, sometimes defined as clinical recovery, is a commonly identified outcome (Bond & Campbell, 2008; Iyer, et al., 2005; Lloyd, et al., 2008). This is commonly used in studies to measure recovery due to being able to measure specific symptoms and symptom severity in fairly noninvasive manner and can be done quantitatively, qualitatively, and longitudinally (Iyer, et al., 2005). Individuals in recovery are expected to either experience a reduction in psychiatric symptoms or improved ability to manage/cope with the symptoms (Mueser, et al., 2006). This reduction in symptoms can also be measured by service utilization, primarily by reduced hospitalizations and a reduction in emergency room visits (Bond & Campbell, 2008; Iyer, et al., 2005).

  While not a lot of research has been devoted to measuring cognitive functioning, it has been identified as an area of functioning that is likely to be positively affected by mental health rehabilitation (Bond & Campbell, 2008; Iyer, et al., 2005). Improvements are likely to be seen in memory, planning, and cognitive flexibility (Bond & Campbell, 2008). Associated with cognitive functioning is improved adherence to a medication

regime (Iyer, et al., 2005). This increase in adherence would also decrease symptoms and decrease service utilization as well.

 Another commonly measured outcome is the ability for individuals to set and accomplish personal goals (Iyer, et al., 2005; Lloyd, et al., 2008). An individual's goals, along with their strengths and needs, are a basis for assessments and treatment planning. In addition, the goal attainment scale can be used in research to measure outcomes in goal accomplishment (Iyer, et al., 2005). Allowing an individual to set their own goals increases a sense of empowerment and meaningful activity, and goal accomplishment can increase hope (Lloyd, et al., 2008).

 Social recovery, or inclusion in a larger community and improvements in social functioning/skills, is another outcome that is frequently measured (Bond & Campbell, 2008; Lloyd, et al., 2008). Social inclusion looks at satisfying relationships that provide the individual with needed social and emotional support. Social inclusion also looks at the amount of positive interactions an individual has with individuals outside of other service users and providers (Lloyd, et al., 2008). Social recovery is also associated with employment (Bond & Campbell, 2008; Lloyd, et al., 2008). As in setting individual goals, social recovery increases meaningful activity and hope. An individual's participation in social recovery is likely to lead to increased hope through the sharing of the recovery process as discussed above (Jacobson, 2001).

 A fourth outcome is functional recovery (Bond & Campbell, 2008; Iyer, et al., 2005; Lloyd, et al., 2008). Functional recovery frequently includes increased self-care skills and improved independent living skills including home care and independent travel and financial management (Bond & Campbell, 2008; Lloyd, et al., 2008). The two

commonly used instruments used to measure functioning are the global functioning scale and the functional assessment, which also includes employment skills and interpersonal skills as a part of functioning (Iyer, et al., 2005). Other areas that are sometimes included in functional recovery is the ability to obtain and maintain appropriate housing, improved quality of life, and general improvement in physical health (Bond & Campbell, 2008; Iyer, et al., 2005). There are several different quality of life instruments that can be used to measure these outcomes (Iyer, et al., 2005).

One last area that can be measured for recovery outcomes is abstinence from or reduction of the amount of non-prescribed mood altering substances. It has been found the treatment of co-occurring disorders may be more effective than parallel treatment of mental illness and chemical use independently (Bond & Campbell, 2008).

Illness Management and Recovery

Illness Management and Recovery (IMR) is a curriculum based approach to recovery (Bond and Campbell, 2008; Mueser, et al., 2004; Mueser, et al., 2006; Roe, et al., 2009). Psycho-education, cognitive-behavioral approaches to medication adherence, relapse prevention, social skills training, and coping skills training were five empirically supported interventions used to develop ten modules supporting recovery (Roe, et al., 2009). IMR can be taught either individually or in groups. Each module, whether taught individually or in the group, has a purpose, goals, and specified interventions. A recommended suggestion for the number of sessions to cover each module is made, generally each module can be covered in two to four sessions with a few modules needing more or less depending on an individual's needs (Mueser, et al., 2006; Substance Abuse and Mental Health Service Administration, 2006).

Interventions are based on motivational, educational, and cognitive-behavioral strategies. Educational strategies are parallel throughout the module. The educational strategies include summarizing the topics of each section and pausing for interaction and to check for understanding. In addition the information can be broken into sections or "chunks" that are manageable to the client and time can be given during or in between meetings are also included as educational strategies. Common motivational strategies include keeping the individual's personal recovery goals in mind and relating the information to the person's experience and recovery goals, while at the same time respecting the individual as an expert. It is also helpful to identify the individual's motivations for receiving treatment. Cognitive-behavioral strategies include helping the person identify how they can use the information in a practical and helpful way, and reframing previous experiences in relation to their symptoms. In addition modeling, role-playing and practice are used. Cognitive-behavioral strategies also involve utilizing the checklists included in each handout. With each checklist obstacles and barriers to utilizing the information is to be identified and problem solved.

The *Illness Management and Recovery Implementation and Resource Kit* also recommends specific homework review questions and strategies, as well as addresses common problems encountered in each module. Educational handouts are included in the resource kit, which is downloadable from SAMHSA's website. They include the psycho-educational material to be learned, homework assignments and worksheets, and examples from other individual's recovery (Substance Abuse and Mental Health Service Administration, 2006).

Recovery vision. The first section of the modules and educational handouts is entitled "Recovery Vision." The purpose of this module is introduce the concept of recovery and set the tone for the duration of a recovery program (Substance Abuse and Mental Health Service Administration, 2006). The goals of this module are to engage the client in the recovery process, increase awareness of recovery, identify a personal recovery goal, install hope that recovery is possible, as well as teach and use the process for achieving goals (Mueser, et al., 2006; Substance Abuse and Mental Health Service Administration, 2006). Motivational strategies used in this module are unique and include acknowledging past disappointments and challenges and reframing these to identify client strengths. Another motivational strategy is helping individuals define recovery goals that are meaningful to them, and assisting individuals in identifying small, measurable steps that will allow the individual to measure progress toward their goals. Three common problems have been identified: (1) individuals may have difficulty talking about recovery, possibly due to negative messages received in the past; (2) individuals may find it difficult to identify goals; and (3) individuals may identify goals that are very ambitious without recognizing them as such (Substance Abuse and Mental Health Service Administration, 2006).

Psycho-education. There are three modules whose specific focus is to empower individuals with severe mental illness using knowledge. Practical facts about their specific mental illness is the second module to be taught, followed by a module on the stress-vulnerability model. The last module, which is education oriented, provides important and empowering information about the mental health system (Mueser, et al., 2006; Substance Abuse and Mental Health Service Administration, 2006).

Education about diagnosis. The goal of this module is to provide practical facts about schizophrenia, bipolar, or depression, depending on the individual's diagnosis (Substance Abuse and Mental Health Service Administration, 2006). Myths and stigma are addressed as well, in addition to giving examples of famous and average individuals who have lived successfully with each diagnosis. This is done to encourage hope for the future, teach that no-one caused or deserved their illness, and introduce the stress-vulnerability model (Mueser, et al., 2006; Substance Abuse and Mental Health Service Administration, 2006). Common problems encountered are individuals may be reluctant to admit they experience symptoms or have a mental illness, or individuals may already know a significant amount of information about their illness and easily identify how it impacts their life (Substance Abuse and Mental Health Service Administration, 2006).

Education about stress-vulnerability model. The goal of this module is to explain how stress and biological vulnerability can influence symptoms, as well as the role treatment can play in reducing symptoms. Furthermore, the treatment options available to the individual are reviewed, and individuals are provided assistance choosing what treatment options are the best for themselves. Two common problems that occur during this module are (1) again individuals may believe they do not have an illness and do not need treatment, or (2) may prefer to have providers make the treatment choices for them not relying on their own judgment (Substance Abuse and Mental Health Service Administration, 2006).

Education about mental health system. Education about the mental health system is the final or tenth module in the curriculum. Modules may be reviewed out of order, and so an individual may review this module earlier in the curriculum (Substance Abuse

and Mental Health Service Administration, 2006). The goals of this module are to review different mental health services and treatment options available to a client, inform clients of their rights, and to increase self-advocacy behaviors (Mueser, et al., 2006; Substance Abuse and Mental Health Service Administration, 2006). Also it is important to discuss the individual's previous experiences with advocating for themselves. The most common problem is that clients have lost faith in the mental health system and do not believe they can get their needs met by the system (Substance Abuse and Mental Health Service Administration, 2006).

Social supports. The purpose of this module is to teach individuals the role that support plays in recovery (Substance Abuse and Mental Health Service Administration, 2006). The goals of this session are to teach clients social skills to improve the relationships they have with existing supports and/or increase the number of supports they have (Mueser, et al., 2006; Substance Abuse and Mental Health Service Administration, 2006). Motivational strategies in this session include discussing previous and current satisfying relationships, along with the advantages and disadvantages of keeping their support system the same and changing it are identified. Common problems encountered in this module include an individual's unpleasant interpersonal experiences, an individual being shy or socially anxious, and/or an individual establishing relationships very rapidly (Substance Abuse and Mental Health Service Administration, 2006).

Use of medications. The purpose of this module is to provide individuals with more information about medications and how they can influence recovery (Substance Abuse and Mental Health Service Administration, 2006). Of primary importance is

giving clients the opportunity to discuss their personal view of medications in a nonjudgmental environment. The additional goals of this module are to inform clients about the advantages and disadvantages of taking medications, complete the pros and cons of taking medications themselves, and teach skills for increasing medication adherence. Finally, skills for improving communication with medication prescribers are taught (Mueser, et al., 2006; Substance Abuse and Mental Health Service Administration, 2006). Motivational strategies include keeping in mind the person's motivations behind taking medications as well as their previous experiences with medications. The primary cognitive-behavioral strategy used in this module is tailoring a medication regime to fit the individual's personal/daily life. Addressing side-effects is also important (Substance Abuse and Mental Health Service Administration, 2006). Common problems in this module are strong beliefs individuals may hold about medications and previous unpleasant experiences individuals may have had. Again, if individuals believe they do not have a mental illness, they are likely to be reluctant to engage in a discussion about medications (Substance Abuse and Mental Health Service Administration, 2006).

Dual recovery. This module address the effects that drugs and alcohol have on recovery; particularly it looks at how reducing or eliminating these substances may be helpful in achieving recovery goals. The specific goals of this session are to provide individuals with factual information about how drugs, alcohol, and mental illness interact as well as to give individuals an opportunity to openly discuss their own experiences with drugs and alcohol. Pros and cons of using and not using substances are reviewed on an individual basis, and a plan of action is developed if individuals wish to decrease (or eliminate) the amount of substances they are using. Several motivational strategies have

been identified as important in this module and are based on motivational interviewing techniques. Two primary cognitive-behavioral skills are utilized: (1) developing a detailed relapse prevention plan, and (2) developing a plan to cope with symptoms that may change or increase as a result of reducing or eliminating substance use. Difficulties encountered in this module are people saying they do not use or have a problem when they do, individuals talking openly about the pros and cons of their use but are reluctant to consider they do have a problem, and/or negative past experiences with harm-reduction and/or abstinence (Substance Abuse and Mental Health Service Administration, 2006).

Relapse Prevention. The seventh module addresses relapse prevention; the purpose of this module is to assist individuals in reducing the frequency of relapses (Substance Abuse and Mental Health Service Administration, 2006). The specific goals of this session are to inform clients that relapses can be preventable and to help individual develop their own relapse prevention plan. As part of developing a relapse prevention plan, an individual's triggers and early warning signs are identified, along with social supports that can be relied on to prevent a relapse (Mueser, et al., 2006; Substance Abuse and Mental Health Service Administration, 2006). The cognitive-behavioral strategies in this module focus on assisting an individual developing and implementing their personal relapse prevention plan (Substance Abuse and Mental Health Service Administration, 2006). Common problems in this module are individuals can not report or do not remember having early warning signs, and for some individuals talking about relapses can trigger unpleasant memories (Substance Abuse and Mental Health Service Administration, 2006).

Coping skills. Coping skills is a topic that is recurrent throughout the IMR curriculum. Two modules are devoted to coping. The eighth module is devoted to coping with stress and the ninth module is devoted to coping with problems and persistent symptoms. Coping skills can help reduce symptoms and relapses, as well as improve an individual's ability to achieve recovery goals (Substance Abuse and Mental Health Service Administration, 2006).

Coping with stress. The goals of the coping with stress module are to (1) inform clients that they can reduce and effectively cope with their stress, and (2) identify and practice ways to reduce and effectively cope with stress. As a part of this an individual's daily hassles and life stressors are reviewed, along with supports available to help reduce and cope with stress (Mueser, et al., 2006; Substance Abuse and Mental Health Service Administration, 2006). Unique cognitive-behavioral strategies involve reviewing previous stressors and coping skills that were or were not used, identifying an upcoming stressor and coping skills that could be used, and identifying coping skills that can become part of a daily routine (Substance Abuse and Mental Health Service Administration, 2006). Common problems that an individual may have are identifying signs that they are experiencing stress and/or identifying coping skills that they may want to try (Substance Abuse and Mental Health Service Administration, 2006).

Coping with problems and persistent symptoms. The goals of coping with problems and persistent symptoms are to review problem solving methods, identify common problems and persistent symptoms experienced by and individual, and identify coping skills to practice with persistent symptoms. Like in other modules where coping is discussed, the importance of social supports is reviewed (Mueser, et al., 2006;

Substance Abuse and Mental Health Service Administration, 2006). Common problems

encountered are individuals may not want to discuss their common problems and/or may

have difficulty identifying a coping skill they want to use to cope with persistent

symptoms (Substance Abuse and Mental Health Service Administration, 2006).

Review of Empirical Studies

Evidence-based practices are service methods and interventions that have strong

research support and the supporting research has used different research methods,

instruments, and investigators, and has a control group (Bond & Campbell, 2008; Torrey,

et al., 2005). Despite the definition, there are no firm criteria for what meets evidence-

based practice criteria. Bond and Campbell (2008) proposed six criteria for practices that

could be classified as evidence-based. First there should be a target group for whom the

practice is intended and the practice itself needs to be clearly outlined with a fidelity

scale. Also several randomized trials need to be completed with "consistent and

convincing results," these results should also be verified by at least two independent

studies (p. 34). The research results need to share better outcomes for the target

population. Lastly, the practice itself should be able to be implemented in multiple

settings.

Studies of recovery. Recovery itself is a guiding principle in the treatment of

mental illness and a foundation for evidence-based practices. Many studies have been

devoted to this principle, how it affects treatment, clients' perceptions, and plays out in

the lives of individuals. Recovery has been found to be a client led movement which

stems from an significant amount of articles and research done by clients during the

1990's (Jacobson, 2001; Torrey, et al., 2005). Jacobson (2001) was able to find thirty

published individual's narratives regarding their recovery to analyzed and found data regarding the recovery process as discussed above. As stated above recovery is defined by an individual and the desired outcomes can vary significantly (Bond & Campbell, 2008; Iyer, et al., 2005; Jacobson, 2001; Lloyd, et al., 2008; Mueser, et al., 2006; President's New Freedom Commission on Mental Health, 2004; Torrey, et al., 2005). Due to this the recovery research frequently is more qualitative (Hasson, Roe, & Kravetz, 2006; Jacobson, 2001).

Recovery has been found to affect the interventions used in the treatment of mental illness. Hasson-Ohayon, Roe, and Kravetz (2006) found that recovery based interventions increased awareness of an individual's perceptions regarding their mental illness, and encouraged increased engagement in the treatment process. In addition, the recovery movement has been found to affect the perceptions of individuals suffering from mental illness. This has been described above by Ridgeway (as cited in Torrey et al., 2005) as the transformations that take place within an individual as they move forward in their recovery. As a result recovery has been found to affect clients' daily lives. Llyod, Waghorn, and Williams (2008) discuss recovery outcomes clinically, socially, and functionally. Clinical recovery is measured by changes in symptoms, and changes in perceptions and interactions with an individual's environment. Barriers to clinical recovery include stigma, ongoing and changing symptoms, if access to services is limited, and stressors. Social recovery encompasses the size and satisfaction with one's social network. Corrigan and Phelan (2004) found that those whose social recovery included larger networks and more satisfaction with their supports expressed more hope in their recovery and were more goal oriented and had more successes (Llyod, et al.,

(2008). Again, stigma was found to be a major barrier to social recovery. Functional recovery is measured by improvements in everyday accomplishments. As part of these outcomes a significant portion of research has been focused on medication adherence and symptom management (Eckman, et al., 1992; Llyod, et al., 2007). When Eckman and colleagues (1992) completed a longitudinal study of recovery strategies, they found improvements in both areas that were retained for at least one year.

Evidence-based practices. Evidence-based practices are service methods and interventions that have strong research support (Bond & Campbell, 2008; Torrey, et al., 2005). Generally, the supporting research has used different research methods, instruments, and investigators and have a control group (Torrey, et al., 2005). Six evidenced-based practices have been identified in the mental health rehabilitation field. Bond and Campbell (2008) review each of these practices and question the strength of supporting research for some of the interventions. They found that assertive community treatment, supported employment, and family psycho-education practices have strong supporting empirical evidence. Integrated dual disorders treatment, or addressing co-occurring disorders, may be more effective than addressing each disorder separately; however, more research is needed. While a few studies have found medication management to be an effective practice (which improves with therapeutic alliance) (Iyer, et al., 2005), Bond and Campbell (2008) found this evidenced-based practice in need of significant more research. The final evidenced-based practice is IMR. This is a curriculum based approach to recovery, and most of the components of the curriculum have been studied and found to be effective. However, as of the date of their research, Bond and Campbell (2008) found no systematic evaluation of the curriculum package.

Research of the curriculum package has been completed since then and is discussed below. It is upon this research that this project seeks to build upon.

Empirical studies of illness management and recovery. IMR curriculum is based on numerous recovery-oriented, evidenced-based practices that are discussed above. It is designed to assist individuals in learning skills to manage their illness, develop and reach recovery goals, and obtain other recovery outcomes reviewed previously (Bond & Campbell, 2008; Iyer, et al., 2005; Lloyd, et al., 2008; Mueser, et al., 2004; Mueser, et al., 2006; Roe, et al., 2009). When Bond and Campbell reviewed evidenced-based practices in 2008, they noted that no systematic study of the IMR curriculum had been made, although the components were all evidence-based. A few empirical studies had been made prior to then (Hasson-Ohayon, Roe, & Kravetz, 2007; Mueser, er al., 2006), and several studies have been completed since then (Färdig, Lewander, Melin, Folke, & Fredrikssom, 2011; Fujita, et al., 2010; Levitt, et al., 2009; Roe, et al., 2009; Salyers, Rolling, Clendenning, McGuire, & Kim, 2011). The research identified three common outcomes measured, and noted a fourth. Common outcomes included coping and self-management, including looking at the areas of functioning and health; social functioning; and recovery oriented outcomes including the areas of hope, goal setting, and goal obtainment (Färdig, et al., 2011; Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Levitt, et al., 2009; Mueser, et al., 2006; Roe, et al., 2009; Salyers, et al., 2011). One follow-up study also found outcomes in the area of cognitive functioning (Roe, et al., 2009). It should be noted that the studies reviewed here were completed in several different locations including New York City, Indiana, United States and Australia, Sweden, Israel, and Japan. The studies also occurred in multiple

therapeutic settings including supportive housing units, from Assertive Community Treatment teams, and community mental health centers (Färdig, et al., 2011; Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Levitt, et al., 2009; Mueser, et al., 2006; Roe, et al., 2009; Salyers,et al., 2011). Most of the studies reviewed completed the studies utilizing IMR groups, one study utilized the IMR curriculum on an individual basis, and one study reviewed results of completing IMR both in groups and individually (Färdig, et al., 2011; Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Levitt, et al., 2009; Mueser, et al., 2006; Salyers,et al., 2011). The remaining study was a one-year follow-up study on individuals who had completed the IMR curriculum either individually or in groups (Roe, et al., 2009).

Coping skills and self-management outcomes. Coping skills and self-management appears to be a common outcome analyzed in IMR as it. It was discussed in each study reviewed, although different terminology may have been used. Coping skills and self-management was measured with multiple scales within and across studies. One study used as many as seven different scales to measure varying outcomes (Fujita, et al., 2010), while others analyzed outcomes from other studies (Mueser, et al., 2004). Within the coping skills and self-management outcomes, data measured includes knowledge of mental illness, symptom severity, use of coping skills, less of distress experienced by individuals, impairments in functioning as a result of symptoms, relapse prevention, hospitalizations, and emergency room visits (Färdig, et al., 2011; Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Levitt, et al., 2009; Mueser, et al., 2006; Roe, et al., 2009; Salyers,et al., 2011).

All studies that examined individuals' knowledge about mental illness found that IMR curriculum increased their basic knowledge about mental illness, their diagnosis, and recovery (Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Mueser, et al., 2006; Roe, et al., 2009). One of the studies stipulated that increased knowledge may also improve medication adherence for individuals with schizophrenia (Färdig, et al., 2011). This is partially supported by Mueser et al.'s (2004) review of research where in two of five studies psycho-education led to improved medication compliance and in six of six studies cognitive behavior interventions increased medication compliance. As noted previously, both psycho-education and cognitive behavioral interventions are both part of IMR, so Färdig, et al.'s (2011) findings are supported. However, Hasson-Ohayon et al. (2007) noted that increase in knowledge does not necessarily improve an individual's ability to cope with symptoms or participate in treatment and recovery. In addition, one study found that individuals with high degrees of education, a bachelor's degree or higher, were significantly more likely to drop out of the program (Levitt, et al., 2009). This could be related to these individuals already having the skills needed to obtain this information independently. While knowledge outcomes were discussed briefly and an increase in knowledge was found, clearly what an increase in knowledge means for individuals with mental illness and their recovery needs further study.

Studies found that IMR decreased the severity of the symptoms experienced by individuals (Färdig, et al., 2011; Fujita, et al., 2010; Levitt, et al., 2009; Mueser, et al., 2006). Two studies used the Brief Psychiatric Rating Scale which consists of four subscales (Fujita, et al., 2010; Levitt, et al., 2009). One study noted "significant improvements" throughout the scale as well as on Global Assessment of Functioning

(Fujita, et al., 2010, p. 1159). The other study noted overall improvements and improvements on the depression-anxiety subscale, but that other subscales did not have any statistical significance when compared with the control group (Levitt, et al., 2009). Färdig et al. (2011) studied the outcomes of IMR on individuals suffering from schizophrenia and found a decrease in positive and negative symptoms, as well as a decrease in depression and anxiety symptoms. At follow-up individuals also reported less suicidal ideation. Furthermore, they found that the individuals who participated in IMR developed more insight into their illness compared with a treatment as usual group. However, Levitt and colleagues (2009) did not find that IMR helped to decrease suicidal ideation or behavior. Overall the impact of IMR on symptoms outcomes has mixed results and further exploration is needed to explore these outcomes and the potential reasons for the varying results.

According to the Substance Abuse and Mental Health Service Administration (2006), coping skills can help reduce symptoms and relapses, as well as improve an individual's ability to achieve recovery goals. All studies reviewed that analyzed coping skills outcomes after engagement in IMR showed an improvement in coping abilities (Färdig, et al., 2011; Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Levitt, et al., 2009; Mueser, et al., 2006; Roe, et al., 2009). Studies found an increase in the number of coping skills that individuals' used as well as individuals' ability to use coping skills to obtain a desired affect (i.e. relaxation) (Hasson-Ohayon, et al., 2007; Mueser, et al., 2006). A one-year follow-up found that 41.7percent of participants shared that IMR improved their ability to cope and that 36.1percent named specific coping skills the participants utilized from IMR (Roe, et al., 2009). In addition, clients were found to have

a more proactive approach and problem-solving approach to their symptoms compared to a control group (Färdig, et al., 2011). However, another study found no difference between IMR and treatment as usual in coping skills outcomes (Hasson-Ohayon, et al., 2007). Aside from this one result, IMR has been found to improve an individual's use of coping skills, but these findings need to be strengthened by further study.

A few of the studies reviewed briefly mentioned the levels of distress experienced by an individual as a result of their symptoms. All the studies noted that levels of distress decreased as a result of completing the IMR curriculum (Fujita, et al., 2010; Levitt, et al., 2009; Mueser, et al., 2006). However, one of the studies found no statistical significance in distress post-treatment when compared to the decrease experienced by the control group after treatment as usual (Levitt, et al., 2009). As in the other outcomes, further studies are needed to measure the effects of IMR on individual's levels of distress. Furthermore, a definition of distress should be developed for use in IMR and measuring IMR outcomes.

Impairments in functioning outcomes addressed areas such as daily functioning including involvement in structured activities (Fujita, et al., 2010; Mueser, et al., 2006) Improvements were noted throughout all studies that looked at functioning (Fujita, et al., 2010; Levitt, et al., 2009; Mueser, et al., 2006). Two studies utilized the Global Assessment of Functioning to measure the improvements (Fujita, et al., 2010; Mueser, et al., 2006) and another used the Abbreviated Quality of Life Scale (Levitt, et al., 2009). However, aside from stating instruments used and that improvements were seen, functioning improvements were left vague and specific outcomes undefined.

A few studies looked at hospitalization rates to see if IMR reduces hospitalization rates for individuals completing the program. Mueser and colleague's (2004) review of research equated relapse prevention to preventing re-hospitalizations, and found that in four out of five studies relapse prevention interventions were more successful than standard care in preventing re-hospitalizations. In the remaining study IMR was equal to standard care in re-hospitalization outcomes. Two studies focusing on IMR noted a decrease in hospitalizations; however, both of these studies also noted this outcome was not statistically significant when compared with the control group (Färdig, et al., 2011; Levitt, et al., 2009). One study specifically looked at the results of IMR on hospitalization days, instead of as a secondary measure as in the two previous studies, and found different results. In this study participants in IMR had 50percent fewer hospitalization days compared to those who received treatment as usual. This is in part due to an overall decrease in the number of hospitalizations by individuals in and who have graduated from the program, and shorter inpatient stays. In addition individuals who dropped out of the program were correlated with higher hospitalization rates. The same study also found individuals that graduated from the program were less likely to have fewer emergency room visits, but this was not true for individuals still within the program (Salyers, et al., 2011). This difference in outcomes is likely to be a result of the research designs. In the first two studies the participants are noted to be relatively stable, one study excluded individuals who had recent hospitalizations from being participants (Färdig, et al., 2011; Levitt, et al., 2009). Where as the other study was looking specifically at hospitalizations and chose participants who received assertive community treatment. These services are geared toward individuals who are the most disabled by

their mental illness and have a history of hospitalizations, homelessness, and/or incarceration (Salyers, et al., 2011). Based on the differing populations included in the studies, it becomes easy to understand why different outcomes were reported.

Overall the outcomes for coping skills and self-management are mixed. Several studies found results that IMR improved positive outcomes in this area, but others shed doubt on the results. This doubt appeared to occur with the highest frequency when comparing IMR outcomes with other interventions. As noted in several sub-outcomes under coping skills and self-management, further studies are needed in all areas to build on this body of knowledge. While studies comparing IMR to other interventions appear to be the body of research most needed to build upon, this is beyond the scope of this project. Despite this, this research project explored outcomes in coping skills and self-management as well as other outcome areas.

Social functioning outcomes. Social functioning outcomes analyzes changes in social/interpersonal relationships, support and help received from others, finding support in the community, and incorporating supports into individual recovery (Färdig, et al., 2011; Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Levitt, et al., 2009; Mueser, et al., 2006; Roe, et al., 2009). Studies found varying results regarding social functioning outcomes of IMR participants. The majority of the studies found improvements in social functioning outcomes (Färdig, et al., 2011; Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Levitt, et al., 2009; Roe, et al., 2009). Roe and colleagues (2009) noted that not only did participants improve their social relationships with supports outside the group, but that participants also noted that the support received from within the group was unique and beneficial for working toward recovery. This finding is complemented by

Färdig and colleagues (2011) who placed the seeking of social support as an important component of improving coping skills; they noted improvements in both developing social supports as a coping skill and utilizing social supports in stressful situations. Also, Fujita and colleagues (2010) found that the improvements in social functioning outcomes were equated in increases in quality of life. Part of these noted improvements are the results in improved social skills (Fujita, et al., 2010).

One study, however, noted that there were no significant improvements. Multiple explanations were identified including that developing supports takes time and the study was not of the length needed to note improvements, that their IMR group did not contribute enough time to the topic, and also that the IMR group did not do as much as it could to incorporate families and other supports in a collaborative manner (Mueser, et al., 2006). Overall, it appears that improvements in social functioning do occur as a result of individuals being a part of the IMR curriculum, and these improvements have the potential to affect most of the other outcome domains. However, social functioning outcomes need further longitudinal studies to explore long-term effects of the program.

Recovery outcomes. While recovery is defined above; here recovery outcomes are specifically looking at area of increased hope and goal orientation (Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Levitt, et al., 2011; Mueser, et al., 2006; Roe, et al., 2009). The most basic improvements were seen in individual's ability to set, pursue, and achieve personal goals (Fujita, et al., 2010; Hasson-Ohayon, et al., 2007). Mueser and colleagues (2006) not only found improvements in goal orientation, but also found increase in hope; both these improvements were measured qualitatively and quantitatively using GAF scores. Mueser and colleagues (2006) went on to state that they found that these

improvements also led to individuals' feeling that their lives were less controlled or dominated by their symptoms. Another study found that the emphasis on setting and pursuing goals also had a positive impact on other outcomes mentioned, particularly on social functioning (Levitt, et al., 2011). Also, Roe and colleagues (2009) found that these improvements in goal orientation and hope led to individuals feeling empowered in their recovery. When the ability to identify and set goals was measured by clinicians' ratings of clients, significant improvements were noted as well (Hasson-Ohayon, et al., 2007). While research overall appears to support improvements in recovery outcomes, further studies will be needed to improve on these results as well as more detailed studies to explore the link between recovery outcomes and outcomes in other domains.

Cognitive improvements. Roe and colleagues (2009) found one outcome that was unique to their one-year follow-up study that was not found in other studies. They found that 50percent of their respondents reported improvements in cognitive functioning. Cognitive functioning included improved attention span and learning skills. The researchers attributed this to two possible causes. First they believed that the learning process itself was triggered by being in the group and that the faculties needed to obtain and retain information were activated during this process. Their second theory is that the process of setting, working toward, and achieving goals had an effect similar to that just described for learning new information. In addition, in both situations, confidence may have played a role. As individuals are learning and/or doing new things, their confidence increases, and as a result they may be more likely to engage in future activities resulting in improved cognitive functioning.

Limitations of illness management and recovery empirical studies. A number of

limitations were identified in the studies reviewed here. The most common limitation

identified was whether or not the studies were impacted by other services the individuals

may have been receiving (Färdig, et al., 2011; Hasson-Ohayon, et al., 2007; Levitt, et al.,

2009; Salyers, et al., 2011; Roe, et al., 2009). For example one study focused solely on

clients who received IMR education while receiving assertive community treatment

(Salyers, et al., 2011). Other possible services noted were vocational services,

professional social and leisure involvement, and other psychiatric outpatient services

(Färdig, et al., 2011; Roe, et al., 2009). Other frequently noted limitations were small

sample size (Färdig, et al., 2011; Fujita, et al., 2010; Levitt, et al., 2009; Roe, et al., 2009)

and the use of non-blind raters (Färdig, et al., 2011; Fujita, et al., 2010; Hasson-Ohayon,

et al., 2007; Mueser, et al., 2006). Fujita and colleagues (2010) and Levitt and colleagues

(2009) both noted that further follow-up data needs to be collected to study long-term

results of the program. The one year follow-up study conducted, however, questioned the

ability of the individuals to accurately recall important information obtained during the

program, not the ongoing outcomes as a result of the curriculum (Roe, et al., 2009). Two

studies noted the need for further studies on the rating scale created for IMR (Hasson-

Ohayon, et al., 2007; Roe, et al., 2009). Two other studies noted that the referral basis

may also have biased the results (Fujita, et al., 2010; Salyers, et al., 2011). Only one

study noted that the IMR program is new, and so facilitator familiarity with the material

would also impact the outcomes of the group (Mueser, et al., 2006). This limitation,

although not noted in the other studies, is likely to still apply as IMR is a program that

has only existed as a curriculum for about five years.

Summary of illness management and recovery studies. The IMR studies reviewed were noted to be completed across multiple geographical locations and settings. Common outcomes noted included coping and self-management, social functioning, and recovery oriented outcomes (Färdig, Lewander, Melin, Folke, & Fredrikssom, 2011; Fujita, et al., 2010; Hasson-Ohayon, Roe, & Kravetz, 2007; Levitt, et al., 2009; Mueser, et al., 2006; Roe, et al., 2009; Salyers, Rolling, Clendenning, McGuire, & Kim, 2011). Roe and colleagues (2009) found outcomes in the area of cognitive functioning as well. Within the coping skills and self-management outcomes, data measured includes knowledge of mental illness, symptom severity, use of coping skills, levels of distress experienced by individuals, impairments in functioning as a result of symptoms, relapse prevention, hospitalizations, and emergency room visits as well as physical health status (Färdig, et al., 2011; Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Levitt, et al., 2009; Mueser, et al., 2006; Roe, et al., 2009; Salyers,et al., 2011). Coping skills and self-management outcomes were found to have varying results across studies, but IMR appears to have an overall positive effect on the domains. The same is true of social functioning and recovery oriented outcomes. Cognitive improvements were found to be a newly identified outcome, and further research is needed in this domain. However, all domains were identified as needing further research. In addition, detailed research is needed to explore the relationship between the domains.

One outcome domain that was not identified in any research, but is covered in the IMR curriculum is dual recovery with drug and alcohol problems. Also, coping skills and self-management outcomes, while addressing a variety of outcomes, did not address functioning areas that included self-care, housing and apartment management, travel,

budgeting, and other basic activities of daily living. It is important to note that negative

effects of IMR curriculum were not noted in any outcome domains. While this study did

not address all of the research needs identified, it did seek to build upon the IMR research

already completed.

Summary of Literature Review

        This literature review covered the definitions of mental health recovery and IMR.

In defining mental health recovery, recovery themes and assumptions, the recovery

process, and recovery outcomes were also identified. It was discovered that mental

health recovery is a complex process that significantly relies on an individual's

perceptions and goals. Studies of recovery covered outcomes in the areas of engagement

in treatment, empowering clients to set and obtain goals, and increasing meaning and a

sense of purpose in life. IMR explored the varying components of the curriculum. IMR

is included as an evidenced based practice that needs further research. Recovery vision,

psycho-education, social supports, use of medications, dual recovery, relapse prevention,

and coping skills are all topics covered in IMR. Empirical studies of IMR found

outcomes in coping skills and self-management, social functioning, recovery, and

cognitive improvements. Coping skills and self-management outcomes also included

knowledge of mental illness, symptom severity, use of coping skills, less of distress

experienced by individuals, impairments in functioning as a result of symptoms, relapse

prevention, hospitalizations, and emergency room visits. Limitations of IMR empirical

studies were also noted.

Conceptual Framework

IMR accepts the stress-vulnerability model of mental illness as its conceptual framework. As discussed previously, this model is taught to individuals suffering from mental illness as part of the IMR curriculum. However, this conceptual framework is part of a larger theoretical framework that identifies program components and proximal and distal outcomes of IMR. Both of these frameworks, along with accompanying figures, will be briefly described.

Theoretical and Conceptual Framework of Illness Management and Recovery

As just identified, IMR is based in the stress-vulnerability model. This posits that individuals are born with or develop a biological vulnerability to mental illness, which at some point is triggered by stress and/or drug and alcohol use. Stress and/or drug and alcohol use also can make symptoms worse when an individual is already experiencing them. The vulnerability can be offset by medication, coping skills, social support, and meaningful activities, which also reduce the effects of symptoms for indivduals who are already experiencing them (Muesser, at el., 2006; Substance Abuse and Mental Health Services Administration, 2006). The Substance Abuse and Mental Health Service Administration (2006) have provided a figure to enhance a basic understanding of the stress vulnerability model (see Figure 1). This model demonstrates several of the topics of the ten modules addressed in the IMR recovery curriculum, and how the modules interact with and rely on each other to reduce vulnerability to symptoms and support recovery.

Figure 1: Stress-Vulnerability Model
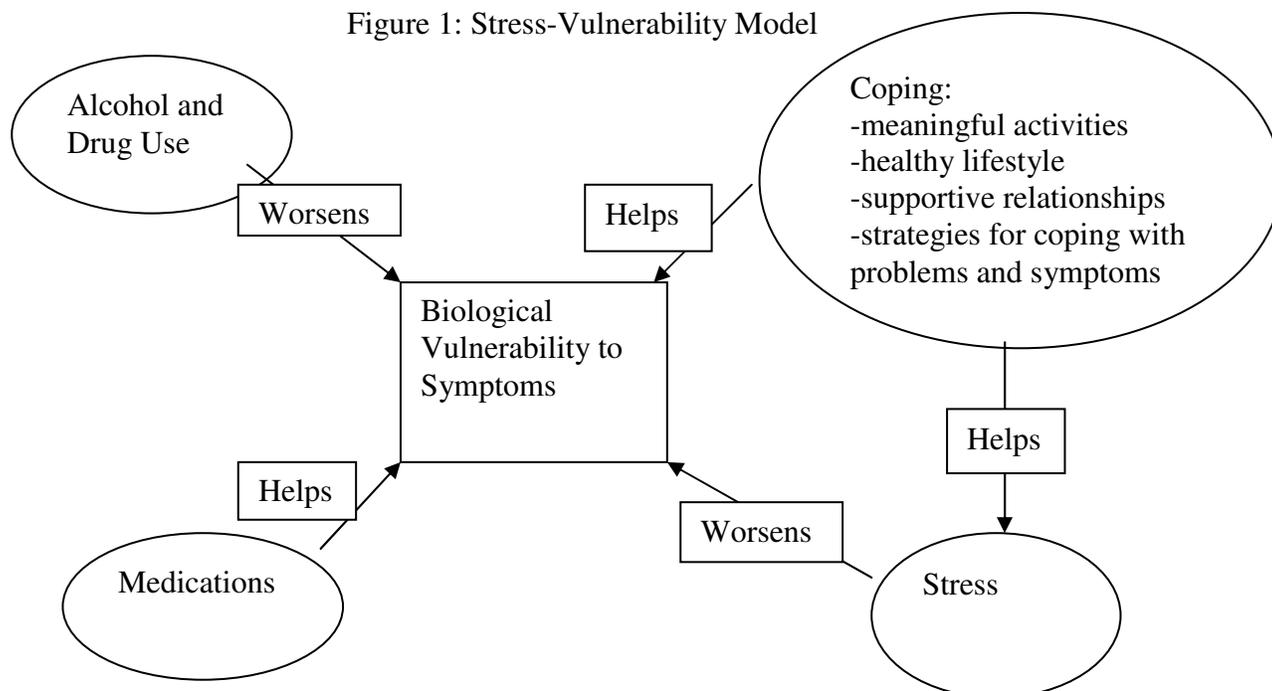
Source: Substance Abuse and Mental Health Services Administration, 2006

The theoretical foundation of IMR also demonstrates how the modules, stress

vulnerability model, and recovery fit together to define immediate outcomes and long-

term outcomes (see Figure 2). The IMR program has education about illness, use of

medications, social skills training, and relapse prevention planning each as an individual

module and are discussed specifically. In addition goal setting and coping skills training

are discussed throughout the curriculum. Proximal or immediate outcomes are expected

in the areas of alcohol and drug use, use of medications, symptom control and relapse

prevention, stress management, coping skills, social supports, and meaningful activities.

These areas are again either specific modules or are addressed throughout the curriculum.

Distal or long-term outcomes involve subjective and objective recovery. Subjective

recovery relies on the individual's sense of recovery and objective recovery is based on

more quantitative measurements (Mueser, et al., 2006). The stress-vulnerability model

from Figure 1 can be seen in the center of the theoretical framework of Figure 2. As

noted components of both figures are addressed in the IMR curriculum. As discussed in

the literature review, IMR also incorporates other interventions such as psycho-education,

cognitive-behavioral, and motivational interviewing. A widely recognized social work

theory, person-in-environment, is also identifiable within the IMR conceptual framework,

as stressors and social supports (or lack of) often incorporate environmental

characteristics. Overall, it appears that the IMR conceptual framework broadly

incorporates a broad spectrum of generally acceptable models and frameworks for

treatment.

Figure 2: Conceptual Framework for the Illness Management and Recovery Program
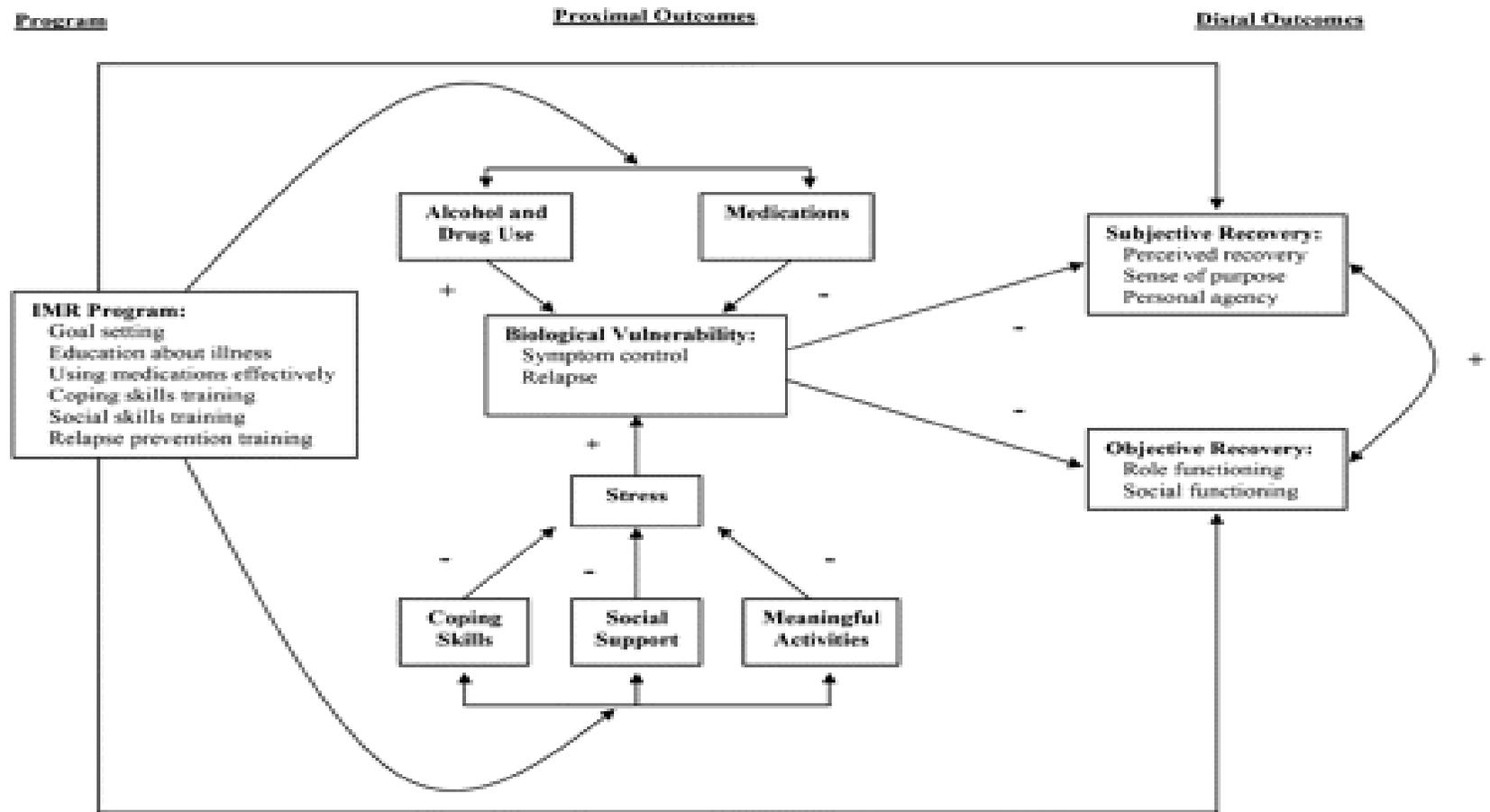
Source: Mueser & et al., 2006

Methods

This section of the project reviews the research question and purpose, and describes the sample, research design, data collection and analysis, and reviews the strengths and limitations of the design. Attention was also given to the protection of participants, reviewing confidentiality measures taken, and the standards of the Institutional Review Board. The sample section includes a short description of participants, while the research design discusses how the participants were selected. Data collection reviews the instrument used to collect the data, while data analysis states the specific steps that were taken to dissect the data.

Research Question

This research project asked the question: What perceptions do individuals diagnosed with severe mental illness have of the treatment outcomes for the IMR curriculum? This question sought to build on the knowledge and research about illness management, particularly potential long-term outcomes. Treatment outcomes, as demonstrated by the literature review, can be broadly applied to several different areas of an individual's life. The literature review identified the need for further exploration of outcomes and the potential reasons for the varying results found. During the data collection process, as described below, multiple questions were asked regarding several different outcome areas. Information was gathered directly from individuals who have been involved in the IMR curriculum.

Sample

The research project sampled adults with severe mental illness who received IMR education based on the modules and handouts in the past. Initially it was desired that

participants received IMR education six months, but to increase sample size this limitations was dropped. A non-probability, convenience sampling method was used. Due to this all individuals lived in southwest Minnesota and are receiving or have received services from a mental health practitioner. Mental health practitioners familiar with the sample population were asked to identify appropriate adult candidates and refer these individuals to be a part of the sample. Mental health practitioners from two different agencies were asked to refer candidates, and approval from these agencies to participate in these studies was gathered before IRB approval was sought. One limitation to this method is that it is difficult to determine whether progress or improvements reported by an individual are due to the IMR curriculum and/or due to other services an individual received during the same timeframe. Due to the small sample size, limited geographical area, and referral process the data collected has no generalizability. However, this research practice is seeking to build upon a body of knowledge regarding IMR and this purpose can be accomplished.

Research Design

This research project used a cross-sectional survey research design. It was qualitative in nature. Demographic data collected included information about participation in the IMR curriculum among other standard demographics. The qualitative data collected utilized a structured interview; these items focused on perceptions of treatment outcomes. There were two different methods of data collection available to participants. They had the option of responding to questions in a face-to-face interview with the researcher, or complete the survey in a written format and submit it to the researcher electronically. The electronic survey was available on the website 'Qualtrics'

to protect their confidentiality; however, no participants chose this method. Two participants did choose to answer the questions based on the questions handed out during recruiting and mail these back to the researcher at her place of employment. Seven participants choose to complete the survey in person.

Protection of Participants

Prior to completing any gathering of data, approval for the research proposal was obtained from committee members and the University of Saint Thomas Institutional Review Board. In addition, agencies where data was gathered had given approval for their involvement in the project (see Appendix A for approval letters). All parties reviewing the proposal and data collection ensured that risks to participants were minimized and addressed properly should they occur. Identified risks to participants included an increase in distressing emotions, memories, and symptoms being triggered due to the questions being asked were of a personal nature. The researcher inquired into a participant's emotional state at the end of the interview, and reviewed coping skills and provided additional resources as needed to address the risks. No additional resources were required by any participants; however, all interviewed participants did engage researcher in more 'social' conversation at the end of their interview as they reported this lowered the anxiety that they had. Also the interview was completed in a setting of the participant's choice including. Options included the participant's home, a meeting room a the local library, or an office at the local mental health center. All but one interviewed participants chose to meet at their homes, the other chose to meet at the local mental health center. This choice was intended to increase a participant's comfort and ability to use coping skills and resources if needed. There are no known benefits for participation

in the study. Interviewed participants did receive a ten dollar gift card incentive to particpate in the study. Risks and benefits were addressed in the informed consent form that was signed by participants prior to the beginning of the interview. Participants were given a copy of the informed consent form as well. A copy of the informed consent form can be found in Appendix B.

To protect participants' confideniality consent forms were kept at researcher's place of employment (administration building at the local mental health center) in a locked file drawer at the researcher's desk. In addition, audio recordings were kept on a password protected computer at the transcriber's work station. Transcripts did not include any identifying information, such as the participants' names. Consent forms and transcripts will be destroyed upon completion of the research project or June 1, 2012 at the latest. Digital recordings were destroyed as the transcripts were created; all digital recordings were destroyed by April 13, 2012. Transcripts may have been reviewed by faculty chair, committee members, and/or other students to check the validity of themes and outcomes identified during analysis. The transcriber signed and followed the transcription agreement form (see Appendix E).

Data Collection

Based on preliminary research completed, there is only one instrument currently available to measure outcomes of IMR curriculum. However, this instrument, the IMR scale (Substance Abuse and Mental Health Services Administration, 2006), is designed for pre- and post-test to measure individual scales before and after receiving education based on the curriculum. This scale was used to create open ended questions assessing individual client outcomes following or during involvement in the IMR curriculum. The

survey created for this study has limited validity and reliability. It has been approved by committee members, and checked for face and content validity. Prior to completing the interview, individuals were asked to complete a brief, one-page written question of demographic data.

The demographic data requested included information about an individual's participation in the IMR curriculum. Participants were asked if they have completed the IMR curriculum and give the responses 'yes,' 'no,' or 'in progress.' In addition, if they have completed the curriculum, participants were asked to identify the number of months since completing the curriculum. Two responses were unavailable due to being written responses. For those interviewed only two met the original request for individuals who were about to complete the curriculum or who completed it in the past six months. One participant had completed it eight months ago, and the other five participants completed it two to three years ago. The participants were also asked to report whether they participated in the curriculum in individual or group format; again two responses were unknown, and the rest of the participants completed the curriculum individually. Finally, participants were asked to identify other services received concurrently as participating in the IMR curriculum. This information can be used to identify other factors that influence outcomes encountered during the interview, and can be seen in Table 1. The demographic data sheet requested from individuals can be found in Appendix C.

Table 1. *Participation in the Co-occurring Services*

Service	Number of Participants	Missing
Psychiatry	6	2
Individual Therapy	6	2
ARMHS	5	0
ACT	4	0
In-Home Nursing	3	2
Personal Care Attendant	1	2
Certified Peer Specialist	2	2
Homemaker	1	2
Total	28	12

A small number of additional demographic items were requested from participants. These items included age, gender, race, and educational attainment. For age, one participant was in their late twenties, two were in their mid-thirties, and four more were in their fifties; the age of two participants were unknown. There were five female participants, three males, and one unknown. Six out of the seven known participants identified their race as Caucasian, and other identified their race as Caucasian and Native American mixed; again there were two unknowns. For educational attainment, data was available for seven of the nine participants. Two reported having a High School Diploma or GED, one had earned a vocational certificate, and four had taken some college credits.

The participants were asked to identify their primary mental health diagnoses, any dual diagnosis disorders if applicable, and number of years since first diagnosed with a mental illness. As with other information collected, the answering of these questions was

completely voluntary, and participants could elect not to respond to any or all of these items. This information was collected to provide general information regarding the sample. These demographic items are also included in Appendix C. Seven out of nine participants provided this information, and all put one reported more than one primary diagnosis. Table 2 includes the total number of participants reporting each diagnosis. Four participants also reported having a physical disability, one reported having co-occurring chemical dependency, and one other reported having epilepsy. The years since first diagnosis were as follows: three, seven, fourteen, eighteen, twenty, twenty nine, and thirty four years. Again, two responses were unavailable.

Table 2. *Diagnoses of Participants*

Diagnosis	Number Participants Reporting
Bipolar	3
Depression	5
Schizoaffective	1
PTSD	2
Social Anxiety	1
Anxiety	2
Borderline Personality	2
Narcissism	1
OCD	1
Total	18

Data on the perceptions of outcomes were collected in a qualitative, interview format. The questions are based on a preexisting pre- and post- test that is completed as part of the IMR curriculum. This test is a fifteen item rating scale that is to be completed by the client independently. The Client IMR Scale has been shown to have satisfactory internal reliability, test-retest reliability, and convergent validity with other scales and inventories (Mueser, et al., 2006). However, this rating scale is designed specifically as a pre- and post- test and is not structured to solely measure outcomes. Fourteen short-answer questions have been created that center around the fifteen item rating scale. Each of the fifteen items has been rephrased in the form of a question regarding the effects of the IMR curriculum in that domain. The first question focuses on progress toward

personal goals. The next question focuses on client knowledge, and whether or not

participants feel IMR increased their knowledge. The third category covers involvement

of family and friends in a participant's mental health treatment. The fourth category

builds on this by asking participants about contact with individuals outside of their

family, and the fifth about time in structured roles. The sixth and seventh domains focus

on symptom distress and how a participant's symptoms impair their functioning.

Domains eight, nine, and ten address relapses of symptoms, relapse prevention planning,

and psychiatric hospitalizations. In addition the eleventh domain addresses a

participant's coping on a day to day basis and how this has been impacted by the IMR

curriculum. The twelfth domain focuses on involvement in self-help activities, which is

built on in the thirteenth domain where the use of medications effectively is addressed.

The final two domains focus on how an individual's functioning and symptoms are

affected by alcohol and drug use. An additional five questions have been identified to

address areas not covered by the rating scale. These questions focus on the IMR

curriculum's impact on education, employment, and the participant's ability to be an

active member of their own treatment team both medically and mentally. Also, the

participants were asked to comment on their perceptions of the IMR curriculum itself

(not their outcomes), based on what they liked about it and what changes they would like

to see being made to it. Most clients answered all questions. One client choose not to

answer questions about alcohol and drug use, and another stopped answering questions

after the tenth domain. The complete survey is available in Appendix D. It should be

noted that the numbered topic headings are the domains addressed by the original rating

scale for the pre- and post- test. The lettered subheadings are the actual questions asked during the course of an interview.

Data Analysis

The analysis of the data primarily relied upon grounding techniques. Here the information was coded by going line by line through a transcript and identifying key words and concepts. The key words and concepts were then combined, in a content analysis, to form themes (Berg, 2009). The analysis of this data followed this process. and did not go back to identify to which theme every code belongs to as is commonly done, due many of the themes were simply codes that repeated themselves consistently throughout the transcript. Certain codes may have been combined into a broader theme.

Strengths and Limitations of Design

The primary strength of this design is that it is qualitative in nature and provided deeper understanding of outcomes of the IMR curriculum for the participants involved. Obviously the limitation associated with this is that the sample size was small, nine participants, and located in a small geographic location. Also the survey used is limited to face-validity, as the validity has not been tested internally, using test and retest, or comparability. However, the purpose of qualitative research is to understand and uncover, so the survey is designed to meet the specific needs of this project.

Researcher bias includes prior exposure to and experience with the IMR curriculum. The researcher was involved, as a mental health practitioner, in the implementation of the curriculum at two local treatment centers in southwest Minnesota. As a part of this the researcher has experience teaching the curriculum individually and in groups, and has also taken part in the fidelity meetings that are a part of the

implementation process. As part of this process, the researcher has endorsed the stress-vulnerability model as well as many of the skills and modules taught. In addition, the researcher will have identified with individuals different ways they can benefit from using the skills taught. This bias will have influenced the ability to interpret the respondent's statements in a completely objective manner. In addition, it may have limited the ability to see different point of views and objectively analyze them. However, it is also be true that the researcher's own experience and beliefs will be a vantage point to gain deeper insight in the outcomes identified during the interviews.

Findings

As stated previously, the data received was coded by going line by line through a transcript and identifying key words and concepts. The key words and concepts were then combined, in a content analysis, to form themes (Berg, 2009). Through the analysis of the data, seven inter-related themes were identified. These themes: education, goals, improved mental health stability, increased self-value, improved relationships, more community involvement, and preexisting knowledge, will each be reviewed in turn, providing examples of the specific codes. For example, identified codes highlighted during the content analysis included taught, learned, educated, and gave me knowledge. These codes were then combined into the theme education.

Education

The first theme, education, was common throughout all but one of the interviews. Statements in this category range from broad: "*it [IMR] educated me on a lot of things*" to narrow "*I learned take the 0.5 [mg of as needed medication] and wait an hour before taking more.*" The education spanned across multiple themes, such as learning to identify triggers and early warning signs that improve mental health stability. "*It [IMR] educated me on what to look for to make sure I'm not getting worse*" and "*I know that it [depressed mood] will go away with the skills that I have learned*" are two examples of this. Education was obviously an important part of IMR: "*that is where I learned the most about everything, also about my Bipolar and my depression and all my medications. I learned everything through IMR, otherwise, I would have been totally lost.*"

Goal Setting

The most education codes were seen in the area of goal setting. These codes were so prominent that goals became their own theme. One participant stated,

> *I know that we sat down and we wrote out my goals; and it gave me a better outlook of what I could reach instead of just having them in my head and not thinking that I really could do them, but could see them on a piece of paper.*

This was echoed by other participants: "*It helped me to realize to make small goals instead of big goals all the time, and to make them small so they could be attainable;*" "*I was able to make goals and reach them;*" and *"[IMR] helped me to break down goals so I could gradually accomplish them."*

Stability

This goal setting, along with education as noted above, contributed to improved mental health stability. "*But even in survival mode I try to set goals for what to do.*" Four of the nine participants report not having had a relapse since completing the IMR curriculum. Other participants noted: "*It affected my understanding of how I need to cope as far as putting ideas into action;*" and "*It goes back to recognizing what the triggers are and trying to have it already in my mind or even a written list of how I would deal with each one of those if they came up.*" So while, not all were able to eliminate relapses, most of the other participants noted a reduction in relapses or improved ability to cope with relapses. One participant noted the prior to IMR she was having two to three hospitalizations and now is averaging one a year: "*So that has really been reduced. It has helped a lot.*" After practicing the skills, one client noted: "*I do it so naturally after learning it that I cannot tell you which one I am using at any particular moment.*" Participants also noted stability that was linked to other areas as well, such as improved

relationships. "*My personality is more stable and does not make people nervous like I used to*."

Awareness

This stability can be directly linked to increased awareness of self, others, and situations. Many of the statements above used words indicating improved understanding, increased recognition, as well as increased awareness. "*I am more aware of symptoms and vulnerabilities*;" "*I feel I understand them [my symptoms] and can recognize them better*;" "*It has affected my understanding of how I need to cope*;" and "*I am more aware of the need to be on medications and stay with the regimen and not do something foolish like having a beer*." These are some of the many examples of how increased awareness has led to improved mental health stability.

Self-value

Three of the participants also noted increases in their self-value. This increase in self-value frequently took the form increased respect for their own opinions and values. "*It [IMR] helped me to get...I can't find the word I want...I did not feel so inferior and that anybody was better than me, like I used to*." This increase in self-value encompasses an increase in confidence: "*Doing IMR and getting more confidence has gotten me into places such as consumer survivor network...it all goes back to giving me the confidence I needed*;" and "*It gave me like a boast of confidence and self-assurance*." Increase in self-worth also was linked to self-advocacy: "*I feel that I can be a part of that now, planning my treatment and making decisions*;" and "*I never questioned before I would just take them [medications] as the doctor knows what they are doing, but I can question them now. And if I don't understand it, then I don't take it until I do*." This increase in

confidence and ability to self-advocate is linked with the increase in self-value, because as clients begin to respect their own opinions and values, they become more willing or confident to share their opinions and values and advocate for themselves.

Relationship

Seven out of the nine participants also reported improved relationships with others. "*[IMR] helped them [family and friends] to understand me better and helped me to be better able to communicate with them*." Some of this improvement can be a contributed to improved communication and understanding: "*It definitely is helping in my relationship with my partner... Communicate better... it helped me to understand him much better*." Part of improved relationships includes meeting more people to form relationships with: "*One it got me out of the house which seems to be everybody's goal. It gave me the opportunity of meeting other people that maybe I would not have always met in general*."

Community Involvement

Along with improved relationships, the same number of participants also reported more community involvement. This community involvement took the form of employment, volunteering, taking classes and forming and joining support groups. "*I have gotten a job since then, a part time job. It has helped me to get more involved in the community such as the LAC [Local Advisory Council], the CSN [Consumer Survivor Network], DFF [DFL, Democratic Famers Labor party];*" "*I volunteer at a Daycare Center and work closely with the person in charge of infants;*" "*I will be taking online classes for medical transcribing;*" and "*Since IMR, I went and joined DBT I joined LAC and eventually I joined depression group*." Some of this involvement also means

increased participation: "*I can be in a group now and I can share, which is really, really unique, because I have not been able to even in narcotics anonymous. All the years I have been in there I never really shared much until lately.*" IMR also helped participants make improvements in areas they were already involved in: "*My boss said since my diagnosis and I started up medications and therapy I have become a more valued employee.*"

Pre-Existing Knowledge

The last theme noted was pre-existing knowledge. Many clients noted that: "*The IMR was kind of repetitive of stuff I already knew.*" For most clients this then became a chance to: "*bring back some of the stuff that I may have forgotten it was about. It refreshed my memory, I guess is how I would put it.*" One client, however, found it: "*boring because it was just kind of repetitive because it was more of common sense thing for me.*" Despite having the knowledge and skills already, another client found: "*it is good for me personally to go back and reread stuff even though I think I know everything about it, just that one little thing that 'oh yeah that is right.'*"

Other Suggestions

The two last questions addressed what participants liked and what they would like to see changed to the IMR curriculum. Multiple participants noted that the curriculum covered a large subject area: "*I liked the fact that it covered a lot of territory.*" As noted above, this led to some participants finding it repetitive, as the topic areas are interrelated: "*It just seemed kind of repetitive and if somebody was going to do IMR with somebody they should make it more specific towards that person not so generalized.*" Wanting more specifics was echoed by other participants. Areas noted where more information

was desired were practical facts: "*Maybe more going into the schizophrenia as there are many types of schizophrenia, to have that broke down further would be helpful;*" substance abuse not being limited to illegal drugs and alcohol: "*I am affected almost the same way by certain foods and by caffeine and drugs...drugs affect many people differently and what the equivalency would be like I have had a lot of problems with caffeine;*" and medications: "*If possible, explain current meds available and possible side-effects and what can be done about the side-effects.*" Another participant requested: "*information on how like living situations, family situations; how these can affect recovery...other factors might help people realize where some of the problems might be coming from*" be included in the manual. Other areas that participants appreciated included being able to keep the curriculum book: "*I enjoyed having the full package in front of me so I was able to choose as I was reading stuff and then go back and reread the book cover to cover;*" that it was "*easy to understand;*" and had practical suggestions: "*I mean actual coping skills out there that I can draw upon.*"

One client found that a lot of things interrupted IMR for her, and suggested to have: "*another person fill in so that the caseworker can work on IMR.*" However, at the same time, she found it helped significantly to have a good connection with her caseworker. This was echoed by another person, "*they are not like 'oh you can't because have bipolar or because you have depression.' Sitting down with somebody that says 'no you can do this and this is a goal' and seeing it on that piece of paper.*" This evidences the power of someone who believed in the participants.

Discussion

The present study investigated the perceptions of individuals diagnosed with severe mental illness about the treatment outcomes for the IMR curriculum. It was expected that individuals found the illness management and recovery curriculum had a positive impact on treatment outcomes in the domains of coping skills and self-management, social functioning, recovery outcomes such as goal setting and attainment, and dual recovery. While other studies have noted improvements in cognitive functioning (Roe, Hasson-Ohayon, Salyers, & Kravetz, 2009), the current study did not focus on these outcomes.

The recovery movement which seeks to empower individuals with mental illness to give them hope for building a meaningful life that encompasses their mental illness, but is not centered around it (Bond & Campbell, 2008; President's New Freedom Commission on Mental Health, 2004).   A major theme of this movement is the importance of empowerment, and it is assumed that recovery cannot occur without it (Anthony, 1993; Campbell, J., 1997; Iyer, S., Rothmann, T., Vogler, J., & Spaulding, W., 2005; Torrey et al., 2005). Jacobson (2001) found four phases after analyzing thirty narratives on recovery. The first phase consists of defining the problem; the individual must identify what happened (name the illness), its causes, and the solution. The second phase is transforming of the self, in which the individual integrates the narrative, taken from defining the problem, with themselves and their personal recovery. Jacobson (2001) identifies the third phase as reconciling with the system where the individual is able to use professional resources in a way that enables them to move forward in their recovery. The last phase identified is sharing their recovery and their personal process of

recovery with others to give others hopes and demonstrate it is possible. Although, a phase order was not identified, each phase can be found in this research study. Participants noted: the importance of setting goals (which acknowledges that something needs to be changed), an increase in confidence, the importance of professionals, and increased community involvement.

Recovery literature focuses on several different domains when exploring the outcomes of recovery and the recovery process. These domains include reduction of psychiatric symptoms, reduction in service utilization, cognitive improvements, increased ability to set and obtain goals, improvements in social skills and supports, improved functioning in day to day life, and abstinence from or reduction in using non-prescribed mood altering substances. Participants in this study did not note a reduction in symptoms, but instead an increased ability to cope with the symptoms they experience. Several participants did report a resulting decrease in service utilization, particularly a decrease in hospitalizations. No cognitive improvements were noted, but all but one participant reported an increased ability to set and obtain goals, along with improved social skills, supports, and increased participation in structure activities. No clients reported that IMR led to abstinence or reduction in non-prescribe mood altering substances, but those who had already achieved abstinence found the curriculum supported their commitment to their abstinence.

The IMR studies discussed in the literature review were noted to be completed across multiple geographical locations and settings. Common outcomes noted in these studies included coping and self-management, social functioning, and recovery oriented outcomes (Färdig, Lewander, Melin, Folke, & Fredrikssom, 2011; Fujita, et al., 2010;

Hasson-Ohayon, Roe, & Kravetz, 2007; Levitt, et al., 2009; Mueser, et al., 2006; Roe, et al., 2009; Salyers, Rolling, Clendenning, McGuire, & Kim, 2011). While this project was limited to a two county area in southwest Minnesota, participants themselves noted similar positive outcomes.

 Each domain of IMR is evidenced based, and as a result has significant research to support the practices and skills. As a whole IMR has had limited research, but the research that has been done has found positive results. Outcomes have been found in the areas of coping skills and self-management, social functioning, recovery outcomes including goal setting, and cognitive improvements.

The literature discussed coping skills and self-management outcomes. There data measured includes knowledge of mental illness, symptom severity, use of coping skills, levels of distress experienced by individuals, impairments in functioning as a result of symptoms, relapse prevention, hospitalizations, and emergency room visits as well as physical health status (Färdig, et al., 2011; Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Levitt, et al., 2009; Mueser, et al., 2006; Roe, et al., 2009; Salyers,et al., 2011). All but emergency room visits and physical health improvements were noted in this study to be effected by IMR. Coping skills and self-management outcomes were found to have varying results across the literature review studies, but IMR appears to have an overall positive effect on the domains. The results of the present study were in accordance with this finding. In the themes positive improvements were noted in managing symptoms due to education and newly learned coping skills, and in preventing relapses. In the literature, coping skills and self-management outcomes, while addressing a variety of outcomes, did not address functioning areas that included self-care, housing and
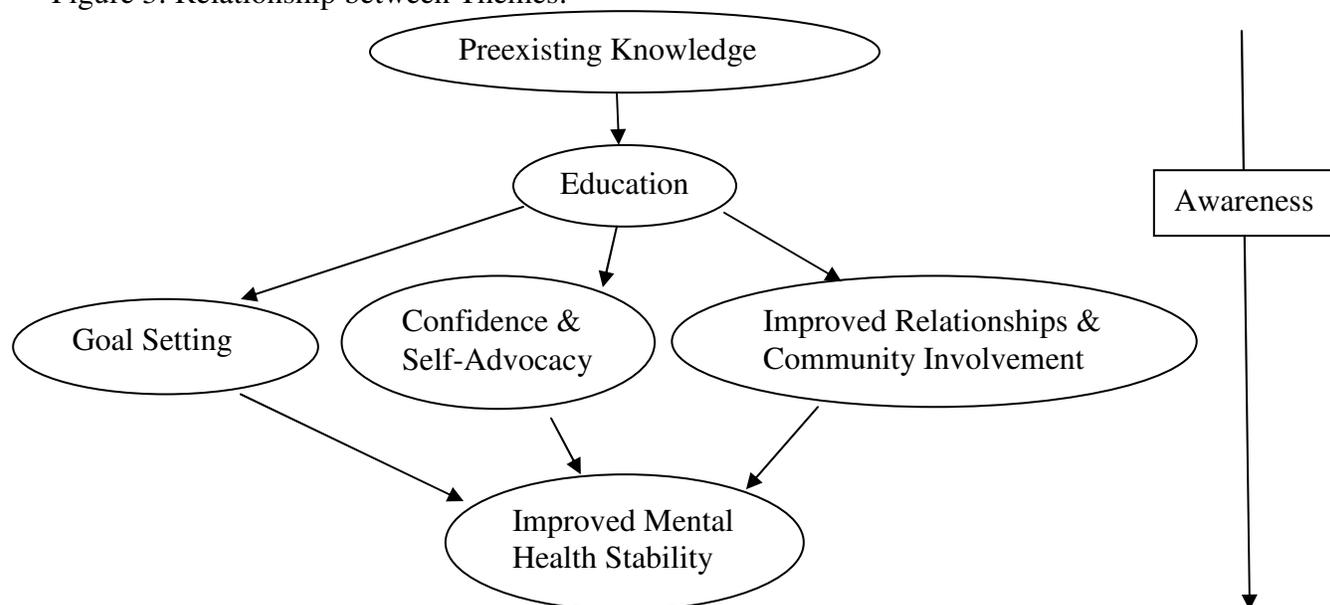
apartment management, travel, budgeting, and other basic activities of daily living. One participant, who was a stay at home mother, did note that the IMR helped her to identify daily goals for self-care, housing management (i.e., when to do the dishes), and family activities. Other participants, as noted above, experienced improvements in employment and volunteering. While these activities could also be noted as improvements in social functioning, they are also very much activities of daily living for a healthy individual.

Previous studies did note improvements in social functioning. Social functioning outcomes analyzes changes in social/interpersonal relationships, support and help received from others, finding support in the community, and incorporating supports into individual recovery (Färdig, et al., 2011; Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Levitt, et al., 2009; Mueser, et al., 2006; Roe, et al., 2009). The present study found positive results in all these areas. Specific examples include better communication with family members, friends, and significant other; participating in support groups; and utilizing supports to prevent relapses.

Research also found recovery outcomes. These outcomes specifically look at increased hope and goal orientation (Fujita, et al., 2010; Hasson-Ohayon, et al., 2007; Levitt, et al., 2011; Mueser, et al., 2006; Roe, et al., 2009). The most basic improvements were seen in individual's ability to set, pursue, and achieve personal goals (Fujita, et al., 2010; Hasson-Ohayon, et al., 2007). Mueser and colleagues (2006) not only found improvements in goal orientation, but also found increase in hope. This was a significant area that was identified as a positive outcome in this study as well. Eight of the nine participants noted improvements in the area of goal setting.

Roe and colleagues (2009) found improved outcomes in the area of cognitive functioning as well. They found that 50 percent of their respondents reported improvements in cognitive functioning. Cognitive functioning included improved attention span and learning skills. While no specific cognitive functioning improvements were noted in this study, several participants identified the educational component of IMR exceedingly important. In fact, it would not be a far stretch based on the findings, that education is the basis for the other themes. Refer to the following diagram in figure 3.

Figure 3: Relationship between Themes:

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                    ┌─────────────────────────┐
                    │  Preexisting Knowledge  │
                    └────────────┬────────────┘
                                 ↓
                          ┌────────────┐
                          │ Education  │
                          └─────┬──────┘
          ┌──────────────────┬──┴──────────────────┐
          ↓                  ↓                      ↓
   ┌─────────────┐   ┌──────────────┐   ┌──────────────────────────┐
   │ Goal Setting│   │ Confidence & │   │ Improved Relationships & │
   └──────┬──────┘   │ Self-Advocacy│   │  Community Involvement   │
          │          └──────┬───────┘   └────────────┬─────────────┘
          │                 ↓                        │
          └──────→┌──────────────────┐←──────────────┘
                  │  Improved Mental │
                  │  Health Stability│
                  └──────────────────┘
```

Awareness

This possible relationship between themes demonstrates how cognitive functioning, if equated to education in this figure, may be overlooked in some studies. Instead the outcomes of the education may be what are being focused on. As noted in the literature review, detailed research is needed to explore the relationship between the

domains, not just the outcomes themselves. Awareness would be a theme that permeates each area of the relationships.

One outcome domain that was not identified in any research, but is covered in the IMR curriculum is dual recovery with drug and alcohol problems. While drug and alcohol use was not discussed frequently enough by participants to form a theme, it was discussed by participants that struggled with it in the past. Those participants (three) noted that the drug and alcohol portion of the curriculum did not make a difference in their commitment to sobriety. This portion of the curriculum did reinforce the commitment they had already made however. One client did decline to comment on if it had affected his drinking and drug use.

It is important to note that negative effects of IMR curriculum were not noted in any outcome domains during the literature review. While there were comments about what individuals disliked about the curriculum, there were no instances where IMR did any harm. One participant felt like the curriculum was completely common sense and redundant, but still did not report suffering any negative outcomes from going through the curriculum. Overall, the perceptions of individuals diagnosed with severe mental illness have of the treatment outcomes for the Illness Management and Recovery curriculum support the outcomes found in research. In other words, the outcomes identified by researchers about the positive results of the IMR curriculum are being noticed by the clients themselves as well.

Implications for Social Work Practice, Policy and Research

There are multiple implications for social work practice. The first that may be noticed is the use of the curriculum itself. The IMR curriculum appears to have, as

indicated by research, sound positive results across multiple domains, which result in improved mental health stability. This curriculum also appears to have no negative results, even for individuals who did not particularly enjoy or gain much from the curriculum. As a result this is a curriculum that could be widely distributed and utilized by the social work profession. Different elements of the curriculum can be utilized and supported individual as well. This could begin with education. If education is indeed the first step toward mental health stability as speculated, then education about the different domains should be implemented. What is unique about this is social workers can choose to educate on specific domains from the curriculum, skipping ones or only briefly reviewing ones the client is already knowledgeable about. Also, the social worker can and should probably bring in educational pieces from different sources as well: making book, website, workbook, and other recommendations as appropriate. This would include making recommendations and supporting the other elements: goal setting, confidence and self-advocacy, and social connectedness. For example, making a recommendation for a support group could be a goal for an individual, improve social connectedness, and result in increased education from the other group members.

One of the difficulties noted in the research study was in recruiting participants. This could be due to a number of different factors including: only a limited number of practitioners involved are actually teaching the curriculum or are teaching it to a limited number of their clientele, not enough incentive for potential participants to participate, unknown barriers for potential participants to participate, and/or potential participants not feeling like their opinion matters. Of these the most concerning is if potential participants feel their voice does not matter. This is supported by a number of

participants asking at the end of the interview, when the recorder was turned off, if their answers were helpful. Each participant was reassured that their answers were appropriate, important, and very helpful to the study. If clients truly feel that their opinions do not matter or are not as valid as other individuals, then social workers need to work hard and advocate for this to be changed. Social work ethics dictates that social workers challenge social injustice, advocating for social change. This includes "meaningful participation for all people" (National Association of Social Workers, 1999, p.5). Social workers need to create opportunities for individuals to advocate for themselves and role model and advocate to others (policy makers and community members) the importance of listening to these individuals.

Social workers also need to build on the research that has already been completed. As identified before the interconnectedness of domains is one subject area that requires further study. The link(s) between the domains are important to be identified, because once they are identified, it would give social workers better insight into what topic areas to cover, what referrals to make, and better insight into the client and the social worker's own interventions. This too links to social work ethics as social workers are to practice competence (National Association of Social Workers, 1999), as the more a social worker knows, the more competent s/he will be. To build on this research why the outcomes are positive could also be addressed. In other words the question: "What is it that is working?" could be addressed. Again, this would assist in improving social workers interventions and insight. Also, most of the participants were receiving at least one other intervention in addition to IMR and the results could also be attributed to these interventions; further research is needed here.

Summary

This research project asked the question: What perceptions do individuals diagnosed with severe mental illness have of the treatment outcomes for the Illness Management and Recovery curriculum? It was expected that individuals found the illness management and recovery curriculum had a positive impact on their treatment outcomes in the domains of coping skills and self-management, social functioning, recovery outcomes such as goal setting and obtainment, and dual recovery. While other studies have noted improvements in cognitive functioning (Roe, Hasson-Ohayon, Salyers, & Kravetz, 2009), this project did not focus on these outcomes. This project found that not only did the majority of individuals note a positive impact on these outcome domains, but that positive outcomes were related back to the outcomes of the recovery movement as well. Overall, IMR has a positive impact on individuals and their recovery as well as on social work practice, policy, and research.

References

Anthony, W.A. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal, 16*(4), 11.

Berg, B.L. (2009). *Qualitative research methods for the social sciences, 10th ed.* Boston, Massachusetts: Allyn & Bacon.

Bledsoe, Sarah E., Lukens, Ellen, Onken, Steven, Bellamy, Jennifer L., & Cardillo-Geller, Lauren. (2008, Summer). "Mental illness, evidence-based practice, and recovery: Is there compatibility between service-user-identified recovery-facilitating and –hindering factors and empirically support intervention?" *Best Practice in Mental Health: An International Journal, 4*(2), 34-58.

Bond, G. & Campbell, K. (2008). Evidenced-based practices for individuals with severe mental illness. *Journal of Rehabilitation, 74*(2), 33-44.

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2010-11 Edition*, Social Workers, on the Internet at http://www.bls.gov/oco/ocos060.htm (visited *July 24, 2011*).

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

Day, P. (2009). *A new history of social welfare, 6th ed.* Boston, Massachusetts: Pearson Education, Inc.

Eckman, T., Wirshing, W., Marder, S., Liberman, R., Johnston-Cronk, K., Zimmermann, K., Mintz, J. (1992). Techniques for training schizophrenic patients in illness self-management: A controlled Trial. *American Journal of Psychiatry 149*(11), 1549-1555.

Färdig, R., Lewander, T., Melin, L., Folke, F., & Fredriksson, A. (2011). A randomized controlled trial of the illness management and recovery program for persons with schizophrenia. *Psychiatric Services, 62*(6), 606-612.

Fujita, E., Kato, D., Kuno, E., Suzuki, Y., Uchiyama, S., Watanbe, A., Uehara, K., Yoshimi, A., & Hirayasu, Y. (2010). Implementing the illness management and recovery program in Japan. *Psychiatric Services, 61*(11), 1157-1161.

Gronfein, William. (1985). "Incentives and Intentions in Mental Health Policy: A Comparison of the Medicaid and Community Mental Health Programs." *Journal of Health and Social Behavior, 26,* 192-206.

Hasson-Ohayon, I., Roe, D., & Kravetz, S. (2006). A qualitative approach to the evaluation of psychosocial interventions for persons with severe mental illness. *Psychological Service 3*(4), 262-273.

Hasson-Ohayon, I., Roe, D., & Kravetz, S. (2007). A randomized controlled trial of the effectiveness of the illness management and recovery program. *Psychiatric Services, 58*(11), 1461-1466.

Iyer, S., Rothmann, T., Vogler, J., & Spaulding W. (2005). Evaluating outcomes of rehabilitation for severe mental illness. *Rehabilitation Psychology 50*(1), 43-55.

Jacobson, N. (2001). Experiencing recovery: A dimensional analysis of recovery narratives. *Psychiatric Rehabilitation Journal, 24*(3), 248-256.

Levitt, A., Mueser, K., DeGenova, J., Lorenzo, J., Bradford-Watt, D., Barbosa, A., Karlin, M., & Chernick, M. (2009). Randomized controlled trial of illness management and recovery in multiple-unit supportive housing. *Psychiatric Services, 60*(12), 1629-1636.

Llyod, C., Waghorn, G., & Williams, P. (2008). Conceptualising recovery in mental health rehabilitation. *British Journal of Occupational Therapy, 71*(8), 321-328.

Mueser, K., Corrigan, P., Hilton, D., Tanzman, B., Schaub, A., Gingerich, S., Essock, S., Tarrier, N., Morey, B., Vogel-Scibilia, S., Herz, M. (2004). Illness management and recovery: A review of the research. *Focus, 11*(1), 34-47.

Mueser, K., Meyer, P., Penn, D., Clancy, R., Clancy D., & Salyers, M. (2006). The illness management and recovery program: Rationale, development, and preliminary findings. *Schizophrenia Bulletin, 32*(S1), S32-S43.

National Alliance on Mental Illness. (2011). *Managed care, medicaid, and mental health resource guide.* Retrieved 10-23-2011 from http://www.nami.org/Content/Microsites158/NAMI_Lexington/Home144/Import ant_Manged_Care_Documents/ResourceGuideWhatIsMCNAMI3232011.pdf

National Alliance on Mental Illness. (2011b). *Mental illness.* Retrieved 10-23-2011 from http://www.nami.org/Content/NavigationMenu/Inform_Yourself/About_Mental_I llness/About_Mental_Illness.htm

National Association of Social Workers. (1999). *Code of ethics of the national association of social workers.* Washington, DC: NASW.

National Institute of Mental Health. *Prevalence of Serious Mental Illness Among U.S. Adults by Age, Sex, and Race.* Retrieved 10-23-2011 from http://www.nimh.nih.gov/statistics/SMI_AASR.shtml

President's New Freedom Commission on Mental Health (2004). *Report to the president.* Retrieved 9-10-11 from http://www.mentalhealthcommission.gov/reports.htm

Roe, D., Hasson-Ohayon, I., Salyers, M., & Kravetz, S. (2009). A one year follow-up of illness management and recovery: Participants' accounts of its impact and uniqueness. *Psychiatric Rehabilitation Journal, 32*(4), 285-291.

Salyers, M., Rollins, A., Clendenning, D., McGuire, A., & Kim, E. (2011). Impact of illness management and recovery programs on hospital and emergency room use by medicaid enrollees. *Psychiatric Services, 62*(5), 509-515.

Stromwall, L., & Hurdle D. (2003). "Psychiatric rehabilitation: An empowerment-based approach to mental health services." *Health & Social Work, 28*, 206-213.

Substance Abuse and Mental Health Services Administration. (2006). *Illness management and recovery implementation resource kit.* Retrieved 9-18-11 from http://www.dhs.state.mn.us/main/groups/disabilities/documents/pub/dhs16_13893 8.pdf

Torrey, W., Rapp, C., Van Tosh, L., McNabb, C., & Ralph, R. (2005). Recovery principles and evidenced-based practice: Essential ingredients of service improvement. *Community Mental Health Journal, 41*(1), 91-100.

Appendix A
Agency Approval Letters

Agency CONSENT FORM

Researcher: Please provide your agency with the information about your project and have your agency contact complete this form.

Agency: Please read this form and ask any questions you may have before agreeing to allow this study to take place at your agency. Please keep a copy of this form for your records.

Project Name	The Outcomes of Illness Management and Recovery on Severe Mental Illness	IRB Tracking Number	284741-1

General Information Statement about the study:
This research project is asking the question: What perceptions do individuals diagnosed with severe mental illness have of the treatment outcomes for the Illness Management and Recovery curriculum?   It is expected that the illness management and recovery curriculum will have a positive impact on treatment outcomes in the domains of coping skills and self-management, social functioning, recovery outcomes such as goal setting and obtainment, and dual recovery.

Your agency is invited to participate in this research. The agency was selected as a host for this study because:
It is known in the local mental health community that your program implemented and utilizes on an ongoing basis the Illness Management and Recovery curriculum.

Study is being conducted by:	Angela Thoreson
Research Advisor (if applicable):	Jeong-Kyun (Evan) Choi, MSW, Ph.D., Chair
Department Affiliation:	Social Work

Background Information
The purpose of the study is:

This research project will gather information from participants about outcomes they have experienced in different domains. Specific questions will be asked about setting and obtaining goals, knowledge obtained from curriculum, and impact of curriculum on relationships, time in structured roles, symptoms, and coping, relapse prevention, use of medications, and drug and alcohol use.

Procedures
Study participants will be asked to do the following:
State specifically what the subjects will be doing, including if they will be performing any tasks. Include any information about assignment to study groups, length of time for participation, frequency of procedures, audio taping, etc.

Participants will be asked to answer eighteen qualitative questions regarding their outcomes of participating in the IMR curriculum. There will also be four questions regarding their completion of the curriculum (how long ago, format, and concurrent services), and six demographic questions. All questions will be completed in a recorded 1:1 interview and digitally recorded. Participants do have the option of answering the questions anamously on an online survey instead of completing the survey in an interview.

Risks and Benefits of being in the study

The risks involved for subjects participating in the study are:

As the questions asked are of a personal nature, there is the risk that negative emotions, memories, and symptoms may be triggered. Researcher inquire into a participant's emotional state at the end of the interview, and review coping skills and provide additional resources as needed.

The direct benefits the agency will receive for allowing the study are:

There are no direct benefits for the agency.

Compensation

Details of compensation (if and when disbursement will occur and conditions of compensation) include:

No compensation will be given to participants or the agency.

Confidentiality

The records of this study will be kept confidential. The types of records, who will have access to records and when they will be destroyed as a result of this study include:

The digital recordings of interviews will be saved to a password protected computer. They will be backed-up on a removable storage device that will be kept in a secure location except when in use. After a transcription is made and all identifying information is removed from transcripts, digital recordings and transcripts with identifying information will be destroyed/deleted. The destruction is expected to be completed by March 1, 2012.

Voluntary Nature

Allowing the study to be conducted at your agency is entirely voluntary. By agreeing to allow the study, you confirm that you understand the nature of the study and who the participants will be and their roles. You understand the study methods and that the researcher will not proceed with the study until receiving approval from the UST Institutional Review Board. If this study is intended to be published, you agree to that. You understand the risks and benefits to your organization.

| Should you decide to withdraw, data collected about | will be used in the study |

you	

Contacts and Questions	
You may contact any of the resources listed below with questions or concerns about the study.	
Researcher name	Angela Thoreson
Researcher email	thor0883@stthomas.edu -or- athoreson@wmhcinc.org
Researcher phone	507-279-1010 -or- 507-530-2745
Research Advisor name	Jeong-Kyun (Evan) Choi, MSW, Ph.D.
Research Advisor email	choi0691@stthomas.edu
Research Advisor phone	507-205-2077
UST IRB Office	651.962.5341

Statement of Consent			
I have read the above information. My questions have been answered to my satisfaction and I consent to allow the study to be conducted at the agency I represent. By checking the electronic signature box, I am stating that I understand what is being asked of me and I give my full consent.			
Signature of Agency Representative ☒ *Electronic signature*		Date	
Print Name of Agency Representative	Tami Dale		
Signature of Researcher ☒ *Electronic signature**		Date	
Print Name of Researcher	Angela Thoreson		

*Electronic signatures certify that::

The signatory agrees that he or she is aware of the polities on research involving participants of the University of St. Thomas and will safeguard the rights, dignity and privacy of all participants.

- The information provided in this form is true and accurate.
- The principal investigator will seek and obtain prior approval from the UST IRB office for any substantive modification in the proposal, including but not limited to changes in cooperating investigators/agencies as well as changes in procedures.
- Unexpected or otherwise significant adverse events in the course of this study which may affect the risks and benefits to participation will be reported in writing to the UST IRB office and to the subjects.
- The research will not be initiated and subjects cannot be recruited until <u>final approval</u> is granted.

Institutional Review Board
🛡 UNIVERSITY of ST.THOMAS

Agency CONSENT FORM

Researcher: Please provide your agency with the information about your project and have your agency contact complete this form.

Agency: Please read this form and ask any questions you may have before agreeing to allow this study to take place at your agency. Please keep a copy of this form for your records.

Project Name	The Outcomes of Illness Management and Recovery on Severe Mental Illness	IRB Tracking Number	284741-1

General Information Statement about the study:

This research project is asking the question: What perceptions do individuals diagnosed with severe mental illness have of the treatment outcomes for the Illness Management and Recovery curriculum? It is expected that the illness management and recovery curriculum will have a positive impact on treatment outcomes in the domains of coping skills and self-management, social functioning, recovery outcomes such as goal setting and obtainment, and dual recovery.

Your agency is invited to participate in this research.
The agency was selected as a host for this study because:

It is known in the local mental health community that your program implemented and utilizes on an ongoing basis the Illness Management and Recovery curriculum.

Study is being conducted by:	Angela Thoreson
Research Advisor (if applicable):	Jeong-Kyun (Evan) Choi, MSW, Ph.D., Chair
Department Affiliation:	Social Work

Background Information
The purpose of the study is:

This research project will gather information from participants about outcomes they have experienced in different domains. Specific questions will be asked about setting and obtaining goals, knowledge obtained from curriculum, and impact of curriculum on relationships, time in structured roles, symptoms, and coping, relapse prevention, use of medications, and drug and alcohol use.

Procedures
Study participants will be asked to do the following:
State specifically what the subjects will be doing, including if they will be performing any tasks. Include any information about assignment to study groups, length of time for participation, frequency of procedures, audio taping, etc.

Participants will be asked to answer eighteen qualitative questions regarding their outcomes of participating in the IMR curriculum. There will also be four questions regarding their completion of the curriculum (how long ago, format, and concurrent services), and six demographic questions. All

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questions will be completed in a recorded 1:1 interview and digitally recorded. Participants do have the option of answering the questions anamously on an online survey instead of completing the survey in an interview.

Risks and Benefits of being in the study

The risks involved for subjects participating in the study are:

As the questions asked are of a personal nature, there is the risk that negative emotions, memories, and symptoms may be triggered. Researcher inquire into a participant's emotional state at the end of the interview, and review coping skills and provide additional resources as needed.

The direct benefits the agency will receive for allowing the study are:

There are no direct benefits for the agency.

Compensation

Details of compensation (if and when disbursement will occur and conditions of compensation) include:

No compensation will be given to participants or the agency.

Confidentiality

The records of this study will be kept confidential. The types of records, who will have access to records and when they will be destroyed as a result of this study include:

The digital recordings of interviews will be saved to a password protected computer. They will be backed-up on a removable storage device that will be kept in a secure location except when in use. After a transcription is made and all identifying information is removed from transcripts, digital recordings and transcripts with identifying information will be destroyed/deleted. The destruction is expected to be completed by March 1, 2012.

Voluntary Nature

Allowing the study to be conducted at your agency is entirely voluntary. By agreeing to allow the study, you confirm that you understand the nature of the study and who the participants will be and their roles. You understand the study methods and that the researcher will not proceed with the study until receiving approval from the UST Institutional Review Board. If this study is intended to be published, you agree to that. You understand the risks and benefits to your organization.

Should you decide to withdraw, data collected about you	will be used in the study

Contacts and Questions

You may contact any of the resources listed below with questions or concerns about the study.

Researcher name	Angela Thoreson
Researcher email	thor0883@stthomas.edu -or- athoreson@wmhcinc.org
Researcher phone	507-279-1010 -or- 507-530-2745
Research Advisor name	Jeong-Kyun (Evan) Choi, MSW, Ph.D.
Research Advisor email	choi0691@stthomas.edu

Research Advisor phone	507-205-2077	
UST IRB Office	651.962.5341	

Statement of Consent

I have read the above information. My questions have been answered to my satisfaction and I consent to allow the study to be conducted at the agency I represent. By checking the electronic signature box, I am stating that I understand what is being asked of me and I give my full consent.

Signature of Agency Representative ☐ *Electronic signature*	*Linda Joberg*	Date 12/1/11	
Print Name of Agency Representative	Linda Sjoberg Southwestern MN Adult Mental Health Consortium.		

Signature of Researcher ☒ *Electronic signature**		Date	
Print Name of Researcher	Angela Thoreson		

*Electronic signatures certify that:

The signatory agrees that he or she is aware of the policies on research involving participants of the University of St. Thomas and will safeguard the rights, dignity and privacy of all participants.

- The information provided in this form is true and accurate.
- The principal investigator will seek and obtain prior approval from the UST IRB office for any substantive modification in the proposal, including but not limited to changes in cooperating investigators/agencies as well as changes in procedures.
- Unexpected or otherwise significant adverse events in the course of this study which may affect the risks and benefits to participation will be reported in writing to the UST IRB office and to the subjects.
- The research will not be initiated and subjects cannot be recruited until <u>final approval</u> is granted.

Appendix B
Informed Consent Form

CONSENT FORM

Please read this form and ask any questions you may have before agreeing to participate in the study.
Please keep a copy of this form for your records.

General Information: This research project asks the questions: What perceptions do individuals diagnosed with severe mental illness have of the treatment outcomes for the Illness Management and Recovery (IMR) curriculum? This question seeks to build on the knowledge and research about illness management, particularly potential long-term outcomes. During the data collection process, as described below, multiple questions will be asked regarding several different outcome areas.

You are invited to participate in this research. You were selected as a possible participate for this study because a mental health provider recognized that you have completed (or are completing) the Illness Management and Recovery curriculum in the past six months.

This study is being conducted by: Angela Thoreson
The research advisor is: Jeong-Kyun (Evan) Choi, MSW, PhD
The study is affiliated with the School of Social Work at the University of St. Thomas

Background Information: This research project will gather information from participants about outcomes they have experienced in different domains. Specific questions will be asked about setting and obtaining goals, knowledge obtained from curriculum, and impact of curriculum on relationships, time in structured roles, symptoms, and coping, relapse prevention, use of medications, and drug and alcohol use.

Proceedures: If you agree to be in the study, you will be asked to do the following: Participants will be asked to answer eighteen questions regarding their outcomes of participating in the IMR curriculum. There will also be four questions regarding their completion of the curriculum (how long ago, format, and concurrent services), and six demographic questions. All questions will be completed in a recorded 1:1 interview and audio recorded digitally. Participants do have the option of answering the questions anamously on an online survey instead of completing the survey in an interview.

Risks and Benefits of being in the study:
The risks involved for participating in the study include a risk that negative emotions, memories, and symptoms may be triggered as the questions are of a personal nature. I (researcher) will inquire into your emotional state at the end of the interview, review coping skills, and provide additional resources.
There are no known benefits for participating in the study.
Any individual who meets with the researcher, regardless of length of time or quality of interview, will be given a $10 gift card to a local store (Walmart). This incentive is meant to also off-set whatever the participant may be giving up to participate in the study.

Confidentiality: The digital recordings of interviews will be saved to a password protected computer. After a transcription is made and all identifying information is removed from transcripts, digital recordings and transcripts with identifying information will be destroyed/deleted. The destruction is expected to be completed by April 1, 2012.

Voluntary Nature of Study: Your participation in this study is entirely voluntary. Your decision whether or not to participate will not affect your current or future relations with any cooperating agencies or institutions or the University of St. Thomas. If you decide to partipate, you are free to withdraw at any time. You are also free to skip any questions that may be asked. Should you decide to withdraw, the data collected about you will be used in the study, unless otherwise requested by yourself.

Contacts and Questions: You may contact any of the resources below with questions or concerns about the study.

Researcher: Angela Thoreson
          thor0883@stthomas.edu
          507-530-2745
Research Advisor: Jeong-Kyun (Evan) Choi, MSW, PhD
          choi0691@stthomas.edu
          507-205-2077
UST IRB Office: 651-962-5341

Statement of Consent:
I have read the above information. My questions have been answered to my satisfaction and I am at least 18 years old. I consent to participate in the study. By signing, I am stating that I understand what is being asked of me and I give my full consent to participate in the study.

Signature of Study Participant   Date

Print Name of Study Participant

Signature of Parent or Guardian (if applicable)   Date

Print Name of Parent or Guardian

Signature of Researcher   Date

Print Name of Researcher

Appendix C
Demographic Data

Age:_____   Gender:_____   Race:_____

Education Level Attained:_____   # of Years since first Diagnosis:_____

Primary Mental Health Diagnosis (select one):

    Depression   Bipolar / Manic Depression   Schizophrenia

    Other:_____

Dual Diagnosis (select one, if applicable):

    Physical Disability   Traumatic Brain Injury

    Alcohol/Drug Dependence   Other:_____

Completed Illness Management and Recovery Curriculum: Yes   No   In Progress

If Completed, Number of Months since Completion:_____

Format of Illness Management and Recovery Services: Group   Individual

Other Services Received Concurrently (at the same time):

    Psychiatry   Individual Therapy   Mental Health Practitioner
                                          (ARMHS / ACT)

    Nursing   Personal Care Attendant

    Other: _____

Appendix D
Survey

Interview Questions:

1. <u>Progress towards personal goals</u>:

    a. How do you feel IMR has impacted your ability to set goals and take steps to accomplish them?

2. <u>Knowledge</u>:

    a. Do you feel that IMR increased your knowledge in the areas of symptoms, treatment, coping skills, and medications? Why or why not?

3. <u>Involvement of family and friends in my mental health treatment</u>:

    a. What affect did IMR have on your relationships, including your ability to improve your existing relationships?

4. <u>Contact with people outside of my family</u>:

    a. How has IMR impacted your ability to meet new people?

5. <u>Time in Structured Roles</u>:

    a. Has how much time you spent doing activities for or with another person that are expected of you changed since being a part of IMR? How or why not?

6. <u>Symptom distress</u>:

    a. Has how much your symptoms bother you changed since being a part of IMR? If yes, how has it changed?

7. <u>Impairment of functioning</u>:

    a. How has the way you manage them changed since being a part of IMR?

8. <u>Relapse Prevention Planning</u>:

    a. How has your ability to prevent relapse changed since being a part of IMR?

9 & 10. <u>Relapse of Symptoms & Psychiatric Hospitalizations</u>:

    a. When was the last time you had a relapse of symptoms or were hospitalized for mental health or substance abuse reasons?

    b. Was this relapse before or after you completed the IMR curriculum?

11. <u>Coping</u>:

    a. How has IMR affected your ability to cope from day to day?

12. <u>Involvement with self-help activities</u>:

    a. What affect has IMR had on your involvement in consumer run services, peer support groups, Alcoholics Anonymous, drop-in centers, WRAP, or other similar self-help programs?

13. <u>Using Medication Effectively</u>: (Don't answer this question if your doctor has not prescribed medication for you).

    a. What affect has IMR had on your willingness and ability to take medications as prescribed?

14 & 15. <u>Functioning affected by alcohol and drug use.</u>

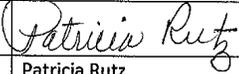   a. How has IMR affected your drinking and drug use?

Additional Questions:

    a. How has IMR affected your ability to be involved in educational and employment activities?

    b. How has your ability to be active in your treatment, both medical and mental health, changed since being involved in IMR?

    c. What did you like about the IMR curriculum?

    e. What changes would you like to see made to the curriculum?

Appendix E
Transcription Agreement Form

TRANSCRIBER CONFIDENTIALITY AGREEMENT

Please read this form and ask any questions you may have before agreeing to participate in the study.
Please keep a copy of this form for your records.

Project Name	The Outcomes of Illness Management and Recovery on Severe Mental Illness	IRB Tracking Number	284741-1

Agreement

I agree to transcribe data for this study.
I agree that I will:

1	Keep all research information shared with me confidential by not discussing or sharing the information in any form or format (e.g. disks, tapes, transcripts) with anyone other than the researcher who is the primary investigator of this study.
2	Keep all research information in any form or format (e.g., disks, tapes, transcripts) secure while in my possession. This includes: - using closed headphones when transcribing audio taped interviews - keeping all transcript documents and digitized interviews in computer password-protected files - closing any transcription programs and documents when temporarily away from the computer - keeping any printed transcripts in a secure location such as a locked file cabinet - permanently deleting any e-mail communication containing the data
3	Give all research information in any form or format (e.g., disks, tapes, transcripts) to the primary investigator when I have completed the research tasks.
4	Erase or destroy all research information in any form or format that is not returnable to the primary investigator (e.g., information stored on my computer hard drive) upon completion of the research tasks.

Statement of Consent	By checking the electronic signature box, I am stating that I understand what is being asked of me and I agree to the terms listed above.		
Signature of Transcriber ☒ Check to sign electronically	*Patricia Rutz*	Date	
Print Name of Transcriber *Pat Rutz*	Patricia Rutz		
Signature of Researcher ☒ Check to sign electronically*		Date	
Print Name of Researcher	Angela Thoreson		

*Electronic signatures certify that::

The signatory agrees that he or she is aware of the politics on research involving participants of the University of St. Thomas and will safeguard the rights, dignity and privacy of all participants.

- The information provided in this form is true and accurate.
- The principal investigator will seek and obtain prior approval from the UST IRB office for any substantive modification in the proposal, including but not limited to changes in cooperating investigators/agencies as well as changes in procedures.
- Unexpected or otherwise significant adverse events in the course of this study which may affect the risks and benefits to participation will be reported in writing to the UST IRB office and to the subjects.
- The research will not be initiated and subjects cannot be recruited until final approval is granted.