Dissertation

ASSESSING MASTER'S LEVEL SOCIAL WORK STUDENTS' ATTITUDES AND KNOWLEDGE OF PSYCHOTROPIC MEDICATION AND ATTITUDES ABOUT PEOPLE WITH SERIOUS MENTAL ILLNESS FOLLOWING A CLASSROOM INTERVENTION

Submitted by

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In partial fulfillment of the requirements

For the Degree of Doctor of Philosophy

Colorado State University

Fort Collins, CO

Summer 2008

March 24, 2008

COLORADO STATE UNIVERSITY

WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY CATHERINE O'DAY ENTITLED *ASSESSING MASTER'S LEVEL SOCIAL WORK STUDENTS' ATTITUDES ABOUT PEOPLE WITH SERIOUS MENTAL ILLNESS FOLLOWING A CLASSROOM INTERVENTION* BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR IN PHILOSOPHY.

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ABSTRACT OF DISSERTATION

ASSESSING MASTER'S LEVEL SOCIAL WORK STUDENTS' ATTITUDES AND KNOWLEDGE OF PSYCHOTROPIC MEDICATION AND ATTITUDES ABOUT PEOPLE WITH SERIOUS MENTAL ILLNESS FOLLOWING A CLASSROOM INTERVENTION

Attitudes towards people with serious mental illness influence the treatment they receive and decisions of policymakers. Social workers have become the largest group of mental health providers in the United States. Therefore, it is important to assess attitudes of social work students who will likely work with people with serious mental illness during their career.

Masters level social work students enrolled in a foundation practice course and a concentration course participated in a classroom intervention that provided exposure to people with serious mental illness, explored the use of psychotropic medication, and provided the opportunity to practice assessments with standardized clients. A control group of students enrolled in alternative sections of the same course participated in order to determine if the intervention affected attitude and knowledge change.

Three instruments were used in the pre and posttests. Two instruments were used to measure attitudes. The Attitude to Mental Illness scale (Singh, Baxter, Standen, & Duggan, 1998) measured attitudes to people with mental illness. The Attitudes toward Psychotropic Medication scale (Bentley, Farmer, & Phillips, 1991) measured attitudes toward the use of psychotropic medication. In order to measure knowledge about psychotropic medication, the Knowledge Index on Psychotropic Medication questionnaire (Bentley, Farmer & Phillips, 1991) was used.

The results of the study indicated that social work students who participated in the study possessed pre-existing fairly high positive attitudes toward people with serious mental illness and psychotropic medication. Therefore, the interventions had no significant change in the pre to posttest scores for both measures.

The control group who reported five months to two years of experience had a significantly higher change in their KIPMSW questionnaire posttest scores than the experimental group. Results indicate that the intervention may have been effective for participants who had some experience with people with serious mental illness. This study has implications for social work educators who are responsible for ensuring that future generation of social workers obtain adequate knowledge and attitudes in order to be effective mental health practitioners. Furthermore, the classroom interventions provide examples for teaching a variety of students about specific populations and fields of practice.

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CHAPTER 1: INTRODUCTION

Background

It is estimated that 121 million people worldwide suffer from depression and 24 million are diagnosed with schizophrenia (WHO, 2003). Mental illness is the leading cause of disability in the U.S. and is a major public health problem (Austrian, 2005: WHO, 2003). Treatment for mental illness costs the U.S. over $71 billion, with indirect costs estimated at $79 billion annually (Austrian, 2005). There is inconsistent estimating of the historical and current prevalence of mental illness in the United States, likely due to the difficulty of obtaining accurate numbers of people who have been diagnosed with a mental illness and the stigma that is attached to such diagnoses. For example, the National Institute of Mental Health (1991) reports that it is estimated that one person in four will be diagnosed with a mental disorder at some time during a given year. This estimate means that one in every four families in U.S. will have a member who is mentally ill (Sherrow, 1996). The revised prevalence estimate of mental illness in the United States reports that approximately 16.5% of the population will be diagnosed with a mental illness in a twelve-month period (Narrow, et al., 2002). Most recently, it is estimated that approximately one person in six, at some time in their life, will experience mental health problems serious enough that they seek professional help (Golightly,

2004). People with mental illness require treatment and if the number increases demands are placed on the professions that provide services. Mental health services are at a crucial stage in redevelopment in order to meet the increased need and cost (NIMH, 1991). Social workers have become the largest group of mental health providers in the United States (Austrian, 2005). Educating and recruiting social workers to work in community-based settings with people with serious mental illness has become a national health issue, particularly in under served rural areas (National Institute of Mental Health [NIMH], 1991). De-institutionalization and the move to community-based services have created a need for trained mental health professionals (Werrbach & DePoy, 1993). A crucial issue is ensuring that there are adequately trained professionals who have a commitment to working with people with serious mental illness. The social work commitment to disadvantaged groups and the current state of federal priorities on community-based care, place social workers in a unique position to provide needed services for people with serious mental illness in community settings. Furthermore, social workers, regardless of the setting, will likely encounter people who are affected by mental illness.

According to the United States Labor Department (2005), social workers have a large representation among mental health professionals, with 21,120 reportedly working with individuals and families in clinic settings, 17,980 working in outpatient care centers, 17,050 in residential mental health facilities and 9,860 work in psychiatric and substance abuse hospitals. It is important to keep in mind that these figures do not include self-employed practitioners. Recent federal data indicate that social workers compose the

largest group of direct service mental health professionals in the country (O'Neill, 1999; Substance Abuse and Mental Health Services Administration [SAMHSA], 2000). SAMHSA reported that there are over 190,000 clinical social workers in the United States, more than the combined totals of other core mental health professionals. The number of clinically trained social workers, as indicated by enrollment in the National Association of Social Workers increased significantly between 1989 and 1999 (O'Neill, 1999). Recognition that social workers are playing increasing roles in providing mental health services has not been reflected in efforts to investigate how best to educate and prepare future practitioners (Newhill & Korr, 2004). Because of the increasing role of social work in mental health settings, it is crucial to meet the training needs and address the obstacles for social workers to remain committed to working with clients with serious mental illness. Social work educators would benefit from research that identifies and provides effective classroom techniques that improve social work students' knowledge, attitude and competency with working with people with serious mental illness.

Research on mental illness relevant to social work education has largely focused on the beliefs of students (Shera & Delva-Tauiliili, 1996; Werrbach & DePoy, 1993), the opinions of practitioners (Kutchins & Kirk, 1988; Murray & Steffen, 1999), or on psychopharmacology (Bentley, Farmer, & Phillips, 1991; Farmer, Bentley & Walsh, 2006). There is substantial literature addressing the needs of people with serious mental illness, few studies have addressed the needs of practitioners who work with this population (Newhill & Korr, 2004). Due to the predominance of social workers in the

mental health arena, it is critical to provide adequate training for working with people with serious mental illness.

Past literature reveals findings that social work students demonstrate less than positive attitudes and reluctance to work with persons with serious mental illness (Werrbach & DePoy, 1993). "Social workers have expressed little interest in working with the severely mentally ill and prefer to work with more intellectually and emotionally rewarding clients" (Shera & Delva-Tauiliili, 1996, p. 160). Attitudes towards people with mental illness have been found to influence the treatment given to clients by personnel working with them (Keane, 1991: Levey & Howells, 1994). Possessing negative attitudes toward any population will affect the way society provides services and the desirability of working or having contact with that population. Social workers who possess negative attitudes towards a specific population will likely avoid contact or minimize contact with that population.

Attitude Research

Attitude change research has occupied the attention of psychologists more than all other aspects of attitude research put together (Albarracin, Johnson & Zanna, 2005). The interest is focusing on exploring changing attitudes about human affairs, personal prejudices, politics, religion, and how to create more effective commercial advertisement campaigns. Education plays an important part in attitude development, course material serves to modify and develop attitudes (Wallach, 2004). For example, Esters, Cooker & Ittenbach (1998) found that showing middle school students a video and providing them with information about the etiology, symptoms, diagnosis and prognosis of mental illness

helped significantly improve their attitudes. However, attitudes based on direct experience have been found to be more influential in predicting later behavior than those based on learning material (Wallach, 2004).

Studying attitude change is complex and we do so without universal agreement on its nature and without a guarantee that the attitude we want to assess will be stable long enough for a one-time measurement to be reliable (Albarracin, et al., 2005). Attitudes cannot be directly observed but they can be inferred by words or actions. Attitudes are an internal state which affects an individual's choice of action toward some object, person, or event (Aiken, 2002). Predictors of behavior from measures of attitudes are not very accurate and the intensity of the attitude depends upon the amount of direct experience one has with the attitude object. Attitudes that are based on direct experience are more accessible, are retrieved more quickly and are more predictive of behavior. Behavior is a result of many complex factors; attitude is just one aspect (Aiken, 2002).

Unfortunately, studies have shown that there is a stigma associated with mental illness. For example, the belief among professionals and the general population that people with schizophrenia are violent, unpredictable, and dangerous, is still prevalent (Alexander & Link, 2003). Therefore, it is important that the general population and especially social work students, who will likely work with people with serious mental illness, develop positive attitudes based on accurate knowledge.

There are few studies that address curriculum development and classroom strategies for social work students focusing on people with serious mental illness (Badger & MacNeil, 2002; Miller, 2004). A study completed by Lacasse and Gomroy (2003)

explored course syllabi from 58 graduate schools of social work and analyzed them for content related to psycho-pathology. They discovered that the Diagnostic and Statistical Manual of Mental Disorders (DSM) is utilized in 45 of the courses focusing on mental health. The authors strongly recommended that social work educators provide more critical thinking opportunities in their curriculum focusing specifically on diagnosing (Lacasse & Gomroy, 2003). Diagnosing clients, using the current edition of the DSM, has become standard practice for many social workers. This is partly due to reimbursement issues with insurance companies demanding a mental health diagnosis in order to pay for services and to meet hospitalization criteria. Almost 20 years ago a systematic randomized national survey found that clinical social workers overwhelmingly use the DSM for business purposes but not for its clinical validity (Kutchins & Kirk, 1988). Social work educators are aware of the need to provide students with the opportunity to practice using the DSM. An example of a classroom strategy practicing using the DSM will be provided in the study.

Psychotropic Medications

Another area of concern for social work practice relates to knowledge regarding psychotropic medications. Social workers will more than likely provide services to clients who take psychotropic medication and should have some knowledge regarding basic classifications (i.e., anti-depressants, and anti-psychotics), as well as possible side effects. There are a few older studies that have explored social work curriculum in psychopharmacology and medication management. A study completed by Bentley, Farmer, and Phillips (1991) explored social work students knowledge and attitudes

toward psychotropic medications. They reported that student scores were generally lower than desired and urged social work educators to include more in-depth knowledge on this issue to provide a more critical approach to practice (Bentley, Farmer & Phillips, 1991). Students were tested using the Knowledge Index on Psychotropic Medication for Social Workers (KIPMSW) and attitude was assessed using the Attitude towards Psychotropic Medication (ATTMED). The KIPMSW and ATTMED will be utilized in this study to measure student's attitudes and knowledge regarding psychotropic medication following a classroom intervention.

Purpose

The study explored the concept that social work students attitudes, defined as the tendency to evaluate an entity with some degree of favor or disfavor, result in approach or avoidance consequences toward persons with serious mental illness, and directly impact their desire to work with this population. Attitude, for the purpose of this paper, was operationalized as the score on the Attitudes to Mental Illness (AMI) questionnaire, developed by Singh, Baxter, Standen and Duggan (1998). The AMI is 20-item, 5-point questionnaire rating scale regarding statements about people with mental illness.

The study was an effort to provide social work educators with a framework for empirical research in the classroom setting. Furthermore, if the intervention was determined to be effective, studies with other target populations (psychology or counseling students) could be completed.

Negative attitudes toward any population will affect the way society provides services and the desirability of working or having contact with that population. The purpose of

this quasi-experimental study was to determine if a classroom intervention was effective in modifying social work students' attitudes about people with serious mental illness and attitudes and knowledge about psychotropic medication. Effective practice is expected to result from knowledge, skills, and improved attitudes towards people with serious mental illness. By improving attitudes and increasing knowledge about psychotropic medications, social work students will be better prepared to effectively provide services to this population.

Overview Description of the Study

The study was an example of a positivist/quantitative paradigm, with data collection provided by self-reports (Attitude to Mental Illness scale, Attitudes towards Psychotropic Medication scale and Knowledge Index on Psychotropic Medication for Social Workers survey) and a few open-ended questions (qualitative). This combination was chosen as a way to provide students with opportunity to utilize their own words to describe their experiences. In addition, the researcher identified that there are few quantitative studies exploring the effectiveness of classroom techniques in social work education. To inform curriculum development, this study compared two groups of master's level social work students. This study used a non-equivalent pretest-posttest control-group design as described by Gliner and Morgan (2000). A seven and one-half-hour mental health training (divided into three activities) was given as part of the regular practice class of master's level social work (MSW) students. The study utilized MSW students from Colorado State University and the University of Montana; there was a control and experimental group from each university. Both the control and experimental groups were

pre- and post-tested using the Attitude to Mental Illness scale (AMI), Attitudes towards Psychotropic Medication (ATTMED) scale and Knowledge Index on Psychotropic Medication for Social Workers (KIPMSW) questionnaire. The students in the experimental group completed open-ended questionnaires after each of the three interventions to evaluate their level of interest and to obtain feedback about the three activities. The intervention included; (a) exposure to people with serious mental illness, (b) an educational videotape and a presentation focused on psychopharmacology, and (c) assessments with standardized clients. The experimental group of students experienced the intervention and the control group experienced traditional curriculum. Table 1.1 provides a comparison of the two groups' experiences. Details regarding the intervention and the measurement instruments are provided in the methodology discussion.

Table 1.1
Group Experiences

Experimental Group	Control Group
1. AMI, ATTMED and KIPMSW * pretests. 2a. Exposure to people with serious mental illness - open-ended questions. 2b. Educational videotape and pharmacist presentation - open-ended questions. 2c. Assessment with standardized clients - open-ended questions. 3. AMI, ATTMED and KIPMSW posttests.	1. AMI, ATTMED and KIPMSW pretests. 2. Traditional curriculum that provides some information and discussion regarding treatment, diagnosing, and social work practice with people with serious mental illness. 3. AMI, ATTMED and KIPMSW posttests.

* Note: AMI = Attitude to Mental Illness; ATTMED = Attitude towards Psychotropic Medication; KIPMSW = Knowledge Index on Psychotropic Medication = KIPMSW

The research questions addressed were:

1. How do MSW students in both groups score on the pre and posttest Attitude to Mental Illness, Attitude towards Psychotropic Medication and Knowledge Index on Psychotropic Medication for Social Workers questionnaires?

2. Is there a difference between the groups in regard to the mean Attitude to Mental Illness pre- to posttest change scores?
3. Is there a difference between the groups in regard to the mean Attitude towards Psychotropic Medication for Social Workers pre-to posttest change scores?
4. Is there a difference between the groups in regard to the mean Knowledge Index on Psychotropic Medication for Social Workers pre-to posttest change scores?
5. Are there differences between ages, years of experience, undergraduate degree, or ethnicities on change scores on the pre and posttest Attitude to Mental Illness, Attitudes towards Psychotropic Medication, or Knowledge Index on Psychotropic Medication for Social Workers in both the control and experimental groups?

The three hypotheses were:

1. MSW students who participated in the intervention will have a higher positive change in their Attitude to Mental Illness score than students who were exposed to traditional curricula.
2. MSW students who participated in the intervention will have a higher positive change in their Attitude towards Psychotropic Medication score than students who were exposed to traditional curricula.
3. MSW students who participated in the intervention will have a higher positive change in their Knowledge Index on Psychotropic Medication for Social Workers score than students who were exposed to traditional curricula.

Definition of Terms

The major concepts and terms utilized within this research project were the following:

Attitude - the tendency to evaluate an entity with some degree of favor or disfavor, which results in approach or avoidance consequences (Aiken, 2002).

Council on Social Work Education (CSWE) - the governing organization responsible for accrediting schools of social work.

Diagnostic and Statistical Manual of Mental Disorders (DSM) - created by the American Psychiatric Association, is an attempt to classify and categorize mental disorders. The first edition was published in 1952 and by the third edition released in 1980, most insurance companies and health organizations adopted the DSM as the main guideline for diagnosing mental disorders. Therefore, reimbursement for mental health services requires a DSM diagnosis. Currently the DSM-IV-TR (2000) is the manual utilized by mental health professionals.

Generalist curriculum - Schools of Social Work are accredited by the Council on Social Work Education (CSWE) which requires that social work curricula include issues regarding specific and vulnerable populations. Schools can decide how to meet that requirement, some provide students with classes that address specific populations, while others take a more generalist approach and infuse material regarding vulnerable populations in classroom curricula (CSWE, 2001). Colorado State University and the University of Montana provide a generalist approach and integrate discussions about vulnerable populations (people with serious mental illness) throughout the classes.

Serious Mental Illness - For the purposes of this study, serious mental illness is defined utilizing the DSM-IV-TR that provides diagnostic criteria for mental

disorders. Specifically, the study focused on the following Axis I disorders; schizophrenia, bipolar disorder, and major depression (APA, 2000). In order to be classified as a serious mental illness, severe symptoms that result in marked impairment in social or occupational functioning for an individual must be present.

Standardized (simulated) Client (SC) - Standardized clients are nonprofessionals (community members or actors) who are trained to take on the full spectrum of characteristics of an assigned client case. SC encounters are designed to simulate actual student-client interactions with a high degree of realism.

Psychopharmacology - The study of psychotropic medications, which are the classification of medications targeted to treat specific symptoms of mental disorders.

Delimitations

This study is limited to Master's level social work students enrolled at Colorado State University and the University of Montana from 8/2007 – 12/2007.

Limitations

There are a number of potential limitations in the study. The sample is one of convenience, is small, and the design was a non-randomized sample, therefore generalizing findings will not be possible.

Measuring attitudes is difficult as they are not stable constructs, numerous variables can affect attitude. The "most serious weakness in attitude measurement is in the realm of validity" (Mueller, 1986, p. 97). Asking people to self-report their attitude regarding

any subject is likely to vary depending upon any number of variables. Therefore, construct validity of attitude is questionable and caution should be used when interpreting the results of self-report inventories (Morgan, et al., 2006).

Responses reflecting social desirability may affect the validity of attitude scales. The issue of social desirability is of particular concern in this study. Social workers are committed to working with disadvantaged populations and may be more likely to express positive attitudes toward people with mental illness. However, Oskamp and Schultz (2005) offer strategies to decrease social desirability by writing an introduction script that includes: emphasizing responses are anonymous, stating that there are no right or wrong answers, looking for opinions not facts, and urging respondents to answer honestly.

Another potential limitation concerns internal validity, referring to causality. More specifically, the degree to which one can draw a valid conclusion that changes in attitude toward people with serious mental illness were caused by the intervention. Because the design is quasi-experimental, it has a weaker internal validity than randomized experimental designs. Gliner and Morgan (2000) identify two main types of threats to internal validity: equivalence of groups on participant characteristics, and control of extraneous variables and environment variables. Random assignment of participants to groups is not possible. Therefore, to determine if there were differences in the groups' characteristics, demographic information was collected. The pretest results allowed for further comparison of the groups before the intervention was implemented. Following each of the interventions open-ended questions were asked to the treatment groups.

Control of extraneous variables and environment variables is more difficult to manage. Factors such as; maturation, history of environmental factors, and repeated testing needed to be closely monitored. It is the duty of the researcher to make attempts to control for these variables and more importantly, report any variations or factors that threaten the validity of the study. For example, monitoring students' exposure to people with serious mental illness, such as, field placements and conferences was attempted by asking students to report any occurrences on the posttest.

Due to the design of the study without random assignment, external validity was constrained and generalizing to the larger population is not possible. A small sample inhibits comparisons on age, ethnicity, or previous experience with people with serious mental illness.

Significance

This study was timely because of the ongoing concern within social work programs to create a curriculum that best prepares relevant and effective social workers (Werrbach & Depoy, 1993). The lack of studies on classroom interventions with social work students (Wallach, 2004) combined with the increasing presence of social workers in the mental health system require a study that focuses on improving education in this area. The goal of this research project was to determine whether the proposed model for teaching students about people with serious mental illness is an effective training intervention. The study provided an evaluation of particular approaches to teaching content within social work education. The results offers social work educators information about classroom strategies that seek to reduce negative attitudes and increase knowledge about

psychotropic medications, in order to increase the interest and competency of social work students who will work with people with serious mental illness. As of this date, no other research has been found that utilizes this combination of interventions and instruments.

Recognizing the limitations and weaknesses in this study, it holds important implications for social work education. The CSWE Commission on Educational Policy provides guidelines that must be met for quality education, specifically requiring clear outcomes in each course and program while leaving the specific configuration to each individual school. This requirement encourages program flexibility and distinctiveness while demanding an integrated and accountable curriculum. This study contributes to the identification of meaningful connections within the curriculum to prepare social workers to work effectively with unique populations, in this case, people with serious mental illness.

Preparing students to be effective practitioners is the goal of social work education. The classroom interventions were specifically designed based on a number of learning theories. Albert Bandura's social learning theory indicates that much of what we learn is through modeling. Bandura (1977) stated "most human behavior is learned observationally through modeling and on later occasions this coded information serves as a guide for action" (p 22). Demonstration is usually the most practical strategy for teachers to promote learning through modeling. Social work education relies heavily upon modeling in the classroom through role-plays and direct observations. MSW students will have already experienced role-plays and modeling by the time they are in the advanced practice course. Therefore, a critical feature of the intervention was

learning through the use of practice. Social work education should have more knowledge about what teaching skills are needed to help students transform classroom learning into effective practice.

Providing students with the opportunity to practice new skills facilitates transfer. Transfer of learning is an important concept because the intention of most classroom learning is to promote transfer to other settings. Bransford (2000) suggests that motivation increases when students can see the usefulness of what they're learning and can use the information to contribute to something that has an impact on others. The simulated client classroom experience is intended to provide students with the opportunity to practice assessment with people with serious mental illness. Social work students need to begin to develop a degree of mastery and utilize available resources for monitoring and feedback. Classroom interventions that provide students with the opportunity to practice, model, and learn from each other promote the acquisition of effective practice skills.

Brain-based learning refers to the fact that learning creates changes in the brain. Researchers propose that changes in the brain occur when practice and emotions are involved (Zull, 2004). Therefore, creating lessons that promote practice and evoke emotions should be one of the goals of teaching. The interventions in the study were intended to accomplish both of these goals. Hearing the personal stories from people who suffer from serious mental illness evoked emotions for some of the students. Listening to their struggles and the impact that mental illness has on its sufferer's likely created empathy and a deeper understanding about the effects of stigmatization.

Furthermore, the use of a control group to compare curriculum approach has not been utilized much in social work education. This study is an effort to provide empirical research to social work educators to improve their mental health curriculum. Research on classroom techniques is limited in social work and this will provide a framework for social work educators to begin to study alternative teaching methods.

Researcher's Perspective

I am passionate about this area because of my own experience as a first-year practitioner. I discovered that I enjoyed working with people with serious mental illness during my BSW program. However, as I pursued this career I discovered there was not adequate training offered in the school. We discussed mental illness and treatments but not in any detail and certainly not in a way that prepared me for practice. I learned on the job, which is not negative but I could have been better prepared for the larger issues that people who suffer from serious mental illness face. The stigma, the medications, the chronicity, the resources, and the ethical dilemmas that I encountered were more complex than I had imagined. I struggled with these issues those first years in practice and even when I returned for my MSW 5 years later, there was still little focus on working with people with serious mental illness. Despite the lack of focused education, I have worked with many social workers who reported similar stories. They ended up in the mental health field, some due to choice, and others due to circumstances and job availability, without having formal training with this population. This leads to high turnover in mental health jobs, lack of effective treatment for clients and an overwhelming disgruntled feeling about mental health services. That is why I choose to study classroom

interventions that specifically focus on people with serious mental illness. My goal was to prepare social workers to work with this population and to improve their attitudes and knowledge about serious mental illness.

CHAPTER 2 - LITERATURE REVIEW

The literature review is organized in the following order: A history of mental illness (treatments and attitudes), the history of social work and mental health, a review of social work education and people who suffer from serious mental illness; literature examining the issue of diagnosing using the DSM is reviewed; literature discussing social work and psychopharmacology is explored; literature regarding utilizing standardized clients in the classroom is reviewed; literature supporting the training methods proposed for the classroom intervention, which incorporate, brain based learning, experiential and practice components will be discussed.

History of Mental Illness and Treatments

Mental illness has been called the most puzzling of all human phenomena. Mental illness is defined as a disorder, disease or disturbance of the mind that prevents a person from functioning adequately in daily life (Sherrow, 1996). Mental disorders are and have been the most common diseases in society; they come in many forms, range from temporary to chronic and vary from minor distress to major disorders (Sherrow, 1996; WHO, 2003). References to mental disorders can be found in ancient writings of people in the Middle East, Greece, Rome, India and China. Hippocrates in 400 B.C. listed and described a number of mental and physical illnesses (Sherrow, 1996). "The mentally ill have always been with us – to be feared, marveled at, laughed at, pitied, or tortured, but

all too seldom cured. Their existence shakes us to the core of our being, for they make us painfully aware that sanity is a fragile thing" (Alexander & Selsenick, 1966, p. 16).

People have questioned the causes of mental illness for centuries. Because ancient societies lacked knowledge they often attributed unexplainable behavior to religious or spiritual explanations (WHO, 2003). Societies dealt with mental illness in various ways depending on their cultural attitudes and sense of social responsibility (Sherrow, 1996). Societies have struggled to balance the needs and rights of people with mental illness with the needs and rights of the rest of society (Rogers, & Pilgrim, 2005). Some societies viewed people with mental illness with hostility, mistrust and shame. A few cultures viewed mental illness as a gift and perceived the person as having special powers (Sherrow, 1996).

In most early societies, mental illness was a private matter rather than a social problem. Families were expected to care for their own, yet society feared and stigmatized people with mental illness (WHO, 2003). During the Middle Ages people with mental illness were often treated cruelly and seen as having "devil sickness", public attitudes moved from avoidance to hostility to persecution (Sherrow, 1996). The Renaissance period (1500's) brought a renewed interest in scientific inquiry with a rejection of superstitious or religious explanations for mental disorders. Scientists were trying to learn more about the causes and treatments of mental illness but the economic depression in Europe (1600-1700's) resulted in many people with mental illness being imprisoned and used as a source of free forced labor (Sherrow, 1996). For example, the English Poor Laws (1597-1601) gave community leaders the power to force relatives to live up to their

responsibility or place the mentally ill person in the local workhouse (Johnson, 1990). Scientists kept exploring early medical explanations during the 18th century, but they did not encourage compassion or tolerance. People with mental illness were seen as incurable sub-humans. This attitude justified the poor living conditions and the use of physical restraints in places of confinement, usually in public jails, workhouses, poorhouses, general hospitals and private asylums (WHO, 2003).

In response to the punitive practices, Philippe Pinel in France (1745-1826) developed "moral treatment" as a model for "curing mental illness" (Sands, 1991). Moral treatment was a humane approach to treatment and people with mental illness were perceived as suffering from great distress, yet still human. "Even the mad were worthy of being treated with respect and dignity" (Whitaker, 2002, p. 41). Moral treatment promoted the belief that people with mental illness could learn behavioral self-control through a connective relationship with a benign authority figure and be cured. The program incorporated kindness, activity and concern for patients' physical, emotional and spiritual well-being. The individual was respected as a human being (Sands, 1991).

Mental health practice in early America combined ideas of moral treatment as well as practices from earlier times. In colonial times, some families cared for people with mental illness in their homes, for some this meant confinement in an attic or cellar, or constrained in chains. The more affluent families would send their relative(s) to private asylums. A Quaker-run hospital in Philadelphia was the first public hospital to accept people with mental illness in 1756 (Johnson, 1990).

Moral treatment was the model adopted by the Quakers and incorporated into four of

the eight American asylums built prior to 1824 (Sands, 1991). The ideal of moral treatment was destroyed as the steady growth of a group of patients with mental illness failed to respond to treatment and came to be considered incurable or chronic (Johnson, 1990). This led to the creation of large state hospitals with the primary task of providing treatment (usually involving medications or other experimental treatments) to people with chronic mental illness.

The first public hospital was built in Williamsburg, VA in 1773 (WHO, 2003). The major role of hospitalization was custodial and overcrowding was common especially during the increased immigration of the late 1800's (Johnson, 1990). For example, by 1880 there were nearly 140 public and private hospitals in the United States holding about 41,000 patients (Sherrow, 1996). As the population in asylums grew it began to include a large number of alcoholics, violent persons and immigrants. With overcrowded conditions and a population that was difficult to manage, methods of restraint from previous eras were used (WHO, 2003). Consequently, the institutions became warehouses for poor social rejects (Sands, 1991).

Institutions of the late nineteenth century had limited treatment options, such as, electrical shock, hypnosis, water therapy, bleeding, restraints, enemas and doses of substances called bromides to calm agitated patients. Scientists of the late 1800's focused on learning how the brain works and were eager to unravel the mysteries of mental illness (Sherrow, 1996). The development of psychotherapy by Sigmund Freud during the 1880's led to his approach becoming the basis of psychologically oriented treatment of mental illness. However, psychotherapy or the "talking cure" proved to be ineffective for

many people with chronic mental illness (WHO, 2003). Psychiatry emerged as the profession that focused on exploring biological cures for mental illness such as, medications, insulin therapy, electric shock therapy and lobotomies (Johnson, 1990).

Public attitudes did not improve during this time and people with mental illness were prohibited from marrying, forcibly committed to state hospitals and sterilized against their will (Whitaker, 2002). For example, in 1897 Michigan passed the first law allowing forced sterilization of "the feeble-minded" (Johnson, 1990). As early as 1860 advocates for people with mental illness began organizing. Commitment laws were being questioned in courtrooms across the country (Whitaker, 2002). Controversy arose in the late 1800's and by 1868 laws had been changed so that mental patients could be freed following courtroom hearings. By the end of the 19th century two trends emerged in the field of mental health, the first was the gradual effort by psychiatry to establish itself as a science and secondly, the tentative development of groups of dedicated people advocating on the behalf of people with mental illness (Johnson, 1990).

The Progressive Era in the U.S., the year's from1900-1920, environmental and psychological perspectives on the causes of mental illness were dominant (Sands, 1991). The Progressive era saw the rise of the "mental hygiene movement". The movements' primary mission was to eliminate insanity by attacking the problem which had its root in the community, rather than in an asylum (Johnson, 1990). In an effort to promote the profession of psychiatry and the medicalization of psychiatric treatment, Adolf Meyer, a psychiatrist renamed asylums to hospitals. He also promoted a preventative approach to mental illness, and looked at environmental hazards and hereditary deficiencies (Johnson,

1990). More importantly, the mental hygiene movement laid the groundwork for the community mental health movement (Sands, 1991).

Public attitudes continued to stigmatize people with mental illness. During the 1920-1930's propaganda characterized people with mental illness as "social wastage, malignant biological growths and poisonous slime" (Whitaker, 2002, p. 65). Implying that society should find a way to get rid of them, the notion of killing people with mental illness was even being discussed in Connecticut (Whitaker, 2002). Institutions became overcrowded, for example from 1903-1940 the population in state hospitals went from about 150,000 to over 445,000 (Johnson, 1990). The population included people with mental illness, the elderly, people with dementia, epileptics, alcoholics, drug addicts and the mentally retarded (Johnson, 1990).

During the 1930's the U.S. experienced the Great Depression and psychiatric hospitals were increasingly overcrowded. This resulted in an expansion of outpatient services in public agencies and private offices. World War II raised the consciousness of the government about mental health problems and the need for expanded services (Sands, 1991). In 1946 Life magazine did an expose about the shameful conditions of people with mental illness in institutions. Pictures of shackled patients, inadequate shelter, clothing or food hit new-stands for the first time (Johnson, 1990). Additionally by 1949, it was reported that over 45,000 people had been involuntarily sterilized in the United States (Johnson, 1990).

The National Mental Health Act was passed in 1946, which shifted primary responsibility for mental health to the federal government. This act authorized federal

funds for training mental health professionals, research and the development of community-based services (Sands, 1991). This resulted in the development of the National Institute of Mental Health (NIMH) with the primary task to administer the programs outlined in the 1946 act and to promote mental health education and prevention (Sands, 1991).

Treatment options during this time were expanding to medical options, such as lobotomies and medications. Reports estimate that between 1950 and 1951 over 10,000 people with mental illness were lobotomized (Whitaker, 2002). Medications were trialed and in 1953 the therapeutic effects of the drug chlorpromazine (thorazine) were reported with psychotic (schizophrenic) and agitated patients (Sands, 1991). Researchers reported the positive therapeutic effects of thorazine and additional medications began to be explored (Whitaker, 2002).

During 1955 an attitude shift occurred and people became hopeful to find a cure for mental illness (Johnson, 1990). In the same year Congress passed the Mental Health Study Act which appropriated $1,250,000 for research into the diagnosis and treatment of mental illness. The Joint Commission on Mental Illness and Mental Health was established to complete the national study of mental health treatment (Sands, 1991). The study identified the deplorable conditions in the state hospitals and encouraged the development of community-based services with a huge outlay of federal funds (Johnson, 1990). Critics of the study reported that the commission failed to take into account the special issues for people with chronic mental illness, as they were convinced that it was treatable with medication (Whitaker, 2002).

Deinstitutionalization became the term used to describe the movement from institutional treatment for people with serious mental illness to the community. The ideology underlying this movement holds that community treatment is preferable to hospitalization. Discharge to the least restrictive environment became preferable over long-term hospitalizations (Sands, 1991). In 1965 the enactment of Medicaid and Medicare resulted in a major increase in de-institutionalization as states could utilize federal funding to establish community-based services (Johnson, 1990). The pre-dominant attitude in the U.S. was that people with serious mental illness suffered from a biological brain disorder and needed to be on medication for the rest of their lives (Whitaker, 2002). At the same time patients mounted legal protests regarding forced treatment and wanted the right to refuse medication. Numerous advocacy groups, such as the National Alliance on Mental Illness (NAMI), developed across the country (Whitaker, 2002). The struggle resulted in states outlining commitment laws that required involuntary commitment or forced treatment only for people with a serious mental illness who were "gravely disabled, a danger to themselves, or a danger to others" (Whitaker, 2002).

Numerous laws were passed between 1950 and 1981 intending to improve various treatment programs and outlined financial responsibilities for establishing community-based programs. Table 2.1 outlines historical legislation that impacted people with serious mental illness between 1950 and 1998.

Table 2.1
Major Mental Health Legislation: 1950-1980

Year	Act
1950	Amendment to the Social Security Act: provided funds to the states for people who became disabled by mental illness.
1955	National Mental Health Study Act: authorized the establishment of the Joint Commission on Mental Illness and Mental Health.
1963	Mental Retardation Facilities and Community Mental Health Center Construction Act: outlined five community mental health services (inpatient treatment, outpatient services, community education, partial hospitalization and emergency services) and authorized expenditures for construction only.
1964	Bill passed that outlined the civil rights of mentally ill patients and provided that "dangerousness" to self or others are the sole criterion for commitment.
1965	Community Mental Health Centers Construction Amendments for construction and staffing.
1967	Amendment to the community mental health center law, providing an extension of the staffing and construction funding.
1968	Alcohol and Narcotic Addict Rehabilitation Amendments: funding for facilities providing treatment of drug and alcohol addiction.
1970	Reauthorization of community mental health center program: continuing staffing grants, providing for services for children and adolescents, supporting services in poverty areas, and including consultation and education.
1972	Supplemental Security Income (SSI) program established.
1974	National Health Planning and Resources Development Act: determined the number of hospital beds for people with mental disabilities suitable for improvement costing $100,000 or more.
1975	Amendments to community mental health center program, expanding number of required services, including drug and alcohol treatment and services for the severely mentally disabled.
1977	Reauthorization of the community mental health center program for one year.
1978	Reauthorization of the community mental health center program for two years.
1980	Mental Health Systems Act: gave priority to services for vulnerable populations such as, persons with severe mental disabilities; increased emphasis on advocacy; authorized for four years.

Table 2.1, cont.
Major Mental Health Legislation: 1981-1998

Year	Act
1981	Mental Health Systems Act: gave priority to service for vulnerable populations such as, persons with severe mental disabilities; increased emphasis on advocacy; authorized for four years.
1990	Omnibus Reconciliation Act: established block grants to states for drug and alcohol and mental health services, at the same time authorized cuts in all areas of the federal budget for community-based services.
1990	Mental Health Amendment Act: required states to develop plans describing a community-based system of services provided to people with serious mental illness, specifying a target number of clients expected to serve.
1990	National Affordable Housing Act: authorized funds for housing and services for the homeless with mental health and substance abuse problems.
1990	Americans with Disabilities Act: prohibited discrimination in employment, education, public accommodations, public services, and transportation against people with mental as well as physical disabilities.
1998	Mental Health Parity Act: mandated that employers serving over 50 employees provide equal coverage for physical and mental illness in their insurance plans.

Note. Adapted from *Clinical Social Work Practice in Community Mental Health* (p. 46) by R. Sands (1991).

The Community Mental Health Centers Act of 1963 primary purpose was to reduce existing state hospital populations; unfortunately the act did not sufficiently address the needs of the serious or chronically mentally ill population (Isaac & Armat, 1990). The act did not mandate coordination with state hospitals, which resulted in numerous people being discharged to the streets without ensuring adequate treatment (Sherrow, 1996).

The 1970's were a time of growth and development for community mental health centers, day treatment programs, halfway houses, vocational programs and outpatient clinics provided counseling and assistance with reintegration into the community. This era saw an increase of people promoting their own mental health and focusing on prevention which resulted in the development of self-help groups, improved access to community mental health treatment, and hospitals coordinating efforts with community programs. However, critics of the community mental health act reported that the

programs failed to reach the primary people it was developed for, the formerly institutionalized population as few mental health centers had adequate resources to meet the needs of people with serious mental illness (Sherrow, 1996). For example, it is estimated that between 1955 and 1980 the number of people in state institutions decreased from 550,000 to 125,000 (Sherrow, 1996). Unfortunately, between 1963 and 1968 Congress released only 40% of the money it had originally committed to funding community mental health centers, leaving many people without services (Sherrow, 1996). With the lack of funding for community mental treatment and the deinstitutionalization movement, many people with serious mental illness ending up living in nursing homes, adult foster homes, shelters and the streets (Johnson, 1990).

During the 1980's social welfare programs were placed on the back burner and experienced increased financial difficulties resulting in programs being reduced, frozen or eliminated. The results of these cut-backs impacted America into the 1990's continuing today, with increased poverty and crime rates, a growing homeless population and under-served, vulnerable populations (Callicutt, 1996). The streets and shelters are increasingly filled with people with serious mental illness; many have never received more than a few days in a hospital for treatment. In effect, they have been deprived of any chance of recovery, much like earlier history, and left to living on the street, in shelters or in jails/prisons (Isaac & Armat, 1990). It is estimated that between 120,000 and 200,000 prisoners suffer from a major mental disorder, this prevalence rate is at least five times the rate in the general population (Kupers, 1999).

The Presidents New Freedom Commission created by President Bush (2003) outlines three obstacles to overcome in the U.S. mental health system; stigma, a fragmented

mental health service system, and unequal treatment and dollar limits for mental health care in private health insurance plans (NAMI, 2007). The report includes findings that there is fragmentation and gaps in care, high unemployment and disability for people with serious mental illness and older adults with mental illness are not receiving adequate care. Based on these findings, the commission outlined six goals targeted at addressing the major issues, such as, mental health care should be consumer driven and excellent mental health care should be delivered and research should be accelerated (NAMI, 2006). However, according to NAMI (2006), for the first time in over 20 years, the President is proposing a reduction in funding for NIMH and a $77 million decrease to the Center for Mental Health Services. He is also proposing changes to the definition of case-management and rehabilitation services which would have a dramatic impact on the ability to use Medicaid (state funding) to finance community-based mental health services (NAMI, 2006).

Currently health care reform has focused on cost-effectiveness, however, treating chronic illnesses, including mental illness, has not been adequately addressed. The National Alliance on Mental Illness completed a study of mental health services in the United States, titled "Grading the States" (2006). This is the first comprehensive analysis of mental health care in the past 15 years. They surveyed 50 states, 2 choose not to reply, and the results indicate that the overall grade for the U.S. is a "D". They utilized four measures; self-reports from each state Mental Health Authority, public information (i.e., applications for block grants, state agency reports, newspaper articles and reports from the Department of Justice), monitored a Consumer Family Test Drive that utilized

websites to educate families/consumers and held interviews with agency staff and consumers. Every state was scored on 39 specific criteria, in four major subgroups; infrastructure, information access, services and recovery supports. None of the participating states received an "A", only five received grades in the "B" range, 16 states received "C" 's and eight states failed (NAMI, 2007).

There is legislation pending that would improve some people's ability to access mental health services using private insurance. In March and April of this year, 182 members of the House of Representatives signed a letter urging support for increased funding for mental illness research (NAMI, 2007). The Paul Wellstone Mental Health and Addiction Equity Act was proposed in March 2007. This act would mandate that employers provide health insurance coverage for mental illness and substance abuse on equal terms with other disorders (NAMI, 2007). Similarly, the Mental Health Parity Act (2007) would expand existing laws and prohibit employers and health plans from imposing durational treatment and financial limitations on coverage for mental illness. One of the problems is how to define mental health benefits, some states use DSM criteria while others leave it up to the insurance companies. Forty-eight states now have parity laws and this act would establish federal parity standards (NAMI, 2007).

Today, people with mental illness continue to carry the burden of stigma and discrimination. They are victims of stereotyping and bias, suffer violations of basic human rights and freedoms, denials of civil, political, economic and social rights. People with mental illness are more likely to be victims of physical, sexual and financial abuse.

They continue to face rejection and denial of employment, and society continues to avoid and fear people with mental illness (WHO, 2003).

Despite advances in treatment and increased understanding of the etiology of mental illness, people with serious mental illness continue to be neglected (WHO, 2003). After all these years, we still seem to be at square one of the problem with a growing population of people with serious mental illness who have been left to manage on their own, without visible assistance from the "panopoly" of treatment programs (Johnson, 1990).

Social Work and People with Mental Illness

The history of social work and people with mental illness closely follows mental health legislation. As Medicaid, Medicare and social security programs were initiated the need for social workers to develop, implement and monitor programs increased. Roberts Sands in her book, *Clinical Social Work Practice in Community Mental Health (*1991) outlines a comprehensive history of the role of social work and mental health, Table 2.2 provides a summary.

Table 2.2
Historical Overview of Social Work with People with Mental Illness: 1900-2000

Year	Social Work History
1900-1920's	• Mary Jarrett became Chief of Social Service of the Boston Psychopathic Hospital and coined the term "psychiatric social worker" whose primary responsibilities included; gathering a patients medical and social history from the patient and others in the community, individual casework, mediated relationships between doctors, patients, families and friends. • Mary Richmond published Social Work Diagnosis, which outlined methods for gathering information from a variety of sources and examining the evidence prior to making conclusions. The work contributed to the development of a scientific approach to casework. • Mary Jarrett developed the first training program for psychiatric social workers at Smith College. • National Conference of Social Work, contributors such as those listed above presented issues regarding working with people with psychiatric problems. Jarrett urged that knowledge regarding psychiatric issues should be required of all social workers. • Psychiatric interpretation and behavioristic psychology were dominant theories and the psychological perspective became important to social work. • The American Association of Psychiatric Social Workers was formed.
1930's	• Overcrowding of psychiatric hospitals resulted in social workers needed to arrange and supervise community placements for discharged patients. • Social Workers were established in Red Cross and Veteran's Administration services, public and private hospitals, child guidance clinics, general hospital clinics, educational institutions, mental hygiene societies, family welfare agencies, public health nursing administrations and private practice.
1940's	• Psychiatric social workers became part of military medical services. • The National Mental Health Act was passed which increased funding for training, research and the development of community-based services which stimulated the growth of psychiatric social workers.
1950's	• Social workers were prominent in mental health settings, functioning as case workers, social investigators responsible for diagnosing and in many cases psychotherapists.
1960's	• Numerous programs were developed as a result of the Mental Retardation Facilities and Community Mental Health Center Construction Act; many of these programs were developed and staffed with social workers.
1970's	• Social workers continued to provide services to diverse populations in a variety of settings. • The NIMH initiated the Community Support Program in order to stimulate states to develop supports systems to sustain the chronically mentally ill who were living in the community. • Systems theory was adopted by many social workers. • National Federation of Societies for Clinical Social Work was founded and worked vigorously to help pass licensing laws and advocated for insurance coverage. Licensure and vendorship made it possible for many social workers to establish private practices.

Table 2.2, continued
Historical Overview of Social Work with People with Mental Illness: 1900-2000

Year	Social Work History
1980's	• Mental Health Systems Act was passed which recognized the needs of the chronically mentally ill and other vulnerable populations. • The Omnibus Reconciliation Act replaced the Mental Health Systems Act which resulted in a decline in federal funding for the states. • Social workers increased their advocacy movement as many people with serious mental illness were threatened with losing their Supplemental Security Income. • Community mental health systems faced financial difficulties with increased demands to serve the indigent chronically mentally ill and other vulnerable populations.
1990's	• Due to changing legislation there is an increased role of private-sector and faith-based organizations in the implementation of social service programs. • Social workers are expanding roles to compensate for the decrease of other mental health professionals (i.e., shortage of psychiatrists). • Increased utilization of social workers in managed behavioral health care organizations where the emphasis is on spending limits and providers are held accountable for outcomes rather than process measures, such as the number of hours of services provided. • Increased role of consumer and families in mental health treatment, social workers are doing more education and case-management with people with serious mental illness and their families.
2000's	• Advances in neurosciences and intervention-outcome research, including; psychopharmacology, counseling, behavioral skills training and interventions targeted on aspects of the environment, require that social workers obtain current information in order to address treatment issues for people with serious mental illness. • Concept of recovery and prevention of mental illness expands the social work function to facilitating recovery with recognition of improvement and providing education programs focused on treatment and prevention. • Social work roles expand to; crisis counselor, diagnostician, therapist, mediator, educator, skills trainer, case-manager, facilitator, advocate, program evaluator and administrator. • Technology advances in computers, communication and management information systems require social workers to utilize current technology and software programs.

Note: Adapted from *Clinical Social Work Practice in Community Mental Health* by R. Sands (1991).

Social work brings professional values and theories to working with people with serious mental illness. Social workers are trained to look at social and environmental causes of mental health issues, utilizing biopsychosocial assessment and systems theory. Social works' unique person-in-environment perspective allows practitioners to

appreciate each client's unique situation and experience. Social work interventions that emphasize empowerment, education and advocacy enable a client to reach independence in the least restrictive environment. The Social Work Code of Ethics provides practitioners with guidelines that promote client self-determination, while outlining the social workers duty to community safety.

Currently, social workers provide advocacy, case management and psychotherapy to people with serious mental illness in conditions that have not improved much since the 1980's. The term "psychiatric social worker" has been replaced by "clinical social worker" (Sands, 1991). Licensed clinical social workers, who are classified as those having a Masters degree in Social Work and a number of years of experience, are allowed to establish private practices and are reimbursed by most insurance companies, Medicare and Medicaid. In order to obtain reimbursement, the practitioner must assess and provide a diagnosis using the DSM.

Clinical social work in community mental health is based on a number of theoretical perspectives. The practitioner uses an integration of biology, psychology and social theories, as well as the social environment. Social workers in mental health centers require a broad understanding of diagnostic criteria, treatment options and theoretical approaches in order to effectively meet the wide variety of client needs. As previously stated social workers represent the nation's largest profession providing outpatient mental health care due to their historical role in providing services to vulnerable and under served populations and the shortage of psychiatrists (Bentley, et al., 2005). Therefore,

preparing social workers for the challenges of working with people with serious mental illness has become an important issue.

Social Work Education and People with Mental Illness

Research on mental illness relevant to social work education has largely focused on the beliefs of students (Shera & Delva-Tauiliili, 1996; Werrbach & DePoy, 1993) and the opinions of practitioners (Kutchins & Kirk, 1988; Newhill & Korr, 2004). There are few research studies that explore curriculum development in the area of mental illness and social work education. Gail Werrbach and Elizabeth DePoy (1993) completed a study assessing social work student's interest in working with persons with serious mental illness. It is the most comprehensive and thorough examination of social work students attitudes towards the mentally ill that is currently available. They utilized a needs assessment in 1993 and sampled Bachelor level social work (BSW) students and MSW students to determine if there is a future interest in working with persons with serious mental illness and their perceived competency with working with people with serious mental illness. Their survey of 90 students found no significant difference between BSW and MSW students on interest or perceived competency. Significant differences were found between those with employment experience (regardless of setting) and those with no experience. Students with experience expressed significantly greater interest in working with persons with serious mental illness than those with no experience (Werrbach & DePoy, 1993). These findings support their hypothesis that increased mental health experience results in a greater interest and increased competency with working with people who have been diagnosed as seriously mentally ill. They conclude

that their results provide valuable implications for social work educators who are attempting to educate social workers in the area of mental health. They encourage educators to survey their students to monitor interest and promote practice by increasing exposure to persons with serious mental illness.

A study reported that "social work students have expressed little interest in working with the severely mentally ill and prefer to work with more intellectually and emotionally rewarding clients" (Shera & Delva-Tauiliili, 1996, p. 160). However, more recently C. Newhill and W. Korr (2004) randomly surveyed 2,000 NASW members who identified themselves as post-MSW direct service practitioners with mental health as their primary practice. The authors utilized the Attitudes to Mental Illness Questionnaire (AMI), developed by Singh and colleagues (1998), and reported that respondents (n = 1,200) expressed a positive attitude and satisfying professional rewards from working with clients who have been diagnosed with a serious mental illness (Newhill & Korr, 2004). They also reported that a majority (79.2 percent) of the social workers reported that they were not adequately trained for working with this population (Newhill & Korr, 2004).

Changes following exposure have been explored in other studies (Shera & Delva-Tauiliili, 1996: Wallach, 2004). Shera and Delva-Taulilli (1996) explored the effects of an intervention in a second year MSW classroom. Their intervention included; a class session devoted to readings and discussions regarding the chronicity and the subjective experience of mental illness, watching a 30 minute educational video, and completing structured interviews with people who have been diagnosed with a serious mental illness. They found that students who completed the intervention (n = 46) considered the severely mentally ill population to be more responsive to treatment, to have a better prognosis, and

to be more predictable in their behavior and less dangerous than before the interventions, than the comparison group who remained unchanged (Shera & Delva-Tauiliili, 1996). They encourage continued research in this area and provide empirical evidence that educators can improve student's attitudes for working with people with serious mental illness.

Similarly, Wallach completed a study in 2004 with 113 college students enrolled in an introductory psychopathology course. The experimental group ($n = 53$) participated in an organized visit to a mental health hospital and had the opportunity to volunteer at the psychiatric hospital with individual or groups. She utilized the Opinions about Mental Illness questionnaire developed by Cohen and Screening (1962) to measure the influence of exposure to mental illness, gained by participating in the two activities. The results indicate that restricting exposure to just one visit at the mental health hospital actually increased students opinion about the need for social restrictiveness, the author concluded "that a small amount of exposure (one visit) can be detrimental" (Wallach, 2004, p. 245). The author reports that students who volunteered at the hospital had improved opinions about persons with serious mental illness. She suggests that educators should use caution exposing students to this population and that "it is necessary to specifically tailor the classroom instruction in order to avoid increasing negative attitudes" (Wallach, 2004, p. 247).

Social Work and the DSM

Psychiatric diagnosing is not reliable and we do so without universal agreement about the definition or terminology regarding people who display or report psychological symptoms. This has implications for mental health professionals, including social

workers who provide services and advocacy for those who are diagnosed with a mental illness. Ethical issues due to the potential for harm in diagnosing have led social workers to struggle with the role of diagnosis in their practice (Ericksen & Kress, 2005). Blind adoption of the DSM for understanding psychological processes has led many professionals to utilize diagnosing without fully understanding the ethical and legal ramifications (Ericksen & Kress, 2005). Therefore, social work education has two major challenges: educating students about the DSM and the implications of diagnosing; and preparing students for providing services to people who have been diagnosed with a serious mental illness.

Social work is one of the professions that has been at the forefront of the debate regarding diagnosing and using the DSM. Social workers are increasingly working in mental health settings and are required to diagnose clients prior to providing services. Many social workers provide case management services to people who suffer from mental illness and advocate for them to receive services, such as, social security disability and vocational education. Social workers in mental health settings require knowledge about the Diagnostic and Statistical Manual for Mental Disorders (DSM) to communicate with psychiatrists, physicians and other professionals. Social workers struggle with diagnosing due to concern regarding stigma and labeling. The medical model is inherent in the use of the DSM, which can create conflict with social work theories, such as system, ecological and strengths-based perspectives. Despite the debate, diagnosing clients, using the current DSM has become standard practice for many social workers with the purpose being payment for services.

A systematic randomized national survey found that clinical social workers overwhelmingly use the DSM for business purposes and not for its clinical validity (Kutchins & Kirk, 1988). Clinical social workers require using the DSM for reimbursement purposes, although there are alternative assessments available, the DSM is the only source recognized by insurance companies and health maintenance organizations. Kutchins and Kirk (1988) explored the use of DSM in social work curriculum and suggest that educators should be providing a more critical and comprehensive approach to diagnosing and exposing students to the ethical dilemmas.

One of the more current studies completed by Lacasse and Gomory (2003) explored course syllabi from 58 graduate schools of social work and analyzed them for content related to psychopathology. They discovered that the DSM is utilized in 45 of the courses focusing on mental health. Conversely, they found that only four courses required any readings by Szasz, and none required any readings by Wakefield (strong critics of the DSM). Social work academics, Kirk and Kutchins have critiqued the DSM publishing numerous articles and books regarding their findings, and their work was not included in any of the syllabi reviewed. This suggests that schools of social work are teaching the DSM, but not exploring the controversies surrounding its usage. Lacasse and Gomroy conclude that "social work's lack of critical content in mental health has much to do with the profession's inability to set itself apart ideologically from psychiatry" (2003, p. 398). They argue that social work curriculum should include the opportunity for students to think more critically about the issue of diagnosing and explore more both current literature and a broader range of viewpoints.

McQuaide (1999) promotes the use of the DSM in college classrooms, but recommends that social work students be empowered in using the DSM "by using it flexibly and malleably" (p. 410). She encourages educators to promote critical thinking about the DSM by examining its strengths and weaknesses and offers a postmodern perspective. She reports that assessment is a primary task of social work and that the DSM offers assistance in assessment and treatment planning. McQuaide (1999) applies the postmodern perspective by rejecting the idea of an objective reality and emphasizes the "intersubjectivity of human experience" (p. 412). This implies that students should be encouraged to consider diagnosing as a social construct which should be approached with critical skepticism.

Social Work Education and Psychopharmacology

Few studies have explored social work curriculum in psychopharmacology and medication management. Bentley and Walsh (2006) outline four reasons that social workers should have education regarding psychotropic medication: the increased presence of social workers in mental health settings; increased number of people with serious mental illness living in the community requires social workers to assist with medication monitoring; social work emphasizes working with systems, including doctors, families, and communities; and social workers should be knowledgeable about the increasing number of medication/treatment options available to clients. Social workers should understand the major classifications of psychotropic medications and the side effects in order to assist clients/families with making informed decisions. The increased emphasis on biological causes for many mental illnesses has increased the use of medications as the main treatment source (Bentley & Walsh, 2006). Social workers have

assumed more roles in helping clients who take psychotropic medications due to increased shortages in other mental health professions. According to Bentley and Walsh (2006) social workers typically assume one or more of the following roles in providing mental health services outlined in Table 2.3.

Table 2.3
Social Work Roles in Mental Health Services

Social Work Title	Description of Role
Physicians Assistant	Helping educate clients/families about the use of medication
Consultant	Empowering clients to make decisions about the use of medication and collaborate with psychiatrists, clients and families.
Counselor	Helping clients with problem-solving related to medication issues.
Monitor	Observe and help clients observe the positive and negative effects of medication and appearance or persistence of symptoms.
Advocate	Have good working knowledge of mental illness, psychotropic medications, laws and regulations about forced medication/treatment and the rights of people with mental illness.
Political Advocate	Advocating and assisting clients who cannot access medications they want to use due to financial or other restrictions.
Educator	Help clients and families understand the rationale behind decisions about medication and other interventions.
Researcher	Social workers need to develop their own literature regarding issues of psychotropic medications and conduct research that evaluates the effectiveness of treatment in ways that support developing new strategies.

Note: Based upon *The Social Worker and Psychotropic Medication (3rd ed.)* by K. Bentley & J. Walsh (2006).

Bentley, Walsh and Farmer (2005) conducted a survey and randomly sampled NASW enrolled social workers who self identified as a "clinical social worker" with "mental health" as their primary field of practice. They were asked what kinds of activities they carried out in regard to psychotropic medication, how frequently they performed these activities, how appropriate they think these activities are, and how

competent they feel in carrying them out. Respondents (994) reported that the most frequent activity is discussing with a client his/her feelings about taking medications, followed by making referrals to physicians and discussing with clients how medications work in combination with psychosocial interventions. Almost all (93%) respondents reported that it was appropriate for social workers to talk with clients about their feelings about taking medication. A majority of respondents (91%) reported feeling quite competent discussing feelings and making referrals (89%). However, only 22% felt competent assessing severity of side effects or facilitating a medication education group with clients or families. While 75% reported that is was appropriate to help a client consider the "pros" and "cons" of taking medication, less than 40% did so, and 71% reported helping a client locate financial/other resources for medication was appropriate, only 19% reported doing so. They emphasize that social workers need to recognize the opportunity to apply their problem-solving skills to issues involving medications, social workers need to become more assertive in regard to medication-related problems and help clients access necessary resources and advocate on their behalf (Bentley et al., 2005).

An article written by Farmer, Bentley, and Walsh (2006) focuses on psycho-pharmacology and social work. They strongly encourage social work education to include knowledge regarding psychotropic medication because "medications are relevant to the clients' capacity for social functioning" (Framer et al., 2006, p. 8). This article followed a research study by Bentley, Farmer and Phillips (1991), which explored social work student knowledge and attitudes toward psychotropic drugs. They reported findings of

260 BSW and MSW students at a large public urban university. Students were tested using the Knowledge Index on Psychotropic Medication for Social Workers (KIPMSW). The authors concluded that the scores (mean = 78.8 for correct answers) were generally lower than desired and the results "lend empirical support to expanding curricula in relevant aspects of psychopharmacology" (Farmer & Phillips, 1991, p. 283). Based on those findings Farmer, Bentley and Walsh (2006), wrote an article arguing that social work education needs to routinely include more in-depth knowledge on the issue of medication management in order to provide a more critical approach to practice. They suggest and outline seven curriculum modules which include suggestions for class activities and assignments providing application of content to field courses. They encourage educators to upgrade and enhance social work education in psycho-pharmacology to meet the growing challenges in practice.

Social Work Curriculum and CSWE

The Council on Social Work Education (CSWE) was created in 1952, at that time CSWE favored the two-year master's program as the minimum educational requirement for full professional status (Morales & Sheafor, 1998). CSWE has shaped its educational programs through accreditation requirements for both baccalaureate and masters level social work degrees. CSWE describes professional values that guide professional practice:

> *The profession of social work is based on the values of service, social and economic justice, dignity and worth of the person, importance of human relationships, and integrity and competence in practice. With these values as defining principles, the purposes of social work are*
>
> > *To enhance human well-being and alleviate poverty, oppression, and other forms of social injustice*

> *To enhance the social functioning and interactions of individuals, families, groups, organizations, and communities by involving them in accomplishing goals, developing resources, and preventing and alleviating distress*
> *To formulate and implement social policies, services, and programs that meet basic human needs and support the development of human capacities*
> *To pursue policies, services, and resources through advocacy and social or political actions that promotes social and economic justice*
> *To develop and use research, knowledge, and skills that advance social work practice*
> *To develop and apply practice in the context of diverse cultures (CSWE, 2001, Section 1:1).*

Although CSWE provides guidelines, schools can design their own programs to meet accreditation requirements. Generalist and specialized programs are available in schools of Social Work. Specialist education has been increasingly designated as the prerogative of the latter part or concentration year of the master's degree. The specialist approach allows students to specialize in a setting, population, social issue or practice method. The specialization fits client/systems into a narrow definition but provides students with an in-depth examination of the issue (Schatz, et al., 1990). Some argue that the generalist approach is more applicable to the current field of social work practice. For example, an article by Wolk and Werthmeyer (1999) claimed that social work education may be "not meeting the market demands" and encouraged CSWE to standardized requirements to ensure that social workers are adequately trained as "generalist practitioners" (p. 107).

The generalist approach to social work education emerged in the late 1960's due to an increased complexity of human problems that practitioners were facing (Morales & Sheafor, 1998). Social workers are required to have a broad knowledge and skill base from which to serve clients or client systems, and have the ability to appropriately select

from that base an intervention to meet the needs (Wolk & Werthmeyer, 1999). Many claim that the generalist approach is preferred over specializing as it provides an integrated and multilevel approach for meeting the purposes of social work defined by CSWE (Miley, O'Melia & DuBois, 2004; Wolk & Werthmeyer, 1999; Morales & Sheafor, 1998).

Generalist social work practice at the Master's level, acknowledges the interplay of personal and collective issues, working with a variety of human systems to create changes which maximize human systems functioning (Miley, et al., 2004). Generalist approach provides a perspective for social workers to view practice situations with social systems theory, looking for ways to intervene, directed by the client system (Morales & Sheafor, 1998). This model recognizes that social workers should have a basic foundation that includes knowledge about social work profession, social work values, purpose of social work, ethnic/cultural diversity sensitivity, basic communication skills and understanding of human behavior and relationships (Morales & Sheafor, 1998). Regardless of the specific approach, schools of Social Work are required to apply basic guidelines, theories and practices as outlined by CSWE. Therefore, social work students should be able to draw from a knowledge base that enables them to provide services to diverse populations in various settings. Drolen, a critic of CSWE, reports that accreditation standards have not been reviewed or renewed regularly and that there "is little systematic scientific examination of the masters curriculum" (1991, p. 184). He continues to argue that curriculum innovation is deterred by CSWE requirements. He

urges social work educators to review curriculum regularly in light of student outcomes, new knowledge and current demands of the profession and practice (Drolen, 1999).

Teaching Strategies

Everyone learns differently and learning is a life long process. Understanding how learning occurs has been the focus of research for centuries. Current research from the fields of education and cognitive science provide educators with deeper insights into the process of learning. Research on adult learning theory provides guidelines on developing classroom strategies. Research emphasizes the biological process of learning and scientists are able to demonstrate that learning changes the brain. This knowledge contributes to the development of the classroom interventions utilized in the study.

Adult Learners

Teaching adults has unique challenges. Beaman (1998) claims that adult learning theory and research in the field indicates that adult learners want more autonomy than younger learners, they desire independence and want to use their past experiences. Similarly, Bowden and Merrell (2000) report that adult learners usually come with more experience than younger students and do not want a lecture. They claim that adult learners want to gather information which will be useful to him/her immediately. They recommend that small group interactions provide a successful strategy with adult learners (Bowden & Merrell, 2000).

Brain-Based Learning

MRIs of human brains before and after learning new material show that the brain actually changes in response to new stimuli. This provides strong evidence for the theory

that learning creates changes in the brain, which challenges educators to seek new ways to facilitate those changes. Researchers propose that changes in the brain occur when practice and emotions are involved (Caine & Caine, 1990; Zull, 2004). Therefore, creating lessons that promote practice and evoke emotions should be the goal of teaching. Zull (2004) claims effective learning occurs when educators purposefully engage the whole brain. To maximize brain-based learning, lessons should focus on the part of the brain associated with cognitive functions which are located in the cortex. The four areas of the cortex that promote cognitive functions are the sensory cortex, the integrative cortex, the two regions of the integrative cortex and the motor cortex. The sensory cortex involves gathering information, the first part of the integrative cortex (near the sensory cortex) makes meaning of the information, the second part of the integrative cortex (in the front) creates new ideas from meanings, and the motor cortex provides acting on the ideas (Zull, 2004).

Brain-based learning has several principles that provide guidelines for educators when developing classroom strategies including; the brain is a social brain, emotions are critical to patterning and remembering information, learning involves both a focused attention and peripheral perception, learning always involves conscious and unconscious processes, learning is developmental, and complete learning is enhanced by challenge and inhibited by threat (Caine & Caine, 1990).

In addition to the principles of brain-based learning Gulpinar (2005) outlined elements of optimal teaching: 1) relaxed alertness - creating the optimal emotional and social climate (challenging but not threatening), 2) orchestrated immersion in complex

experiences - by providing learners rich, complex and realistic experiences, 3) active processing of experience - creating optimal ways to consolidate learning and process information.

Lesson plans can be developed that promote brain-based learning. For example, the first step for learning about biopsychosocial assessments would involve exposing social work students to the topic through lectures and readings (gathering information), then asking them to think and write about the importance of assessment (making meaning), then assigning work in pairs to develop a tool for assessing (creating new ideas), and finally having them complete an assessment and report back to the class (actively testing ideas).

Emotions and Learning

Leamnson (2000) proposes that the role of emotions is so strong in learning that unless students become actively engaged in the process, they will not remember or learn from the experience. The goal of most educational innovations and theories is to get students engaged, involved, and focused, regardless of the methodology utilized (Leamnson, 2000).

Furthermore, emotions activate the problem-solving processes that develop the response and then continue an arousal that maintains interest in the problem (Sylvester, 1994). Emotions respond most vigorously to high-contrast information. Activities that draw out emotions such as, simulations, role playing and cooperative projects, may provide important contextual memories that will help students recall the information during closely related events in the real world (Sylvester, 1994). According to Sylvester

(1994) the role of the limbic systems in classifying and storing information into long-term memory is triggered by emotional responses. Therefore, classroom activities that provide students with an emotional context that can be tied to a memory will improve their chances of applying it later. The challenge is to develop classroom lesson plans that promote the concept that different people learn in different ways. What provokes an emotional response in one student may have no impact on another. The key is to try and design lessons to accommodate the wide range of learning styles in any given classroom.

Cooperative Learning

Cooperative learning incorporates the principles of brain-based learning such as, respecting learners as unique individuals, creating an enriched environment and providing meaningful realistic experiences (Gulpinar, 2005). In addition, cooperative learning emphasizes motivation, practice, retention, transfer, learning styles and extending students' thinking (Davidson, & O'Leary, 1990). Research on cooperative learning shows positive effects in areas of academic achievement, self-esteem as a learner and social skills development (Tai, 2004; Slavin, 1991). Tai (2004) completed a study measuring the progress of college business students ($n = 215$) and different achievement levels following a cooperative learning project. He reported that low-achieving students benefited the most from the cooperative learning experience. However, he also reports that in the area of social skills development, all of the students demonstrated improvement following the exercise (Tai, 2004).

Furthermore, compared to students who were taught traditionally, cooperative learning students learn at a deeper level, retain information longer, are less likely to drop

out, acquire better communication skills, and work better in teams (Oakley, Felder, Brent & Elhajj, 2004). The main strategy of cooperative learning is using group work to enhance learning. "Thoroughly to teach another is the best way to learn for yourself" (Oakley, et al., 2004, p. 21). Students working together enhance their abilities to improve understanding and to apply knowledge in more creative ways (Oakley, et al., 2004; Tai, 2004).

Slavin (1991) completed an article highlighting the research on cooperative learning. He reported that enhancing student achievement was most successful when the strategy incorporated two key elements; group goals and individual accountability. Slavin (1991) indicated that there are 75 cooperative learning methods among the most "extensively evaluated alternatives to traditional instruction in use today" (p. 76). However, he reported that there is very little research on cooperative learning in college classrooms (Slavin, 1991).

Transfer and Learning

Another concept of learning that is important for educators to understand is the process of transfer. Transfer is the ability to extend what has been learned in one context to other contexts (generalizing). The hope of educators is that students will transfer learning from one problem to another. Transfer is a dynamic process that is enhanced when the learner can actively choose and evaluate strategies, consider resources and receive feedback. Bransford (2000) reports that the following elements will promote learning; having a degree of mastery, learning by understanding rather than memorization, allowing sufficient time to learn complex subject matters, active monitoring, and feedback

regarding progress. He further suggests that motivation increases when students can see the usefulness of what they're learning, and when they can use that information to contribute to something that has an impact on others (Bransford, 2000). Engaging students in problem solving rather than memorizing will help them generalize what they have learned and improve their ability to apply their knowledge to other situations. The use of standardized clients is intended to provide students with the opportunity to practice assessment skills with people with serious mental illness. This strategy increases the likelihood that transfer of learning will occur from the classroom to actual practice.

Social Work Education and the Use of Standardized Clients

Teaching social work practice is challenging. The teaching skills that are needed to facilitate learning practice skills and theories in the classroom have not been clearly articulated. There is limited research and the variables associated with teaching effectiveness in social work continue to be debated and explored (Knight, 2001). There are challenges associated with identifying classroom strategies that promote student learning and access their ability to utilize knowledge and skills with clients. Knight completed a study surveying 194 social work students (BSW and MSW) asking them to report on their social work professors' use of modeling social work skills in the classroom. They were asked to indicate the extent to which their social work instructors engaged in one of the sixteen measured behaviors on a four-point Likert scale. Results indicated a wide variety of behaviors but no significant findings were reported (Knight, 2001). Knight urged that there is need for continued exploration of what constitutes effective teaching for social work practice.

Current research provides some evidence that an effective classroom technique for teaching students about mental illness involves the use of standardized clients. Badger and MacNeil (2002) utilized standardized clients (people trained to portray persons with serious mental illness) in a quasi-experimental study. Eighty MSW students participated in the study. Researchers utilized the Assessment Interview Measurement Schedule (AIMS) to evaluate students' assessment skills. They found that students who participated in standardized client simulations improved their assessment skills more than the students who participated in a conventional classroom role-play. They also collected data rating the use of standardized clients from the students and the instructor. The faculty that utilized standardized clients reported an overwhelming positive experience and students reported an increase in engagement in the learning process (Badger & MacNeil, 2004).

M. Miller expanded the research using standardized clients in his 2004 study. He utilized standardized clients in a combined BSW and MSW program with 68 students. Unlike Badger and MacNeil (2002), Miller did not use a pretest - posttest design, his study is primarily descriptive. He utilized two standardized clients who each represented a case created by social work educators. The standardized clients met with BSW and MSW students for 60 minute interviews. His article includes copies of the measures, the cost of the intervention and a detailed process of utilizing standardized clients in the classroom. He concluded that this study provides evidence for social work educators to consider utilizing standardized clients to take "the lead in new social work education techniques" (Miller, 2004, p. 97).

In conclusion, there is insufficient research in the area of social work education and people with serious mental illness. Studies have primarily been descriptive (Lacasse & Gomroy, 2003; Miller, 1991; Newhill & Korr, 2004; Wallach, 2004; Werrbach, et al., 1993). Furthermore, small sample sizes limit the generalizability of other studies (Badger & MacNeil, 2002; Shera & Delva-Tauiliili, 1996). This study sought to add to the existing knowledge regarding the effectiveness of specific classroom strategies focusing on a client population of special interest to social work practitioners.

CHAPTER 3: METHOD

Introduction

The design and procedures for the study are presented in the following sections: 1) research design and rationale, 2) participants and site, 3) data collection, 4) measures, and 5) data analysis.

Research Design and Rationale

The design of this study is a quasi-experimental design, more specifically, a pretest-posttest nonequivalent control-group design as described by Morgan, Gliner, and Harmon (2006). Table 3.1 below displays the design in more detail.

Table 3.1
MSW Assessment Study Design

Assig.	Group	Pretest	Inter.	Posttest
NR	Experimental	AMI ATTMED KIPMSW	X	AMI KIPMSW ATTMED
NR	Control	AMI ATTMED KIPMSW	~X	AMI KIPMSW ATTMED

Note: AMI = Attitudes to Mental Illness; KIPMSW = Knowledge Index on Psychotropic Medication for Social Workers; ATTMED = Attitudes towards Psychotropic Medication

This design was chosen because there is an active independent variable (classroom intervention), but participants could not be randomly assigned to the two groups (intervention or traditional curriculum). Change over time was another potential independent variable because there are pretests and posttests on the three dependent

variables: knowledge about psychopharmacology (KIPMSW), attitudes toward psychotropic medications (ATTMED), and attitudes to mental illness (AMI). The general design classification was a 2x2 factorial design with repeated measures on the second factor. However, the change score approach was utilized for analysis, therefore, the design was a single-factor between-groups design with two levels. This design was chosen as the strongest method available to answer the research questions and test the hypotheses.

The research questions were:

1. How do MSW students in both groups score on the pre and posttest Attitude to Mental Illness (AMI), Attitude toward Psychotropic Medication (ATTMED), and Knowledge Index of Psychotropic Medication for Social Workers (KIPMSW) questionnaires?
2. Is there a difference between the groups in regard to the mean Attitude to Mental Illness pre- to posttest change scores?
3. Is there a difference between the groups in regard to the mean Attitude towards Psychotropic Medication pre- to posttest change scores?
4. Is there a difference between the groups in regard to the mean Knowledge Index of Psychotropic Medication for Social Workers pre-to posttest change scores?
5. Are there differences between ages, years of experience, undergraduate degree, or ethnicities on change scores on the pre and posttest Attitude to Mental Illness, Attitude towards Psychotropic Medication, or Knowledge Index on Psychotropic

Medication for Social Workers questionnaires in either the control or experimental groups?

The three hypotheses were:

1. MSW students who participated in the intervention will have a higher positive change in their Attitude to Mental Illness score than students who were exposed to traditional curricula.
2. MSW students who participated in the intervention will have a higher positive change in their Attitude towards Psychotropic Medication scores than students who were exposed to traditional curricula.
3. MSW students who participated in the intervention will have a higher positive change in their Knowledge Index of Psychotropic Medication for Social Workers score than students who were exposed to traditional curricula.

Planned Intervention

The intent was to provide the same interventions to the experimental groups at the two universities, however, due to numerous scheduling and cancelling issues the students in the experimental groups were exposed to somewhat different curricula and in different orders. The ability to duplicate the intervention was complicated due to the researcher relocating to Montana and not having community contacts. The distance between the two sites did not allow for the same guest speakers to present to both groups. Table 3.2 outlines the planned interventions.

Table 3.2
Planned MSW Experimental and Control Group Experiences

Experimental Group	Control Group
1. Pretest 2a. Exposure to people with serious mental illness. -Followed by open-ended questions. 2b. Educational videotapes regarding psychotropic medications followed by a presentation focusing on current medications. -Followed by open-ended questions. 2c. Assessment with standardized clients. -Followed by open-ended questions. 3. Posttest	1. Pretest 2. Traditional curriculum that provides some information and discussion regarding issues, treatment options and social work practice with people with serious mental illness. 3. Posttest

The order of the planned intervention was purposeful, following a revision Bloom's taxonomy of learning objectives (Krathwohl, 2002) moving from remembering, to understanding, to applying, analyzing and implementing, to evaluating and finally, to creating. Therefore, the learning objectives for the interventions target some of Bloom's taxonomy objectives. Exposing students to people with serious mental illness as the first component prompted the students to begin to think of the issues that impact people, rather than focusing on the diagnosis. Secondly, providing an educational videotape and a presentation about psychopharmacology promoted their understanding about the etiology and medication treatment options available to persons with serious mental illness. Utilizing standardized clients provided students with the opportunity to practice their assessment skills and further their exposure to people with serious mental illness. Synthesizing all the knowledge and experience from the first two interventions enhanced their experience with the final intervention. Specifically, Table 3.3 outlines the interventions, learning objectives and content in more detail.

Table 3.3
Curriculum Interventions

Intervention	Learning Objective	Content
1. Exposure to guest speakers who suffer from serious mental illness.	1. Increase understanding about the personal impact of serious mental illness. 1a. Improve knowledge about the treatment and resources available to people who live with mental illness.	1. People with serious mental illness shared their personal stories regarding their illness, including: treatments, stigma, family and friend responses, employment issues, and relationship issues.
2. Students watched educational videotapes on medications utilized to treat symptoms of mental illness and a presentation of additional information regarding psych-pharmacology treatment was provided.	2. Increase understanding regarding etiology and treatment options available to people who suffer from serious mental illness. An aspect of attitude change theory is the role of the expert opinion, the information in the videotapes explores current medications including, actions on the brain, desired effects, side effects and precautions. The presentation discusses the most current research in this area.	2. The videotapes were created by Classroom Productions (2005) to improve knowledge regarding assessment, intervention and treatment regarding patients with psychiatric disorders. The psychopharmacology presentation discussed current medications, side effects and ethical issues in more detail.
3. Completing assessments with standardized clients.	3. The opportunity to apply and to practice their interview skills. Students will be able to identify and define symptoms of serious mental illness. 3a.This exercise also allows for social learning, students will observe and evaluate each other in order to provide feedback.	3. Students engaged in a 60-minute biopsychosocial assessment, during class sessions with standardized clients. They were observed by other classmates in order to practice giving and receiving constructive feedback regarding interviewing skills.

Actual Interventions

As previously stated, the interventions were not able to be exactly replicated at both sites, in the same order, Table 3.4 shows the actual experimental group experiences.

Table 3.4
Actual MSW Experimental Group Experiences

Experimental Group Colorado State University (n = 16)	Experimental Group University of Montana (n = 15)
1. AMI, ATTMED, and KIPMSW* pretests. 2a. Exposure to people with serious mental illness. -Followed by open-ended questions. 2b. Educational videotapes about psychotropic medications followed by a presentation focusing on current medications. -Followed by open-ended questions. 2c. Assessment with standardized clients. -Followed by open-ended questions. 3. KIPMSW, ATTMED and AMI posttests.	1. AMI, ATTMED, and KIPMSW pretests. 2a. Educational videotapes regarding psychotropic medications followed by a presentation focusing on current medications. – Followed by open-ended questions. 2b. Exposure to videotape *Back from madness: the struggle for sanity* (1996) a documentary that follows four psychiatric patients for 1-2 years. - Followed by open-ended questions. 2c. Assessment with standardized clients. -Followed by open-ended questions. 3. KIPMSW. ATTMED and AMI posttests.

Note: AMI = Attitudes to Mental Illness; ATTMED = Attitudes towards Psychotropic Medication; KIPMSW = Knowledge Index on Psychotropic Medication for Social Workers

The seven and one-half hour mental health training intervention was administered as part of the practice courses taught to MSW students at Colorado State University (n = 16) and the University of Montana (n = 15). The control group consisted of 24 students from Colorado State University and 15 University of Montana MSW students enrolled in similar masters-level social work classes.

The three interventions were each two and one-half hours long (the length of the scheduled class) and scheduled once a month. The pretests from the control and experimental groups were collected at the end of August 2007. To avoid changes in class enrollment, the first intervention was administered about one month after the beginning of class, the week of September 18, 2007. The first intervention was implemented at Colorado State University and provided students with the experience of hearing from a

panel of four consumers and one staff person from "Spirit Crossing" which is a clubhouse model providing treatment to people with serious mental illness. The program is operated by the Larimer County Mental Health Center and utilizes a rehabilitation model. The panel graciously shared their stories about treatment, medications, experience with mental health professionals, and family issues.

Due to scheduling difficulties, a similar program in Montana cancelled repeatedly due to internal issues, and in the end the agency was unable to provide guest speakers. Therefore, due to time constraints and other scheduling conflicts, the students in Montana were exposed to psycho-pharmacology as their first intervention; it occurred the week of October 16, 2007 and is described below as the second intervention.

In lieu of guest speakers, the experimental group at the University of Montana was exposed to a videotape about people with serious mental illness in November 2007. The videotape, *Back from madness: The struggle for sanity* (Rosenburg, 1996), provided a view of the world of mental illness that few ever see. It is a documentary that follows four patients from Massachusetts General Hospital for 1-2 years. Rare archival footage demonstrated how their conditions were treated in the past as compared with present day treatments. The program is about the patients and their inner strength as they search for some relief from severe mental illness. The patients have been diagnosed with schizophrenia, bi-polar disorder and major depression with suicidal thoughts. Keeping in mind that videotapes provide a different exposure than in-person contact, it was still important to expose students to real-life stories. Therefore, this video was chosen as a replacement for the guest speakers.

The second intervention focusing on psychopharmacology was initially planned to include a pharmacist as a guest speaker combined with educational videotapes. However, locating a pharmacist who was able to present during the class times in either Montana or Colorado was not possible. Therefore, a lecture regarding psychotropic medication was created with Dr. Bill Doktor, a pharmacy professor at the University of Montana. The researcher met with Dr. Doktor who teaches psychopharmacology and has presented to social work students in the past, he provided the bulk of the lecture materials regarding current medications, side effects, use of alternatives, and ethical issues with drug companies. The lecture was given by the researcher at both universities and videotapes regarding psychotropic medication were viewed by students. The videotape titled, *Psychotropic medications: Caring for patients with psychiatric disorders* (Harrigan, 2005) is a five-part series that addresses assessment, intervention, and treatment of patients with psychiatric disorders, specifically schizophrenia, bipolar disorder and depression. Three parts were utilized in the classroom intervention that focused on schizophrenia, bipolar disorder and depression. The series focused on current medications, actions on the brain, desired effects, side effects and precautions.

The third intervention utilizing standardized clients occurred at both universities the week of November 13, 2007. Recruiting drama students and local actors resulted in 4 volunteers in Colorado and 5 volunteers in Montana. The actors participated in a two and one-half hour training in which they watched the video, *Back from madness: The struggle for sanity* (1996) and they were given detailed client scenarios (Appendices I-O) followed by an in-depth discussion about symptoms. The students were given brief client scenarios prior to meeting the standardized clients (Appendices P-V) and they assessed the

standardized clients in groups of 4-5. Students were given a biopsychosocial assessment (Appendix W) for guiding the interview and other instruments were provided for elective use (such as the geriatric depression scale). Students were informed that the role play setting was a mental health center that was experiencing a large number of new clients and they needed help with the initial screening process. The standardized clients portrayed people with serious mental illness, specifically, schizophrenia, bipolar disorder, and depression. The students, in groups of 4-5, interviewed the standardized clients for 60 minutes and then participated in a debriefing with the actors. Although the assessments were not turned in, students discussed their findings during the debriefing. The students in both groups were able to successfully identify the DSM diagnoses portrayed by the standardized clients.

Participants and Site

The accessible population was one of convenience. Participants were students enrolled in a master's level foundation social work class at Colorado State University (CSU) and at the University of Montana (UMT). MSW students were chosen due to the fact that the majority of mental health jobs require a master's degree (U.S. Department of Labor, 2005). These universities were chosen for convenience because they both provide a generalist teaching approach in their masters programs. The courses were taught by four different instructors, two at each university during the fall semester of 2007. The two faculty that taught the control groups shared similar professional backgrounds in child welfare. The two faculty that taught the experimental groups had years of experience working in mental health. The Colorado State concentration course, titled Social Work 630 - advanced generalist practice with individuals was very similar to the

University of Montana's foundation course, Social Work 515 -practice with individuals. Both of the classes were taught in two sections, providing access to a control and an intervention group. The syllabi from the courses at both universities were examined for objectives and descriptions and found to be similar. For example, all syllabi reported that the course objective is to provide students with knowledge and skills for assessment and intervention with diverse systems and client populations and identify benefits and problems associated with psychopharmacology interventions.

The sample was a non-probability sample, utilizing MSW practice classes at CSU and UMT for the intervention and control groups. This design provides a larger sample size (n = 77/ valid n = 70 students) than limiting the study to one university.

Measures

Demographic data were collected to determine the equivalence of the groups and assess variables such as; ethnicity, age, previous work/ volunteer experience/ personal experience with people with serious mental illness, and interventions attended (Appendix D & Appendix H).

Measuring students' knowledge regarding psychopharmacology and attitudes toward psychotropic medication and attitudes towards people with serious mental illness was completed by utilizing three scales. Pre- and post-test scores were obtained for each of the instruments. To measure knowledge about psychotropic medications the Knowledge Index on Psychotropic Medication for Social Workers (KIPMSW) (Bentley, et al., 1991) was utilized (Appendix E). The Attitude toward Psychotropic Medication (ATTMED) (Bentley, et al., 1991) measured students' attitudes toward the use of psychotropic medication (Appendix F). The Attitude to Mental Illness (AMI) (Singh, et al., 1998)

scale was utilized to measure social work students' attitude toward mental illness (Appendix G) . These measures were chosen because they have been used successfully with students. The evidence in support of measurement validity for KIMPSW was content validity. The authors of the ATTMED reported a Cronbach's alpha of .85 (Bentley, et al., 1991). No information regarding reliability and validity of the AMI was provided. The KIPMSW has a potential score ranging from 0-27 with a high score indicating more knowledge, the ATTMED has a score from 0-85 with a higher score reflecting a more positive attitude. The AMI is similar with scores ranging from 0-100 with a higher score reflecting a more positive attitude.

Pilot Testing

A pilot test of the KIPMSW, which is a 19-item true/false questionnaire, was completed in the summer of 2007, prior to the beginning of the study. The results of the pilot test demonstrated that the MSW students who participated scored high (mean score of 78.2%) which prompted the researcher to add six multiple choice items to decrease the chances of guessing a correct response. The six multiple choice items were created with the assistance of a psychiatrist affiliated with a major mental health center located in Colorado.

Data Collection

Pretests and posttests, utilizing the Knowledge Index on Psychotropic Medication for Social Workers, Attitude towards Psychotropic Medication, and Attitudes to Mental Illness surveys were completed by each group. The scales were administered during the second week of classes and again on the last day of the semester course. The administrator introduced the topic and explained the procedures, reading the cover letter

(Appendix A) and the appropriate Human Subjects script depending upon whether students were in the control or experimental group (Appendix B & C), emphasizing that there were no right or wrong answers and that their answers were confidential. The same administrator for each group was used for pre- and post-testing. Scores from the pre-tests and post-tests were compared within and between groups to determine if there were any changes.

In addition, following each of the interventions, index cards were distributed to each student, different colors were used for each of the following questions: What did you find most interesting about today's class?, What did you find least interesting?, What suggestions do you have to improve today's class? This data provided the researcher with information from students in their own words about each of the interventions. Furthermore, student feedback will be useful for future curricula and classroom planning.

Data Analysis

This study was a quasi-experimental design to compare groups after an intervention. According to Morgan and colleagues (2006) the change score approach is an appropriate analysis of this design. The change score approach involved subtracting the pretest scores from the posttest scores within each group, which provided the gain or effectiveness of each treatment condition over time (Gliner & Morgan, 2000). This created one independent variable, intervention, with two levels, the experimental group and the control group (Morgan, et al., 2006). The dependent variable was the change score. Subtracting pretest scores from posttest scores for each participant in the study was the first step in this approach. The calculated score provided an average change score for the experimental and control groups. By comparing the change scores on the AMI,

ATTMED, and KIPMSW scales a conclusion was reached concerning the effectiveness of the intervention.

The appropriate analysis for a single factor design with two levels was the single factor ANOVA or the independent *t* test. The null hypothesis was that there is no difference between the students in the experimental and control group in their change scores on the AMI, ATTMED and KIPMSW questionnaires. The null hypothesis needs to rejected or not to determine if there exists a statistically significant difference between the two groups. In order to determine statistical significance, the *p* value for this study was established at $p < .05$. Examining the data entailed making comparisons and exploring relationships, not only to determine causality but to examine relationships between variables. Due to the nature of the attitude change theory, results were interpreted cautiously.

The completed instruments provided the data that was entered into a database within the Statistical Package for Social Sciences (SPSS). SPSS was utilized to assist with the quantitative data analysis (*t* tests, associations, and descriptive statistics). A code book was created and the instruments were identified as either from the control or experimental group from each university. The pre and post-tests were matched utilizing the information provided by the participants. Participants who did not have both pre and posttest results were deleted from this analysis ($n = 7$), however, their open-ended responses were included. The Knowledge Index on Psychotropic Medication for Social Workers (KIPMSW) was graded and the data was entered into the data base.

The data entry of the 70 participants was followed by data editing in order to check for accuracy, completeness, and consistency prior to the onset of analysis. In order to

analyze and identify change scores, Likert sums were calculated for the pretest and posttest attitude scores. A change score was calculated for each individual on the three scales by subtracting the pre-scores from the post-scores. An independent samples *t* test was used to determine if the change scores of the experimental and control groups differed following exposure to the intervention.

The Attitudes to Mental Illness (AMI), with a Cronbach's alpha of .56, lacked inter-item reliability. Content validity is also an issue with this measure. For example, items range from alcohol abusers to ECT, and terminology is inconsistent. Thus, the overall AMI summated score was used with caution about its validity.

Factor analysis provides a way to combine a number of items to form a smaller number of factors by examining which variables are closely related (Gliner & Morgan, 2000). A principle component factor analysis on the AMI indicated that five items (1, 2, 4, 12, and 17) had principle axis loadings above .40 on the first factor. They appeared to have face validity as a measure of attitudes towards people with serious mental illness. The five items (1, 2, 4, 12, and 17) were further analyzed for internal consistency and resulted in a Cronbach's alpha of .74, it appears that the five items were measuring attitudes towards people with serious mental illness. Thus, the AMI subscale was created from those items and was used to test the first hypothesis regarding attitude towards people with serious mental illness. The Attitude to Mental Illness subscale had a possible score of 25 with a higher score reflecting a more positive attitude.

The Cronbach's alpha for the Attitude toward Psychotropic Medication (ATTMED) for this study was .79. The ATTMED was scored by assigning scores to the five choices (1 = "strongly agree" to 5 = "strongly disagree"). Items 4, 6, 14, and 15 were reversed-

scored, and all items summed for the total score. Frequency distributions were run for the ATTMED to test for normalcy. The ATTMED has a possible score of 85 with a higher score representing a positive attitude (neutral score 51).

The scoring on the Knowledge Index on Psychotropic Medication for Social Workers (KIPMSW) test was obtained for each respondent by computing the number of correct answers that the respondent gave; there was a possible score of 25.

Differences in age, ethnicity, and experience were examined within and between groups to profile the groups and to determine similarities or differences. Descriptive statistics were utilized and *t* tests were utilized to measure the relationship between two variables, such as experience and AMI/ATTMED/ KIPMSW scores.

The results determined if the hypotheses were correct; that MSW students who participated in the intervention had a higher positive change in their Attitudes to Mental Illness and Attitude towards Psychotropic Medication scores than students in the control group, and that MSW students in the intervention group had a higher positive change in their Knowledge Index on Psychotropic Medication for Social Workers scores than students in the control group. The results also answered the research questions by comparing the mean change scores and determining if positive changes occurred in the intervention group. One of weaknesses of the gain score approach is that it does not provide information specifically about pretest score differences (Gliner & Morgan, 2000; Oakes & Feldman, 2001). An alternative data analysis method utilized in pretest-posttest designs is the analysis of covariance (ANCOVA). The ANCOVA takes pretest score differences into account by adjusting the posttest scores from these differences (Gliner & Morgan, 2000). However, statisticians claim that unless participants are randomly

assigned to treatment conditions ANCOVA is not appropriate. The gain score provides the same information and is clearer than the mixed repeated measures ANOVA (Gliner & Morgan, 2000; Oakes & Feldman, 2001). The gain score approach was chosen for the study because it incorporates the reliability of the pretest, whereas the ANCOVA model assumes perfect reliability (Oakes & Feldman, 2001), which has not been proven for the KIPMSW, or the AMI scale.

The answers to the open-ended questions that participants turned in after each of the interventions were analyzed utilizing qualitative data analysis techniques. Codes were created that allowed the researcher to combine the data retrieved as described in Miles and Huberman (1994). Codes allow the researcher to differentiate and compile information, examining common statements and key words/phrases. This method was chosen in order to allow the students to provide feedback about the interventions in their own words. Students' suggestions for improvements were reported and will be taken into consideration for future studies.

The statistical analysis allowed the researcher to answer the research questions and make a determination regarding the effectiveness of the intervention, either accepting or rejecting the null hypothesis. In addition, the qualitative data collected enriched the study by adding personal experiences to the research. Engaging students in classroom research provided modeling and the researcher offered to share results with participants as a way to promote and encourage their research endeavors.

Limitations of Methodology

One of the major limitations in this study was the difficulty of replicating the treatment intervention consistently at two sites. Utilizing guest speakers and volunteers

at two universities in different states, made it impossible to hold the treatment variable constant. Students were exposed to similar curricula but the impact of differences between speakers and the standardized clients was difficult to measure. This was further complicated by the inability to obtain guest speakers in MT, therefore the students were exposed to a videotape rather than "real people". The small sample size and the lack of random assignment limited the ability to generalize findings.

CHAPTER 4: RESULTS

Introduction

This chapter reports the findings of this research on knowledge and attitudes of MSW students regarding psychotropic medication and people with serious mental illness following a classroom intervention. First, the participant demographic characteristics and professional experience with people with serious mental illness will be described. Secondly, the research questions will be answered and findings from the three hypotheses will be presented followed by some additional analyses of the data.

Sample Characteristics

The majority of the respondents were Caucasian (90%), therefore, analysis will not include ethnicity as a variable. Three age groups represented the majority of respondents: 20-25 (39%); 26-30 (39%); and, over 30 (11.7%). Among the participants, 26 (37.1%) had a BSW and 43 (61.4%) did not. The majority of students were in their foundation year and had seven or fewer MSW courses (62.4%). About half (46.8%) reported no prior experience with people with serious mental illness, although 21 students (27.3%) reported being exposed to people with serious mental illness during their practicum over this semester. The control and experimental group demographics were similar. The control group contained more BSW graduates (48.7%) than the experimental group

(22.6%). Additionally, the control group had more participants who were older than 36 years (18.2%) as compared to the experimental group (6.5%). Table 4.1 describes the characteristics within each group.

Table 4.1
Sample Description

Characteristic	Control Group ($n = 39$)	Experimental Group ($n = 31$)
Age (years)		
20-25	35.9% ($n = 14$)	48.4% ($n = 15$)
26-30	35.9% ($n = 14$)	38.7% ($n = 12$)
31 or over	28.2% ($n = 11$)	9.7% ($n = 3$)
Total	100%	96.8% (missing 1)
Ethnicity		
White -- non-Hispanic	82.1% ($n = 32$)	100% ($n = 31$)
Other	15.3% ($n = 6$)	0
Total	97.4% (missing 1)	100%
Bachelors Degree (BSW)		
Yes	48.7% ($n = 19$)	22.6% ($n = 7$)
No	51.3% ($n = 20$)	74.2% ($n = 23$)
Total	100%	96.8% (missing 1)
Years of Experience		
0-2	64.2% ($n = 25$)	67.8% ($n = 21$)
2.5-5	20.4% ($n = 8$)	22.5% ($n = 8$)
5.5 or over	15.4% ($n = 6$)	9.7% ($n = 2$)
Total	100%	100%
Number of MSW Courses Completed		
0-5	30.8% ($n = 12$)	35.4% ($n = 11$)
6-11	51.3% ($n = 20$)	32.2% ($n = 10$)
12-19	12.8% ($n = 5$)	32.2% ($n = 10$)
20 or more	5.1% ($n = 2$)	0
Total	100%	100%

Demographics by school were also reviewed, with the UMT having 30 students participating and CSU having 40 participants. Students were similar in age, with UMT having 12 students between the ages of 20-25, 10 between 26-31, and 7 students age 32 and over. CO State University had 17 students between the ages of 20-25, 16 between

26-31 and 7 students age 32 or over. There were 7 students at the UMT who reported having an undergraduate degree in social work, while 19 students at CSU reported having a BSW. There was little difference between the schools on students reported years of experience. There were 9 participants at each university that reported no previous experience with people with serious mental illness. There were 10 participants at the UMT and 18 at CSU that reported 1-2 years of experience. There were 7 participants at the UMT and 9 at CSU that reported 2.5-5 years of applicable experience. There were 4 participants at each university that reported 5.5 or more years of experience. The number of MSW courses completed varied by school due to the classes chosen for the research study. Participants at the UMT were enrolled in a foundation year course, usually for beginning MSW students, so the majority (73%) of students reported 5 or less MSW courses completed. The class at CSU was a concentration year course, usually for second year MSW students, and the majority (75%) reported completing 4-12 courses in the MSW program.

Attendance was determined by asking participants in the experimental group what interventions they attended. The majority (82%) of the experimental group participants (n = 70) at both schools reported that they attended all three interventions and 100% reported that they were present for the standardized clients' classroom activity.

Research Question 1

The first research questions asks, how do MSW students in both groups score on the pre and posttests Attitude to Mental Illness (AMI), Attitude toward Psychotropic Medication (ATTMED), and Knowledge Index of Psychotropic Medication for Social Workers (KIPMSW) questionnaires? On the AMI pretest, students already appeared to

have favorable attitudes towards mental illness with a mean score of 78.03 (neutral score 60) out of 100 (*SD* 5.64). Scores on the post-AMI slightly decreased in both groups, to a mean score of 76.33 (*SD* 5.84). As previously stated the AMI had poor internal consistency; therefore, using principle components analysis with varimax rotation, the data was reduced to five items creating a subscale. The AMI subscale was created with a possible score of 25 (neutral score 15), a positive attitude will have a higher score. The whole sample reported a fairly high positive attitude with a mean on the pre AMI subscale of 22.81 (2.03) and a mean of 22.42 (2.12) on the post AMI subscale.

The Attitudes toward Psychotropic Medication Survey had a possible score of 85, with a higher score reflecting a more positive attitude (neutral score 51). Students generally had a fairly positive attitude with a mean pre score of 55.46 (7.21) and mean post score of 57.03 (7.09).

The Knowledge Index on Psychotropic Medication for Social Workers consisted of 19 true/false statements and 6-item multiple choice questions and was utilized to measure knowledge about psychotropic medication with a possible score of 25. Overall, participants had a mean pre KIPMSW score of 16.26 (2.91) and a mean post score of 16.88 (3.06).

Research Question 2

The second research question asks is there a difference between the groups in regard to the mean Attitude to Mental Illness (AMI) pre- to posttest change scores? The difference on the total AMI pre to post test change scores between the control and experimental groups was not statistically significant, $t = -1.32$, $df = 68$, $p = .192$, Table 4.2 shows the results.

Table 4.2
Mean Scores on Attitudes to Mental Illness (AMI) by Group

Group *	Mean Pre AMI scores (*SD*)	Mean Post AMI scores (*SD*)	Change
C (*n = 39*)	77.46 (5.84)	75.10 (5.51)	-2.36
E (*n =31*)	78.74 (5.39)	77.87 (5.95)	-.87
Difference	1.28	2.77	1.49

* Note: C = control group, E = Experimental group

Although the change scores for the experimental and control were not significant on the Attitude to Mental Illness scale, the experimental group appears to have started with a slightly higher score and there was a somewhat less negative change in the experimental group. Both groups had slight decreases from pre to posttest scores. The AMI subscale that was created from five items on the Attitude to Mental Illness scale will be used to measure attitudes to mental illness. Similarly, both groups had slight decreases from pre to posttest scores, but the change scores between the experimental and control groups were not statistically significant, $t = -.224$, $df = 68$, $p = .823$. Table 4.3 shows the scores on the AMI subscale.

Table 4.3
Mean scores on Attitude to Mental Illness (AMI) Subscale by Group

Group*	Mean Pre AMI subscale scores (*SD*)	Mean Post AMI subscale scores (*SD*)	Change
C (*n = 39*)	22.87 (2.14)	22.44 (2.25)	-.43
E (*n = 31*)	22.74 (1.91)	22.42 (1.99)	-.32
Difference	.13	.02	.11

* Note: C = control group, E = Experimental group

Research Question 3

The third research question explores the differences between groups on pre and posttest change scores on the Attitude toward Psychotropic Medication (ATTMED). Both groups had a slight increase from pre to posttest change scores but they were not

statistically significant ($t = .731$, $df = 67$, $p = .467$). Table 4.4 shows how the groups scored on the ATTMED.

Table 4.4
Mean scores on Attitude Toward Psychotropic Medication (ATTMED) by Group

Group *	Pre Mean ATTMED score (*SD*)	Post Mean ATTMED score (*SD*)	Change
C (*n = 38*)	54.76 (6.87)	56.32 (7.64)	1.56
E (*n = 31*)	56.87 (7.31)	57.23 (6.92)	.36
Difference	2.11	.91	1.20

* Note: C = control group, E = Experimental group

The experimental group had a slightly higher pre and post mean ATTMED score than the control group.

Research Question 4

The fourth research question explores differences between the experimental and control group on the pre to posttest change scores on the Knowledge Index of Psychotropic Medication for Social Workers (KIPMSW). The experimental group had slightly higher mean pre and post test scores. However, there was no statistical difference between the experimental and control group change scores, $t = -1.27$, $df = 68$, $p = .207$. Table 4.5 shows how the groups scored.

Table 4.5
Mean Scores on KIPMSW by Group

Group	Pre Mean KIPMSW Score (*SD*)	Post Mean KIPMSW Score (*SD*)	Change
C (*n = 38*)	16.10 (3.64)	16.33 (3.29)	.23
E (*n = 31*)	16.45 (1.61)	17.55 (2.63)	1.10
Difference	.35	1.22	.87

* Note: C = control group, E = Experimental group

Both groups had a slight increase from pre to posttest scores, with the experimental group having a slightly higher positive change in posttest scores.

Research Question 5

The last research question explores any relationships between ages, years of experience, undergraduate degree, or ethnicities on change scores on the AMI, ATTMED, or KIPMSW in either the control or experimental groups. Due to the small numbers of non-white participants, ethnicities were not analyzed.

Attitude to Mental Illness subscale. To analyze demographics for the Attitude to Mental Illness survey, results of the Attitude to Mental Illness subscale were utilized. Due to the small numbers in some of the age categories, data were collapsed into three categories, ages 20-25, 26-31, and 32 and over. There was no significant difference on change scores between the control and experimental group based on age; for ages 20-25, $t = -1.01$, $df = 27$, $p = .322$, for ages 26-31, $t = 1.77$, $df = 24$, $p = .089$, and for participants over 32 years of age, $t = .422$, $df = 12$, $p = .681$. Table 4.6 shows the results for the groups in the three age categories.

Table 4.6
Mean scores on Attitude to Mental Illness Subscale by Age and Group Identification

Age	Group *	Mean Pre AMI subscale score (*SD*)	Mean Post AMI subscale score (*SD*)	Change
20-25	C ($n = 14$)	23.64 (1.5)	23.36 (1.50)	-.28
	E ($n = 15$)	23.00 (2)	23.47 (1.64)	.47
26-31	C ($n = 14$)	22.86 (1.66)	22.93 (1.86)	.07
	E ($n = 12$)	22.67 (1.83)	21.58 (1.88)	-1.09
32- over	C ($n = 11$)	21.91 (3.02)	20.64 (2.58)	-1.27
	E ($n = 3$)	22.33 (2.52)	20.33 (1.53)	-2.00

* Note: C = control group, E = Experimental group

The results indicate that students who were older had a slight decrease in their scores from pre to posttesting, and they had slightly more negative attitudes towards people with serious mental illness than younger participants.

Similarly, participants who reported more experience with people with serious mental illness had a slight decrease in their change scores. It is important to discern between those participants who reported no experience with people with serious mental illness and those with some experience; therefore, the categories were divided to compare participants. There were no statistically significant differences between the experimental and control groups change scores on the Attitude to Mental Illness subscale in any of the categories; for 0 years of experience, $t = .160$, $df = 16$, $p = .875$; for .5 – 2.0 years of experience, $t = -.478$, $df = 26$, $p = .637$; for 2.5 – 5 years of experience, $t = .229$, $df = 14$, $p = .822$; and for participants who reported more than 5 years of experience, $t = .236$, $df = 6$, $p = .822$. Table 4.7 shows the results for each category.

Table 4.7
Mean scores on Attitude to Mental Illness Subscale by Years of Experience and Group Identification

Years of Experience	Group*	Mean Pre AMI subscale score (SD)	Mean Post AMI subscale score (SD)	Change
0	C ($n = 8$)	21.88 (2.90)	22.25 (2.19)	.37
	E ($n = 10$)	22.90 (2.28)	23.10 (1.66)	.20
.5-2.0	C ($n = 17$)	22.88 (2.20)	22.35 (2.55)	-.53
	E ($n = 11$)	22.00 (1.67)	21.82 (1.78)	-.18
2.5- 5	C ($n = 8$)	23.13 (1.55)	22.50 (2.00)	-.63
	E ($n = 8$)	23.00 (1.60)	22.13 (2.59)	-.87
5.5 or more	C ($n = 6$)	23.83 (1.17)	22.83 (2.23)	-1.00
	E ($n = 2$)	25.00	23.50 (2.12)	-1.50

* Note: C = control group, E = Experimental group

Findings suggest those participants who reported more experience with people with serious mental illness had a slightly higher mean pre and post scores; however, their posttest scores seemed to decrease while participants with no experience seemed to increase. None of the differences between the experimental and control group change scores were statistically significant.

The other information collected referred to undergraduate degree status, whether participants had a Bachelors degree in social work or not. Students who had a BSW (n = 26) had a pre mean AMI subscale score of 22.81(2.04) and a post mean AMI subscale score of 22.73(1.97). The scores were not significantly different (t = .804, df = 67, p = .424) from those without a BSW (n = 43) with a pre mean AMI subscale score of 22.79(2.07) and mean post score of 22.30 (2.21).

Attitude toward Psychotropic Medication. The magnitude of change was not statistically significant between the control and experimental groups when analyzing the Attitude toward Psychotropic Medication (ATTMED) scale pre to posttest change scores and demographic variables. The results of the independent samples t test for the age categories are; ages 20-25, t = -.174, df = 26, p = .864; ages 26-31, t = 1.27, df = 24, p = .215, and for respondents 32 and over, t = .141, df = 12, p = .890. Table 4.8 shows the results of age by group.

Table 4.8
Mean Scores on Attitude toward Psychotropic Medication (ATTMED) by Age and Group Identification

Age	Group *	Mean Pre ATTMED score (*SD*)	Mean Post ATTMED score (*SD*)	Change
20-25	C (n = 13)	55.62 (8.84)	57.08 (7.40)	1.46
	E (n = 15)	53.87 (7.14)	55.80 (7.82)	1.93
26-31	C (n = 14)	53.36 (4.70)	56.64 (6.40)	3.28
	E (n = 12)	58.75 (8.10)	58.83 (6.25)	.08
32 or over	C (n = 11)	55.55 (6.90)	56.91 (8.87)	1.36
	E (n = 3)	59.67 (7.64)	60.33 (2.08)	.66

* Note: C = control group, E = Experimental group

The largest increase from pre to posttest change scores on the ATTMED occurred in the control group with participants aged 26-31 years old (3.28).

Similar results were found when examining years of experience working with people with serious mental illness and change scores for the experimental and control groups on

the ATTMED. There was no significant difference found between the groups based on years of experience; for no experience, $t = -.659$, $df = 16$, $p = .519$; for .5 – 2.0 years, $t = 1.031$, $df = 25$, $p = .312$; for 2.5 – 5 years, $t = 1.52$, $df = 14$, $p = .151$; and for participants who reported 5 or more years of experience, $t = .276$, $df = 6$, $p = .792$. Table 4.9 shows the results based on years of experience by group.

Table 4.9
Mean scores on Attitude toward Psychotropic Medication (ATTTMED) by Years of Experience and Group Identification

Years of Experience	Group *	Mean Pre ATTMED score (*SD*)	Mean Post ATTMED score (*SD*)	Change
0	C ($n = 8$)	52.88 (8.90)	54.75 (7.25)	1.87
	E ($n = 10$)	53.60 (6.74)	57.80 (9.02)	4.20
.5-2.0	C ($n = 16$)	55.25 (6.22)	58.56 (6.56)	3.31
	E ($n = 11$)	55.27 (6.68)	56.55 (5.41)	1.28
2.5- 5	C ($n = 8$)	55.88 (6.33)	56.38 (4.60)	.50
	E (n =8)	58.88 (9.19)	55.75 (6.30)	-3.13
5.5 or more	C ($n = 6$)	54.50 (7.56)	55.83 (12.06)	1.33
	E ($n = 2$)	65.50 (.71)	64.00 (4.24)	-1.50

* Note: C = control group, E = Experimental group

It appears that participants in the experimental group who reported no experience, had the largest positive increase in their mean pre to post ATTMED scores (4.2).

In addition, students who reported having a BSW ($n = 25$) had a pre mean ATTMED score of 57.60 (6.78) and a post mean ATTMED score of 57.52 (7.36). The scores were not significantly different ($t = -1.56$, $df = 66$, $p = .125$) from those without a BSW ($n = 43$) with a pre mean ATTMED score of 54.07 (7.24) and mean post score of 56.56 (7.04).

Knowledge Index of Psychotropic Medication for Social Workers. The KIPMSW change scores between the experimental and control groups were analyzed using the demographic data. There were no statistically significant differences between the experimental and control groups change scores on the KIPMSW based on age; for ages

20-25, $t = .017$, $df = 27$, $p = .986$; for ages 26-31, $t = -1.691$, $df = 24$, $p = .104$; for ages 32 and over, $t = .408$, $df = 12$, $p = .690$. Table 4.10 shows the results by age and group.

Table 4.10
Mean Scores on Knowledge Index on Psychotropic Medication for Social Workers (KIPMSW) by Age and Group Identification

Age	Group	Mean Pre KIPMSW score (*SD*)	Mean Post KIPMSW score (*SD*)	Change
20-25	C ($n = 14$)	15.64 (3.50)	15.86 (3.32)	.22
	E ($n = 15$)	16.80 (1.66)	17.00 (1.69)	.20
26-31	C ($n = 14$)	15.93 (3.71)	16.50 (3.28)	.57
	E ($n = 12$)	16.42 (1.51)	19.08 (2.57)	2.66
32 or over	C ($n = 11$)	16.91 (3.94)	16.73 (3.52)	-.18
	E ($n = 3$)	15.00 (1.73)	14.00 (3.46)	-1.00

* Note: C = control group, E = Experimental group

Results indicate that participants in the experimental group, aged 26-31 had the highest change from their mean pre to mean post test scores on the KIPMSW (2.66). Furthermore, results indicate that participants in both groups who were over the age of 32, had a slight decrease in their mean pre to mean post test scores.

The results of the *t* tests exploring differences between the experimental and control groups KIPMSW change scores depending upon the other categories for years of experience were; for 0 years, $t = 1.85$, $df = 16$, $p = .083$; for .5-2 years, $t = -2.13$, $df = 26$, $p = .043$, for 2.5 – 5 years, $t = -.978$, $df = 14$, $p = .345$, and for participants with 5 or more years, $t = -.51$, $df = 6$, $p = .632$. Note that there was a statistically significant difference between the experimental and control group for those with .5-2 years of experience, $p = .043$, with a relatively large effect size of approximately .8. However, due to the large number of *t* tests calculated in the study, interpreting the results was done with caution. Note also that all three of the experimental groups with some experience seemed to improve at least slightly. Therefore, a *t* test that compared the experimental and control group's change scores for participants with some experience computed, $t = -2.104$, $df =$

50, $p = .040$, there was a significant difference. The experimental group KIPMSW posttest scores for those who had at least some experience improved more ($M = 17.95$, $SD = 2.97$) than the control group participants with at least some experience ($M = 16.77$, $SD = 2.75$).Table 4.11 shows the results of both groups by years of experience.

Table 4.11
Mean Scores on Knowledge Index on Psychotropic Medication for Social Workers (KIPMSW) by Years of Experience and Group Identification

Years of Experience	Group	Mean Pre KIPMSW score (*SD*)	Mean Post KIPMSW score (*SD*)	Change
0	C ($n = 8$)	12.63 (5.42)	14.63 (4.72)	2.00
	E ($n = 10$)	16.50 (1.51)	16.70 (1.49)	.20
.5-2	C ($n = 17$)	17.06 (1.92)	16.24 (2.95)	-.82
	E ($n = 11$)	16.45 (1.04)	18.09 (3.08)	1.64
2.5- 5	C ($n = 8$)	16.88 (2.47)	16.63 (2.20)	-.25
	E (n =8)	16.25 (2.55)	17.25 (3.11)	1.00
5.5 or more	C ($n = 6$)	17.00 (3.85)	18.50 (2.51)	1.50
	E ($n = 2$)	17.00 (.00)	20.00 (1.41)	3.00

* Note: C = control group, E = Experimental group

Results indicate that participants who reported more experience with people with serious mental illness in the experimental group had the highest positive change score from pre to posttest results. Participants who had a BSW had a mean pre score of 16.85 (2.17) and a mean post score of 17.31 (2.41) compared to those without a BSW who had a mean pre score of 15.86 (3.26) and a mean post score of 16.49 (3.32). Table 12 shows the mean scores for each group.

Table 4.12
Mean Scores on Knowledge Index on Psychotropic Medication for Social Workers (KIPMSW) by BSW Status and Group Identification

BSW	Group	Mean pre KIPMSW score (SD)	Mean post KIPMSW score (SD)	Change
Yes	C ($n = 19$)	16.89 (2.38)	16.68 (2.34)	-.21
	E ($n = 7$)	16.71 (1.60)	19.00 (1.73)	2.29
No	C ($n = 20$)	15.35 (4.46)	16.00 (4.03)	.65
	E ($n = 23$)	16.30 (1.64)	16.91 (2.57)	.61

* Note: C = control group, E = Experimental group

The results suggest that participants in the intervention who had a BSW experienced a mean higher change score (2.29) than participants without a BSW (-.21). Overall, the changes were not statistically significant (t = -.26, df = 67, p = .815).

First Hypothesis

The first hypothesis, which was answered in research question 2, stated that MSW students who participated in the intervention would have a higher positive change score on the Attitude to Mental Illness scale than students who were exposed to traditional curricula. The hypothesis was not supported by the data analysis. The hypothesis was not supported by the data analysis. The null hypothesis was not rejected. The intervention was not successful in changing attitudes towards people with serious mental illness. The magnitude of change was not significantly different between the control and the experimental group. However, the results are not surprising given the relatively high scores on the pre Attitude to Mental Illness subscale in both the experimental and control groups.

Second Hypothesis

The second hypothesis which was answered in research question 3, stated that participants in the intervention would have a higher change score on the Attitude toward Psychotropic Medication survey than the control group. This hypothesis also was not supported, therefore, the null hypothesis was not rejected.

Third Hypothesis

The third hypothesis, which was answered in research question 4, stated that students who participated in the intervention would have a higher positive change in their Knowledge Index of Psychotropic Medication for Social Workers score than the control

group score. Overall, this hypothesis was not supported, therefore, the null hypothesis was not rejected. However, there was a significant difference on the KIPMSW change score between the experimental and control group participants who reported having .5-2 years of experience with people with serious mental illness. These results need to be interpreted cautiously due to the many statistical tests computed. Furthermore, there was a significant difference between the experimental and control group change scores for all the participants who had some/any experience with people with serious mental illness.

There was no difference between the groups on pre to posttest change scores for the Attitude to Mental Illness, Attitude towards Psychotropic Medication, or Knowledge Index on Psychotropic Medication for Social Workers. The null hypothesis was not rejected for the three hypotheses. The research question regarding changing students' attitudes and knowledge about psychotropic medication and attitudes towards people with serious mental illness will be answered with a conservative, not significantly with this intervention.

Additional Findings

In addition, a question about differences between schools was examined. Was there a difference between the participants at the University of Montana and Colorado State University and scores on the instruments in both groups? To answer this question, data were analyzed for all three instruments and results indicate that there were no significant differences between schools on any of the pre to posttest change scores; for the AMI, t = 1.29., df = 68, p = .203; for the AMI subscale, t = .526, df = 68, p = .600; for the ATTMED, t = 1.12, df = 67, p = .268; and for the KIPMSW, t = -.374, df = 68, p = .709. For example, the mean pretest score for the Attitudes towards Psychotropic Medication

for students at Colorado State University was 56.28 (7.31) and at the University of Montana students scored 54.4. The posttest scores were almost identical, CSU mean score of 57.05 (7.3) and UMT mean score of 57.00 (6.83). It does not appear that location was a variable that affected the results of the study.

Open-ended Questions Results

In addition to the instruments, students in the experimental group answered three open-ended questions at the end of each intervention: 1) what did you like least about today's class; 2) what did you like most about today's class; 3) and what suggestions do you have for improvement? The answers were analyzed for common themes, words or phrases, and statements were grouped by similar terms and placed in categories. The first intervention for participants at CSU (n = 17) consisted of 4 guest speakers from the clubhouse program operated by the local mental health center. The results of participants at CSU are summarized in Table 4.13.

Table 4.13
Results of Open-ended Questions for Intervention 1 (Colorado State University)

Most Interesting (n = 17)	**Least Interesting** (n = 15)	**Suggestions for Improvement** (n = 16)
Listening to the panel of speakers (n = 13)	Nothing, it was all interesting (n = 9)	Nothing/ it was all interesting (n = 8)
Discussion about the program (n = 2)	Power point presentation about program (n =4)	More information about the clubhouse program (n = 2)
Hearing about mental illness from people (n = 2)	Volunteer perspective about the program (n = 1)	More time/more information/more stories about mental illness (n = 6)

Results indicate that listening to the panel of speakers was most interesting to the majority of respondents (n = 13). Overall, participants found this intervention interesting; suggestions for improvement included more time and information about this particular population.

Participants at UMT (n = 17) were unable to be exposed to real clients and watched a videotape, overwhelmingly students (n = 16) reported that they found the video tape "very realistic and informative". However, the majority (n = 15) stated that they would have preferred guest speakers.

The second intervention that focused on psychopharmacology was presented to the experimental groups using the same material at both universities. Responses are shown in Table 4.14.

Table 4.14
Results of Open-ended Questions for Intervention 2 (Colorado State University and University of Montana)

Most Interesting (n = 33)	**Least Interesting** (n = 33)	**Suggestions for Improvement** (n = 32)
Learning about medications and side effects (n = 17)	Videotape/too long (n = 14)	More class time discussing medications and social work interventions (n = 11)
Pharmacist perspectives (n = 7)	Nothing/enjoyed it (n= 13)	A guest speaker (n =7)
Learning about the effectiveness of ECT (n = 5)	A lot of information/names of drugs (n = 4)	More class interaction/activities (n =6) Hand-outs with medication benefits and side effects (n = 4)
Hearing about the difficulties of medication compliance (n =4)	Not enough discussion time (n = 3)	More information on alternative/holistic treatment options (n = 4)

Results indicate that over half of the participants (n = 17) reported that learning about medications and side effects to be the most interesting part of the lecture. Participants reported that the videotapes were too long and the least interesting (n = 14). Some participants suggested more class time discussing this topic (n = 11); and over half of the students (14) offered specific suggestions including class activities, informational handouts and information on alternative treatment options.

The third intervention utilized standardized clients in role-plays for students to practice their interviewing and assessment skills. Participants at Colorado State

University had 3 standardized clients for their role-play and participants at University of Montana had 4 standardized clients. Assessments were completed in groups with 4-5 students. Participant responses are shown in Table 4.15.

Table 4.15
Results of Open-ended Questions for Intervention 3 (Colorado State University and University of Montana)

Most Interesting (n = 33)	**Least Interesting** (n = 29)	**Suggestions for Improvement** (n = 30)
Experiential learning with "real clients" (n = 28)	Big groups (n = 10)	More preparation time (n = 12)
Group format/role modeling (n = 2)	Nothing/enjoyed it (n= 9)	Smaller groups/more actors (n =6)
Being uncomfortable (n = 2)	No preparation (n = 8)	One on one interviews (n =4)
Debriefing with the actors (n =2)	Feeling incompetent (n = 3)	No suggestions/great (n = 4)
		Rotating clients (n = 4)

Results indicate that the standardized client intervention was appreciated and the majority of participants liked the experience (n = 28). One participant stated "it was such a good experience to be uncomfortable in the situation and work through it. This was awesome, we need more experiences like this in our curriculum". Participants report that they would have liked more preparation time (n = 12) and that smaller groups would have been more advantageous.

Overall, responses indicate that all three interventions were beneficial and suggestions for improvement could be considered for future replications, as well as prove beneficial for curriculum consideration.

CHAPTER 5: DISCUSSION

Summary of Study

Social work education, developed over the last century, is designed to prepare MSW graduates for effective social work practice within current social contexts. Social work education is based on cultivating a knowledge base, skill level, and values or ethics in order to prepare the social worker to respond to clients' with a variety of appropriate interventions. Current social realities are many and diverse, presenting a unique challenge to social work educators.

The literature on the history of mental illness provides an overview of the historical connection between social work and people with serious mental illness. The literature on social work with people with serious mental illness and psychopharmacology was consistent in reflecting that MSW graduates were not adequately prepared to meet the needs of this population. Attitudes towards a population or intervention will impact a social worker's decision to work with a specific population or utilize a specific intervention. The current demand for MSW's to work in the mental health field has increased opportunities for social workers which poses a challenge to social work educators. Further studies began to identify a knowledge base that was necessary for approaching social work and psychopharmacology (Farmer, Bentley, & Walsh, 2006).

However, no research had gone beyond the suggestion of how the information could be effectively included within the MSW curriculum.

Social work education and general education literature presented concepts of teaching strategies with adult learners. Literature regarding brain-based learning, the role of emotions in learning, cooperative learning, and the concept of transfer and learning presented the benefits in increasing the level of knowledge and skills learned by the student, and significantly enhancing attitude development.

This study sought to determine if attitudes and knowledge towards psycho-pharmacology and attitudes toward people with serious mental illness could be changed using a classroom intervention. Two universities cooperated in the study, the University of Montana ($n = 34$) and Colorado State University ($n = 43$). Both of these universities use the generalist approach to educating their MSW students. A master level foundation practice class focusing on individuals and families at the University of Montana and a master level concentration practice class focusing on individuals and families at Colorado State University were chosen as the convenience sample, and both universities offered these courses in two sections. A control group and experimental group were assigned by class at each university, the faculty of the experimental group had similar professional experiences in mental health. The faculty of the control group had similar professional experiences primarily in child welfare. A total of 77 students participated in the quasi-experimental, pre-posttest design. However, 7 participants were not included in the quantitative data analysis due to missing pre or posttest scores.

The survey instruments included demographic information, e.g., age, undergraduate education, and experience with people with serious mental illness. The participants'

attitude toward people with serious mental illness was tested utilizing the Attitude of Mental Illness (AMI) created by Singh, Baxter, Standen and Duggan (1998). Knowledge and attitudes about psychotropic medication was tested by utilizing the Attitude towards Psychotropic Medication (ATTMED) and the Knowledge Index on Psychotropic Medication for Social Workers (KIPMSW) created by Bentley, Farmer and Phillips (1991). In addition, participants in the experimental group completed open-ended questions following each of the three interventions.

Students in the intervention group (n = 35, valid n = 31) were exposed to three classroom interventions that focused on psychopharmacology and people with serious mental illness. Participants in both the control group (n = 42, valid n = 39) and the experimental group were predominantly Caucasian (91.3%) between the ages of 20-30 (79.7%). The majority of participants (n = 64.9) reported having a BSW prior to admission to the MSW program and less than two years experience with people with serious mental illness (n = 65%). The majority (n = 62.3%) reported completing less than seven MSW courses. The three hypotheses tested were: MSW students who participated in the intervention will have a higher positive change in their Attitude to Mental Illness score than students who were exposed to traditional curricula; MSW students who participated in the intervention will have a higher positive change in their Attitude to Psychotropic Medication scores than students who were exposed to traditional curricula; and, MSW students who participated in the intervention will have a higher positive change in their Knowledge Index on Psychotropic Medication than students who were exposed to traditional curricula. Although, none of the hypotheses were supported by the data, a significant difference between the experimental and control group was found on

the KIPMSW change scores with participants who reported having between six months and two years of experience (.5-2) with people with serious mental illness. Results indicate that participants in the experimental group who reported .5-2 years of experience had a higher change score from pre to posttesting on the KIPMSW than participants in the control group. Similarly, a *t* test that compared the experimental and control group's change scores for participants with some experience was computed and there was a significant difference. The experimental group for those who had at least some experience working with this population improved more than the control group participants with at least some experience. However, due to the large number of *t* tests calculated in the study, interpreting the results was done with caution. Overall, the findings reflected no significant differences in changes on the attitude measures or knowledge test regardless of participating in the intervention.

Discussion of Findings/Interpretation

Besides the one difference between the experimental and control group on the KIPMSW depending upon experience, there were no significant differences found when comparing pre to posttest change scores on any of the instruments. One explanation for the lack of findings between the control and experimental group may be that the instruments poorly measured the variables in the study. In addition, faculty in the control groups may have unintentionally added more content about mental illness and psychotropic medication over the course of the semester.

Independent samples *t* tests showed that the intervention did not create a statistically significant change in Attitudes to Mental Illness scores. However, the pretest mean (78.03) and posttest mean (76.33) were somewhat higher than the 73.77 mean reported by

Singh, Baxter, Standen, & Duggan (1998). The Attitude to Mental Illness subscale was tested and no significant differences were found in pre to posttest changes in either group. The sample had a pretest mean score of 22.81 (2.03) with a possible score of 25, demonstrating that social work students in this study tended to possess pre-existing positive attitudes towards this population. Although the mean AMI subscale posttest scores slightly decreased to 22.42 the change was not significant and results agree with the literature that suggests that measuring attitudes is difficult as they may not be stable over time.

Similarly, independent samples *t* tests showed that the intervention did not impact scores on the Attitudes toward Psychotropic Medication scale. There was an absence of extreme scores in either direction, with a possible score of 85, neutral score 51. Participants had a pre mean score of 55.46 (7.21) and mean post score of 57.03 (7.09). Both groups slightly increased their post mean scores but the change was not statistically different for the experimental and control groups. These means were higher than those reported by Bentley, Farmer, and Phillips (1991) who reported a mean of 40 (8.16). The results imply that social workers in this study possessed a slightly more positive attitude regarding psychotropic medication than those in the study by Bentley et al. However, there is a challenge interpreting the results because there is no agreement about what represents the optimum attitude for social workers. The midrange scores reported by respondents may represent an appropriate level, in that extremely negative or extremely positive attitudes may be inappropriate for social workers. That is, the scores may represent a good balance of acceptance and skepticism among students regarding the use of psychotropic medications. On the other hand, it may be that the midrange scores

represent a high degree of ambivalence regarding psychotropic medication from exposure to both positive and negative effects from either personal or professional experiences. Either way, the social workers' attitude toward psychotropic medication may serve to hinder clients' motivation to continue drug treatment (Bentley, et al, 1991). Furthermore, in a study assessing social workers' attitudes about psychotropic drug treatment with youths, Moses and Kirk (2006) concurred that "attitudes are likely to shape clinicians' communication, behavior, and ultimately, treatment outcomes" (p. 217).

The Knowledge Index on Psychotropic Medication pre to posttest score changes were analyzed with independent samples *t* tests, there were no statistically significant differences between the control and experimental groups and the change scores. Overall, the participants had a pre mean score of 16.26 (2.91) and a mean post score of 16.88 (3.06) with a possible score of 25. These scores are slightly lower than the 17.3 (14.6) mean reported by Bentley and colleagues (1991). However, the intervention group had slightly higher pre mean score (16.45) and posttest mean score (17.55) than the control group who had a pre mean score of 16.10 (3.64) and a post mean score of 16.33 (3.29). As previously reported, a significant difference was found between the experimental and control group on the KIPMSW change scores occurred with those participants who reported .5-2 years of experience with people with serious mental illness, the experimental groups' posttest mean score was 18.09 (3.08). Furthermore, when comparing the control and experimental group's change scores depending upon having some experience or no experience, a significant difference was found. The experimental group participants who reported some experience had a higher posttest mean score 17.95 (2.97) than the control groups' posttest mean score of 16.77 (2.75). The results suggest

that the intervention focused on psychotropic medication may have been more effective for participants who reported .5-2 years of experience and for those with some experience with people with serious mental illness. Perhaps the information may have been more applicable and pertinent for those with some experience. The degree of knowledge that social worker students should have about psychotropic medication has not been determined but the majority of the students in the study would have received a "D" if this was an exam graded on a 60-70 = D, 70-80 = C, etc., scale. An examination of the items in which the respondents performed well versus poorly yields some interesting information. In general, students in both the control and experimental group answered the true/false questions more accurately than the multiple choice items, which makes sense based on the fifty percent chance of answering correctly even if guessing. Furthermore, questions referring to general information about psychotropic medications were answered more correctly than items targeted at specific drug interactions or side effects. The results may support expanding social work curriculum to include more information about psychotropic medication, specifically side effects and interactions.

The open-ended question results indicated that the students appreciated all three of the classroom interventions and especially the role-play with the standardized clients. Students offered many suggestions for future classroom interventions; these included; videotaping the assessments with standardized clients, using smaller groups, and having a guest speaker for the pharmacy discussion. Overall, the students suggested more information, time and practice with this specific population.

Attitude Research

Studying attitudes is difficult and the literature offers possible explanations as to why it is difficult and identifies some barriers to assessing attitude change. Brinol and Petty (2005) studied individual differences on attitude change and motivation. They reported that in different situations and for different people, "the same attitude can be the result of the operation of different motives" (p. 580). Furthermore, they state that "a certain motive can influence the amount of thinking in which people engage when making a social judgment" (Brinol & Petty, 2005, p. 581). Participants in this study may have not been adequately motivated to engage in assessing their attitudes about people with serious mental illness and psychopharmacology, after all participation in the study was voluntary and not required for passing the course.

According to Brinol and Petty (2005), some people like information presented that is clearly divided into two sides in order for cognitive processing to occur before an attitude is changed. Furthermore, they claim that "people differ in the extent to which they attend to their own attitudes, feelings, needs, and concerns" (Brinol & Petty, 2005, p. 584). Fazio (2000) reported that "individuals appear to vary in their chronic tendencies to engage in evaluative responding" (p, 5). Fazio went on to suggest that in order for attitudes to change, individuals need to evaluate the object with new information. Asking people to self-report their attitude is likely to vary, therefore, construct validity of an attitude is questionable. In addition, providing alternative ways to evaluate an attitude object, such as people with mental illness or the use of psychotropic medication, may have affected some individuals' attitude change more than just exposure to the information. For example, an exercise that had students critically examine the use of the

psychotropic medication (pro's and con's) or engaging students in a debate about the issue of diagnosing people with a serious mental illness may have been more effective in changing attitudes.

Literature also discusses the strength of an attitude as a consideration in assessing attitude change, "When people are committed to an attitude, they are more certain their attitude is correct, they are more confident they will not change and their attitude is more stable" (Brinol & Petty, 2005, p. 586). Davidson (1995) studied attitude change and suggested that "attitude strength should depend on the amount of information that one has about the attitude object" (p. 315). Furthermore, the effect of a new piece of information would be relatively dramatic when one has very little existing information about the attitude object, conversely if one has studied the subject in-depth, new information would have little effect (Davidson, 1995). This implies that a strong initial attitude would be difficult to change, especially for those that have in-depth knowledge about the subject. In this study, participants had fairly positive attitudes about people with serious mental illness prior to the intervention as indicated by their scores on the Attitude to Mental Illness subscale with a mean pre score of 22.81 out of a possible score of 25 (with a higher score reflecting a more positive attitude). This suggests that changing attitudes about people with serious mental illness would be difficult with this sample population unless new information was explored in-depth.

Attitudes based on direct experience have been found to be more influential in predicting later behavior than those based on learning material (Wallach, 2004), although, it has not been determined if attitudes are linked to career choice behavior. Furthermore, Wallach (2004) reported that a small amount of exposure can be detrimental and that

prolonged, intimate exposure on an equal basis, is superior in changing attitudes towards people with mental illness. This study briefly exposed participants to psychotropic medications which could somewhat explain the lack of change in the scores on the Attitude toward Psychotropic Medication questionnaire.

The accessibility of attitudes is another area that has been extensively researched and could be another factor in the lack of results in the study. There is a growing body of research indicating that attitudes are constructed from whatever information happens to be currently accessible (Erber, Hodges, & Wilson, 1995). Fazio (2000) studied accessible attitudes and stated "one of the benefits of possessing an attitude is that the individual does not need to engage in an extensive process of deliberative reflection regarding the value of the object every time it is encountered. Instead, the preexisting attitude provides a ready aid for appraising the object, especially with more accessible attitudes" (p. 15). This suggests that participants in this study may not have engaged in an extensive process while completing the attitude measures. Furthermore, the fact that the study used repeated measures may have decreased their deliberative reflection on the posttests.

Another area of attitude research that is related to this study concerns social desirability and attitudes. It was expected that social work students possess a positive attitude towards people with serious mental illness due to the professions' commitment to underserved and disadvantaged populations. Research indicates that attitudes toward a given object may assume a particular stance because that stance allows one to communicate group membership (Fazio, 2000). Attitudes can provide a means of communicating one's social identity, expressing one's core values, and maintaining or

enhancing one's self-esteem (Fazio, 2000; Brinol & Petty, 2005). Furthermore, attitudes provide a social comparison function and a normative function (Fazio, 2000). This means that groups exert influence on individual attitudes because other people provide an informational standard of comparison for evaluating people's own attitude and because they provide social norms through which people can gain or maintain group acceptance (Fazio, 2000). Social work education spends considerable time discussing social justice and helping students understand the impact of oppression on disadvantaged groups. Social work education enables students to integrate the knowledge, values and skills of the social work profession (CSWE, 2001). Therefore, students learn "appropriate" or politically correct attitudes in order to belong to the profession, which may have influenced their responses to the attitude questionnaires.

Knowledge and Learning Research

How students learn and acquire knowledge is another area of education that has been extensively researched. Literature offers suggestions to educators for improving the likelihood that students will acquire and retain new information. Goslin (2003) reports that learning requires engagement and that "learning of complex knowledge rarely takes place instantly" (p. 16). Furthermore, engagement involves the investment of energy or effort on the part of the learner, activities such as paying attention, concentrating, mentally rehearsing, thinking and practicing indicate engagement (Goslin, 2003). The only intervention in this study that students actively engaged in was the role-play with standardized clients. The intervention focused on psychotropic medication had a goal of increasing knowledge but without active engagement students may have been limited in their ability to acquire new knowledge.

Learning and memory are functions in the brain and research suggests that the "brain will dispose of memories that are not accessed" (Sprenger, 1999). There are five memory lanes or gateways to access memories in the brain and how knowledge is obtained makes a difference in how the brain stores the information. The five memory lanes are the semantic, episodic, procedural, automatic and emotional (Sprenger, 1999). Semantic memory holds information learned from words, however, in order for information to be transferred from short-term memory to long-term memory takes several repetitions and has to be stimulated by associations, comparison and similarities (Sprenger, 1999). According to Sprenger (1999) emotional memory takes precedence over any other kind of memory as the brain gives priority to emotions. Therefore, active emotional engagement appears to be a key to learning (Sprenger, 1999). The fact that students were exposed to the information regarding psychotropic medication early in the semester without active engagement and then asked over three months later to take the KIPMSW posttest may have contributed to the lack of improvement on the change scores.

Implications and Recommendations

The study was intended to enhance existing knowledge concerning effective classroom techniques focusing on improving knowledge and attitude towards mental illness. Despite the limitations previously outlined, this study has implications for improving social work education with recommendations for future studies. The NASW Code of Ethics identifies as one of the ethical principles "Social workers practice within their areas of competence and develop and enhance their professional expertise. Social workers continually strive to increase their professional knowledge and skills to apply them in practice. Social workers should aspire to contribute to the knowledge base of the

profession" (Miley, O'Melia & DuBois, 2004, p. 474). Furthermore, the Code of Ethics outlines social work responsibilities to the profession and states "Social workers should promote and facilitate evaluation and research to contribute to the development of knowledge" (Miley, et al., 2004, p. 487).

Social Work Education

The results of the study provide social work educators with knowledge about the effectiveness of an intervention targeted at improving attitudes. This study contributes to the field of inquiry regarding attitude change theory by demonstrating that it may take more than a seven and one-half hour intervention to affect attitude change.

In addition, the results of the study contribute to the field of education as the intervention includes concepts from a variety of learning theories. Social work education struggles with teaching practice skills in the classroom, the study increases the knowledge regarding potentially effective strategies, such as the use of standardized clients. Social work curriculum has moved to infusing information regarding specific populations throughout courses. The field practicum offers a place for students to be exposed to diverse populations, therefore, interventions may be more effective if they are applicable to students' field placement. An argument may be made that traditional curriculum may not sufficiently prepare students for practice with specific populations. Furthermore, without establishing standards defining what social workers' attitudes or knowledge about people with serious mental illness or psychotropic medications should be, it may be difficult to determine the effectiveness of classroom interventions.

It is critical in both social work classrooms and field placements to pay attention to attitudes. Knowledge and skills are not enough. Positive attitudes are essential to

effective work with disadvantaged populations, such as people with serious mental illness (Shera & Delva-Tauiliili, 1996). Hopefully, the findings of the study provide evidence that exposure (longer than one class session) within the context of an educational experience should be considered as an important element to investigate as a basis for nurturing interest in working with people with serious mental illness. Furthermore, competence in providing services to this population will be enhanced by addressing the issues of psychotropic medications and using the DSM-IV-TR. Social workers need to be educated to speak to multidisciplinary teams in the mental health environment, as well as to be informed about all aspects of treatment and interventions. Because of the commitment to disadvantaged populations, social work educators must continue to survey students to form a basis from which to systematically monitor interest, attitudes, and promote practices in these populations (Werrbach & DePoy, 1993).

Future Studies

Implications for further studies include surveying social work practitioners both to determine standards or minimum levels of knowledge/attitudes towards people with serious mental illness and the use of psychotropic medication required in order to be an effective mental health practitioner.

One of the major limitations in this study was the choice of instruments utilized, a recommendation would be to research new and better instruments in order to more accurately measure attitudes and knowledge about people with serious mental illness and psychotropic medication.

Another area that could be improved for future studies is to develop classroom interventions that increase student engagement and evoke emotional responses to the

subject matter. Furthermore, if increasing knowledge is a goal for educators, interventions that provide opportunities for critical examination, repetition, and practice may improve the likelihood that students will retain the information.

In conclusion, systematic inquiry into educational strategies and ongoing evaluation of these strategies is essential if social workers are to be responsive to the needs of people with serious mental illness. Replication of the study in a wider variety of social work classes can serve to provide both individual and group data bases on which to assess and guide the potential education needs of social work students.

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Appendix A:

Fall 2007

Dear Student;

As an MSW student, you are invited to participate in a study evaluating the effectiveness of a classroom intervention focusing on measuring attitudes and knowledge about psychotropic medication and people with serious mental illness. Results of this study will help us learn more about the impact of classroom interventions, design additional strategies, and develop plans for providing research-based educational opportunities for social work students.

Your participation in this survey is entirely voluntary and not a requirement for this class. It should take about 20- 30 minutes to complete the four questionnaires that will be distributed before class begins, at the beginning and at the end of the semester. There are no known risks or benefits from participating and data will not have any identifying information. Your identity will not be revealed in the final results and only group comparisons will be made and reported in summary form.

If you have questions about the study, you can contact the co-investigator, Catherine O'Day, at (970) 613-1653 or principal investigator, Vicky Buchan at (970) 593-0216. If you have any questions about your rights as a volunteer in this research, contact Janell Meldrem, Human Research Administrator at (970) 491-1655. Your return of the completed questionnaires will indicate your consent to participate in this research study.

Thank you for your participation in this research.

Sincerely,

Catherine O'Day
Phone: (970) 613-1653
E-mail: voday@earthlink.net

Appendix B:

Assessing Master Level Social Work Students' Knowledge and Attitudes about Psychotropic Medication and Attitudes about People with Serious Mental Illness Following a Classroom Intervention
Human Subjects Script

(To be read to the control groups prior to distribution of Pretest Form A, the Knowledge Index on Psychotropic Medication, the Attitude towards Psychotropic Medication Survey, and the Attitude to Mental Illness Questionnaire.)

We are conducting research accessing social work students' attitude and knowledge about psychotropic medication and attitudes to people with serious mental illness. The purpose of the study is to determine the effectiveness of a classroom intervention in improving students' knowledge and attitudes about the use of psychotropic medication and attitudes to people with serious mental illness.

You, as an enrolled student in this class, are invited to participate in the study by completing the *Pretest Form, the Knowledge Index on Psychotropic Medication, the Attitudes towards Psychotropic Medication Survey, and the Attitudes to Mental Illness Questionnaire.* We realize that your time is valuable and have attempted to keep the requested information as brief and concise as possible. It will take approximately fifteen to twenty minutes of your time to complete the questionnaires. Your participation in this project is voluntary. At the end of the semester you will be given the same questionnaires to complete and your participation is also voluntary.

There are no known risks to your participation in this study. You have the options of not answering questions you find upsetting or that you don't want to answer.

The anticipated benefits of participating are that as you help us learn more about the outcomes of classroom interventions designed to increase knowledge about psychotropic

Appendix B:

Human Subjects Script, pg 2.

medication and change attitudes towards psychotropic medication and people with serious mental illness.

Your responses are anonymous and will be kept confidential. When the data are presented in a written report, you will not be linked in the data by your name, title, or any other identifying item.

Please assist us in our research and return the completed questionnaires. Thank you very much for your time and assistance.

Appendix C:

Assessing Master Level Social Work Students' Knowledge and Attitudes about Psychotropic Medication and Attitudes about People with Serious Mental Illness Following a Classroom Intervention
Human Subjects Script

(To be read to the experimental groups prior to distribution of Pretest Form A, the Knowledge Index on Psychotropic Medication, the Attitude towards Psychotropic Medication Survey, and the Attitude to Mental Illness Questionnaire.)

We are conducting research accessing social work students' attitude and knowledge about psychotropic medication and attitudes to people with serious mental illness. The purpose of the study is to determine the effectiveness of a classroom intervention in improving students' knowledge and attitudes about the use of psychotropic medication and attitudes to people with serious mental illness.

You, as an enrolled student in this class, are invited to participate in the study by completing the *Pretest Form, the Knowledge Index on Psychotropic Medication, the Attitudes towards Psychotropic Medication Survey, and the Attitudes to Mental Illness Questionnaire.* This class was chosen to participate in the experiment and will receive three classroom interventions. The interventions will include meeting with people with serious mental illness who will come and talk with the classroom about their experience. The second intervention will include an educational videotape on psychotropic medication and the opportunity to discuss these medications in more detail with a local pharmacist. The last intervention will allow all of you the opportunity to complete an assessment with standardized clients who are volunteers from the community. At the end of each intervention you will have the opportunity to provide feedback about the experience and make recommendations for improvements. Your participation in this

Appendix C:

Human Subjects Script, pg.2

study will not impact your grade in this class and is strictly voluntary. However, your participation and feedback would be greatly appreciated as we continue to develop and explore effective classroom strategies.

We realize that your time is valuable and have attempted to keep the requested information as brief and concise as possible. It will take approximately fifteen to twenty minutes of your time to complete the questionnaires. Your participation in this project is voluntary. At the end of the semester you will be given the same questionnaires to complete and your participation is also voluntary.

There are no known risks to your participation in this study. If you experience any discomfort throughout the interventions please discuss this with the instructor. You have the options of not answering questions you find upsetting or that you don't want to answer.

The anticipated benefits of participating are that as you help us learn more about the outcomes of classroom interventions designed to increase knowledge about psychotropic medication and change attitudes towards psychotropic medication and people with serious mental illness.

Your responses are anonymous and will be kept confidential. When the data are presented in a written report, you will not be linked in the data by your name, title, or any other identifying item.

Please assist us in our research and return the completed questionnaires. Thank you very much for your time and assistance.

Appendix D:

Pretest Form A

NO NAME PLEASE!

Part A : Test Matchers

The next few items are designed to ask about things that are unique about you. We do not ask your name because we want you to remain anonymous; however we want to be able to match this pretest with the posttest you will complete at the end of the semester. The same test matcher questions will appear on the posttest and this information will be used to match you pre and posttests.

1. Circle the **first letter** of your **mother's first name** on the list below.
For example, if your mother's name is Mary, you would circle the M below.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

2. Please circle the **last two digits** of your **social security number** below.
For example, if your social security number is 122-33-4567, you would circle 6 in the first column and 7 in the second column.

second to the last digit of your social security number	**last** digit of your social security number
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	0

3. Please write the day of your birth, for example if you were born on the 3rd of the month, you would write 03. _____

Part B: Student Demographic Information

For the following questions please indicate your answer by circling the appropriate response or filling in the blank.

1. Your age: _____

2. Racial/Ethnic group: (Circle all that apply)

   White/Caucasian African American/Black American Indian/Alaska Native

   Asian American/Asian Native Hawaiian/Pacific Islander Puerto Rican

   Mexican American/Chicano Other Latino Other

3. Do you have a Bachelors of Social Work Degree? _____ Yes _____ No

4. How many years of experience, either personal or professional, paid or volunteer, do you have working with people with serious mental illness? (If less than 1 year indicate how many months) _____.

5. Current number of courses completed in masters social work program, including classes you are now attending _____.

Appendix E: **Knowledge Index on Psychotropic Medication for Social Workers**

The following questionnaire is designed to determine the degree of knowledge regarding psychotropic medication. There are 19 true-false statements and 6 multiple choice questions, please clearly circle one answer to each of the statements (T = True, F = False). The information gathered in these questionnaires is confidential and will only be used for the purpose of research. No information will be used for any other purposes. Many thanks for your cooperation.

1. Antipsychotic medications reduce such symptoms as delusions and hallucinations. T F
2. Using alcohol while taking psychotropic medication is not a problem. T F
3. Lithium use needs to be monitored closely, large doses can be toxic. T F
4. Geriatric clients are less sensitive to the side effects of antipsychotic medication. T F
5. Psychotropic medications are those that affect mental functioning, behavior or perceptions. T F
6. Tranquilizers help to correct ego deficits and poor concentration. T F
7. The usual philosophy is to prescribe the smallest possible dose of psychotropic medicine that still provides benefits. T F
8. Use of minor tranquilizers, also referred to as sedative hypnotics, can result in physical or emotional dependency. T F
9. Lithium is the treatment of choice for all forms of schizophrenia. T F
10. Dry mouth, constipation, and blurred vision are all possible side effects of anti-depressant medication. T F
11. Dilantin and Tegretol are antiseizure medications. T F
12. Some major tranquilizers are administered in combination with Artane or Cogentin to prevent parkinsonian side effects. T F
13. Certain antidepressant medications, called MAO (monomine oxidase) Inhibitors, can only be used with dietary restrictions. T F
14. A negative side effect of Haldol is akathasia, which is evidenced by constant pacing and restlessness. T F
15. Clozapine is a drug that claims to be an effective treatment for the negative symptoms of schizophrenia. T F
16. It takes at least 2 weeks before antidepressant medication begins to alleviate symptoms. T F

17. Haldol and Xanax are examples of antidepressants. **T** **F**

18. Medication side effects are usually worse during the beginning phase of drug treatment. **T** **F**

19. Extrapyramidal side effects occur in most people who take antipsychotic medication. **T** **F**

---

20. What drug is prescribed for symptoms of depression?
    A. Zyprexa (Olanzapine)
    B. Risperdal (Resperidone)
    C. Geodon (Ziprasidone)
    D. Effexor (Venlafaxine)

21. A client is complaining of feeling shaky, short of breath, irritable and having difficulty concentrating. The medication that is often prescribed is:
    A. Buspar (Buspirone)
    B. Depakote (Valproic Acid)
    C. Eskalith (Lithium)
    D. Zyprexa (Olanzapine)

22. Possible side effects of taking SSRI medications include all of the following EXCEPT?
    A. Decreased sexual desire
    B. Headaches
    C. Rashes
    D. Odd dreams

23. The combined use of caffeine and antipsychotic medications could result in:
    A. Hypotension
    B. Decreased ability to experience pain
    C. Possible additive toxic effect
    D. Reduced antipsychotic effect

24. A client complains about the side effects of taking Respiradol, treatment will most likely be:
    A. Stop taking the medication
    B. Diet and exercise
    C. Antiparkisonian drug therapy
    D. Benzodiazepine

25. Which of the following decreases the absorption of anti-anxiety and anti-depressant medications?
    A. Alcohol
    B. Cigarette smoking
    C. Antacids
    D. Allergy medications

Appendix F: **Attitude towards Psychotropic Medication Survey**

The following questionnaire is designed to ascertain the attitudes of students towards mental illness. There are 17 statements with five possible answer choices for each statement. Please mark your level of agreement or disagreement with each statement as per the following scale: ***1 = Strongly Agree*** ***2 = Agree*** ***3 = Neutral*** ***4 = Disagree*** ***5 = Strongly Disagree***	*Since this is an attitudinal scale, it is important that your answers be 'off-the-top-of-your-head' rather than deliberately thought out. Please answer all questions.* *The information gathered in these questionnaires is confidential and will only be used for the purpose of research. No information will be used for any other purposes. Thank you for your cooperation.*

1. Psychotropic medications are administered too frequently. _____
2. Psychotropic medications cause a person to lose control. _____
3. Psychotropic medications are too dangerous for routine use. _____
4. The adverse side effects of psychotropic medications are overemphasized. _____
5. Psychotropic medications are usually administered inappropriately. _____
6. Psychotropic medications are logical treatment for serious mental illness. _____
7. Psychotropic medications are detrimental to short-term health. _____
8. Psychotropic medications are used as a means of social control. _____
9. Taking psychotropic medications represents lack of personal strength. _____
10. The use of psychotropic medication reinforces a sick/deviant self-image. _____
11. Psychotropic medication should be treatment of last resort. _____
12. Psychotropic medications do not cure, only masks the problem. _____
13. There are too often negative side effects from taking psychotropic medication. _____
14. It is better to take psychotropic medication than psychosis. _____
15. Psychotropic medications help a person with chronic mental illness function. _____

16. The use of psychotropic medication makes clients too dependent. _____

17. Short-term use of psychotropic medication causes brain damage. _____

Appendix G: **Attitudes to Mental Illness Questionnaire**

The following questionnaire is designed to ascertain the attitudes of students towards mental illness. There are 20 statements with five possible answer choices for each statement. Please mark your level of agreement or disagreement with each statement as per the following scale: ***1 = Strongly Agree*** ***2 = Agree*** ***3 = Neutral*** ***4 = Disagree*** ***5 = Strongly Disagree***	*Since this is an attitudinal scale, it is important that your answers be 'off-the-top-of-your-head' rather than deliberately thought out. Please answer all questions.* *The information gathered in these questionnaires is confidential and will only be used for the purpose of research. No information will be used for any other purposes. Thank you for your cooperation.*

1. Psychiatric patients generally speaking, are difficult to like. _____
2. The mentally ill should be discouraged from marrying. _____
3. Violence mostly results from mental illness. _____
4. Those with a psychiatric history should never be given a job with responsibility. _____
5. Psychiatric diagnoses stigmatize people and should not be used. _____
6. Mental illnesses are wrongly diagnosed in women and ethnic minorities. _____
7. Those who attempt suicide leaving them with serious liver damage should not be given transplants. _____
8. Psychiatric drugs are mostly used to control disruptive behavior. _____
9. ECT should be banned. _____
10. People who take an overdose are in need of compassionate treatment. _____
11. Psychiatric drugs do more harm than good. _____
12. Depression occurs in people with a weak personality. _____
13. Mental illness is the result of adverse social conditions. _____
14. Alcohol abusers have no self-control. _____
15. Mental illnesses are genetic in origin. _____

16. People who had good parenting as children, rarely suffer from mental illness. _____

17. Care in the community for the mentally ill puts society at risk. _____

18. It is preferable that the mentally ill live independently rather than in a hospital. _____

19. Not enough is being done for the care of the mentally ill. _____

20. Patients with chronic schizophrenia are incapable of looking after themselves. _____

Appendix H:

Posttest Form A
NO NAME PLEASE!

Part A : Test Matchers

The next few items are designed to ask about things that are unique about you. We do not ask your name because we want you to remain anonymous; however we want to be able to match this pretest with the posttest you will complete at the end of the semester. The same test matcher questions will appear on the posttest and this information will be used to match you pre and posttests.

1. Circle the **first letter** of your **mother's first name** on the list below.
For example, if your mother's name is Mary, you would circle the M below.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

2. Please circle the **last two digits** of your **social security number** below.
For example, if your social security number is 122-33-4567, you would circle 6 in the first column and 7 in the second column.

second to the last digit of your social security number	**last** digit of your social security number
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	0

3. Please write the day of your birth, for example if you were born on the 3rd of the month, you would write 03. _____

Part B: Student Demographic Information

For the following questions please indicate your answer by circling the appropriate response or filling in the blank.

1. Your age: _____

2. Racial/Ethnic group: (Circle all that apply)

   White/Caucasian African American/Black American Indian/Alaska Native

   Asian American/Asian Native Hawaiian/Pacific Islander Puerto Rican

   Mexican American/Chicano Other Latino Other

3. Do you have a Bachelors of Social Work Degree? _____ Yes _____ No

4. Please check all of the interventions that you attended: (For experimental group only)
___ Video/Panel Speakers ___ Lecture on Psychopharmacology ___Standardized Clients

5. Did you have any additional exposure to people with serious mental illness over the semester, if yes please explain, (for example, attending a mental health conference, practicum, or other content in another class)?

Appendix I – O:
Detailed Client Scenarios for Standardized Clients

Appendix I:
Standardized Client Scenario: Major Depression

Symptoms of Major Depression:

- Depressed mood most of the day, nearly every day (reports feeling sad or empty).
- Markedly diminished interest or pleasure in all, or almost all, activities most of the day.
- Significant weight loss and decrease in appetite.
- Insomnia nearly everyday.
- Fatigue or loss of energy nearly every day.
- Feelings of worthlessness or excessive or inappropriate guilt.
- Diminished ability to think or concentrate.
- Recurrent thoughts of death, recurrent suicidal ideation.

Client Scenario:
Don is 27 years old who has recently been released from the psychiatric unit following a suicide attempt. Don reportedly took an overdose of his blood pressure medication after experiencing depressive symptoms over the past 8 months. His wife found him and called the police. He did not have any medical complications after he got his stomach pumped in the emergency room. Don refused voluntary hospitalization so he was committed for 7 days to the local psychiatric hospital. He has been released with a prescription for anti-depressants and a referral to the local mental health center. The social worker will complete an intake (this will be done with 2-3 students taking turns during the assessment, total time will be 80minutes).
Facts about Don:

- In the space of 8 months, Don went from being a kind, caring, loving husband to becoming unkempt, aggressive, cognitively impaired and deteriorating.
- He became easily frustrated and hit his wife after 5 years of marriage, this resulted in extreme feelings of guilt so he took an overdose in an attempt to "make sure my wife is safe".
- Don and his wife have two children, a son who is 4 and a daughter who is 2-years-old.
- He began drinking heavily over the past year.
- He reports that he feels "fed up with life – it's all too much".
- He reports feeling ignored and isolated.
- He reports a dramatic decrease in sexual functioning, maybe due to medication but he acknowledges that he was having difficulty even before taking the medication.
- He was a full-time engineer at HP but was laid off 5 months ago and has not been looking for work.
- His wife "Betty" is an accountant and works full-time.

- He has been unable to care for the children, so his mother-in-law watches them during the day, while Don is supposed to find work but spends most of his day in front of the television.
- He reports that his best friend died last year which has left him with a sense of despair.
- He only leaves the house to go shopping and reports that he is uninterested in "everything".
- He reports that he is bored with his wife and they frequently bicker, mostly about money and his lack of "motivation".
- He admits to being critical about how she spends their money and she complains that all he does is watch television and drink beer.
- He currently denies any suicidal thoughts, although continues to report depressive symptoms.
- He reports taking his medication but does not like the side effects.
- He is unable to identify any activities that he would like to engage in and does not want to attend church with his wife, which has been their primary social activity for years.
- He reports feeling embarrassed about the overdose and because he lives in a small town "I just know that everyone is talking about what me and I feel so stupid".
- He is a very private man and finds it difficult to discuss his personal business with the social worker so he is reluctant and tends to answer questions briefly with one or two words.

Appendix J:
Standardized Client Scenario: Major Depression

Symptoms of Major Depression:

- Depressed mood most of the day, nearly every day (reports feeling sad or empty).
- Markedly diminished interest or pleasure in all, or almost all, activities most of the day.
- Significant weight loss and decrease in appetite.
- Insomnia nearly everyday.
- Fatigue or loss of energy nearly every day.
- Feelings of worthlessness or excessive or inappropriate guilt.
- Diminished ability to think or concentrate.
- Recurrent thoughts of death, recurrent suicidal ideation.

Client Scenario:
Ted is 67 years old who has recently been released from the psychiatric unit following a suicide attempt. Ted reportedly took an overdose of his blood pressure medication after experiencing depressive symptoms over the past 8 months. His wife found him and called the police. He did not have any medical complications after he got his stomach pumped in the emergency room. Ted refused voluntary hospitalization so he was committed for 7 days to the local psychiatric hospital. He has been released with a prescription for anti-depressants and a referral to the local mental health center. The social worker will

complete an intake (this will be done with 2-3 students taking turns during the assessment, total time will be 80minutes).
Facts about Ted:

- In the space of 8 months, Ted went from being a kind, caring, loving husband to becoming unkempt, aggressive, cognitively impaired and deteriorating.
- He became easily frustrated and hit his wife after 35 years of marriage, this resulted in extreme feelings of guilt so he took an overdose in an attempt to "make sure my wife is safe".
- Ted and his wife have two children, both adults who live out of state.
- He began drinking heavily over the past year.
- He reports that he feels "fed up with life – it's all too much".
- He reports feeling ignored and isolated.
- He was a full-time farm worker and is retired and on a fixed moderate income.
- He reports that his best friend died last year which has left him with a sense of despair.
- He only leaves the house to go shopping and reports that he is uninterested in "everything".
- He reports that he is bored with his wife and that since retiring they frequently bicker.
- He admits to being critical about how she spends their money and she complains that all he does is watch television and drink beer.
- He currently denies any suicidal thoughts, although continues to report depressive symptoms.
- He reports taking his medication but does not like the side effects.
- He is unable to identify any activities that he would like to engage in and does not want to attend church with his wife, which has been their primary social activity for years.
- He reports feeling embarrassed about the overdose and because he lives in a small town "I just know that everyone is talking about what me and I feel so stupid".
- He is a very private man and finds it difficult to discuss his personal business with the social worker so he is reluctant and tends to answer questions briefly with one or two words.

Appendix K:
Standardized Client Scenario: Major Depression

Symptoms of Major Depression:

- Depressed mood most of the day, nearly every day (reports feeling sad or empty).
- Markedly diminished interest or pleasure in all, or almost all, activities most of the day.
- Significant weight loss/gain and increase/decrease in appetite.
- Insomnia nearly everyday.
- Fatigue or loss of energy nearly every day.
- Feelings of worthlessness or excessive or inappropriate guilt.
- Diminished ability to think or concentrate.

- Recurrent thoughts of death, recurrent suicidal ideation.

Client Scenario:
Dee is a 37-year-old female. She is being referred to the mental health agency by her family physician that has been prescribing anti-depressants for the past 6 months and continues to report symptoms of depression. This is the first meeting at the mental health center, a social worker will complete and intake (this will be done with 2-3 students taking turns during the assessment, total time will be 80 minutes).
Facts about Dee:

- She is complaining of weight gain, 20 lbs over the past 6 months.
- She has an increased need for sleep
- She reports experiencing anger combined with radical mood swings and excessive crying.
- She reports minimal relief from symptoms with medication but isn't sure if "talk therapy" will help her as she is reluctant to "air her dirty laundry to a stranger".
- She has a strong religious affiliation with a fundamentalist church that has been discouraging her from accessing mental health treatment.
- She has a teenage son "Vern" who is 16 and has been getting into trouble at school, most recently he was caught selling marijuana in the locker room and was suspended and charged and is now on probation.
- Dee is on her third marriage and her husband and Vern fight all the time, and she reports feeling in the middle.
- She reports that her marriage is "good" except for the differences in parenting, she is strict and claims that "Rob" does not discipline her son as he should.
- Dee reports that she has not control over her situation and is angry that Vern's behavior is destroying her marriage and her family and that she can't do anything about it.
- Dee works as a housekeeper at a local hospital and she likes her job.
- She reports minimal social contacts, one friend at work and some people at church but her husband does not belong to the church.
- She reports that she says things "as they are" which puts people off .
- She reports that Rob and her quit drinking alcohol 2 years ago because he was having trouble she denies any concerns but quit "to be a good wife and support her husband".
- She expresses concern about her weight gain as the medication have contributed and she is now trying to lose weight but reports that she has difficulty "motivating myself to go to the gym".
- She denies any current suicidal ideation but admits to feeling "tired and not caring about anything".

Appendix L:
Standardized Client Scenario: Bipolar Disorder

Symptoms of Bipolar Disorder (specifically the manic phase):

- Expansive mood (positive and rising at the extremes to ecstatic)
- Inflated self-esteem or grandiosity
- Decreased need for sleep (feels rested after 3 hours of sleep)
- More talkative than usual with pressure to keep talking
- Flight of ideas , thoughts are racing
- Distractibility (attention easily drawn to unimportant or irrelevant stimuli)
- Increase in goal-directed activity (either socially, at work or school, or sexually) and psychomotor agitation (want to keep moving)
- Excessive involvement in pleasurable activities that have a high potential for painful consequences (engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments)

Client Scenario:
Bob, aged 29, has severe mania, which has been very difficult to control. Bob does not like to access mental health treatment and does not like to take medication "I like the high too much". He is homeless, does not have an employment record, and receives Social Security Disability when he is able to stay in one town for longer than a week or two. His family does not have contact with him and he has no friends except those on the street. He has recently been released from jail, after spending 7 weeks for loitering and causing a public disturbance. He is convinced that he is the next messiah and has messages from God that he will yell at the top of his lungs in front of businesses that he believes need to be "saved" (such as Wal-mart). His release was conditional on following up at the local mental health center. The social worker will complete an intake (this will be done with 2-3 students taking turns during the assessment, total time will be 80 minutes).

Facts about Bob:

- He is manic as he refuses to take medication, his speech is very rapid and he makes inappropriate sexual references.
- He has never married and has no family contact.
- He reports that he would rather be in jail than a psychiatric hospital because they "don't mess with my mind".
- He denies drug or alcohol use, claiming that "God gets me high every minute of the day that is why I am his messenger"
- He does not want to take medications but recognizes that the mental health center can help get his SSD benefits reinstated so he agrees to therapy.
- He reports that he is trying to save money for a bus ticket to "Southern California where the rich people live in paradise".
- He has spent a considerable time in jail due to minor offenses, and he doesn't mid the break "from all the people".
- He sleeps outside as he avoids shelters because "they don't understand me".

- He has difficulty answering questions and staying on track due to his desire to discuss "Gods' messages".
- He is disheveled and unkempt but pleasant and cooperative.
- He reports that he will never take medication that "spoils the high, it is the best and no drug can imitate it".
- He reports a long history of experiencing mania, and denies that his depression "is a problem", denies any history of suicidal ideation but does report and incident when he "hit his father because God told him to", that was his first hospitalization and he can't remember the times or how long he has been in psychiatric units, but states "in and out my whole life because I don't belong anywhere, like Jesus, I just roam the country telling my story".

Appendix M:
Standardized Client Scenario: Bipolar Disorder

Symptoms of Bipolar Disorder (specifically the manic phase):

- Expansive mood (positive and rising at the extremes to ecstatic)
- Inflated self-esteem or grandiosity
- Decreased need for sleep (feels rested after 3 hours of sleep)
- More talkative than usual with pressure to keep talking
- Flight of ideas , thoughts are racing
- Distractibility (attention easily drawn to unimportant or irrelevant stimuli)
- Increase in goal-directed activity (either socially, at work or school, or sexually) and psychomotor agitation (want to keep moving)
- Excessive involvement in pleasurable activities that have a high potential for painful consequences (engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments)

Client Scenario:
Edith, aged 25, has very severe mania, which was very difficult to control. Over the years she had relapsed a number of times after stopping her medication, lithium, although sometimes she had gone more than a year without any symptoms. Her home had changed within two days from being a comfortable middle-class dwelling to being a near wreck as she had scribbled a huge shopping list over every surface. Her neighbors heard her in the early morning talking loudly and playing music they were concerned and approached her but she denied any problems. They noticed that she looked "crazy" with lipstick and dressed for an evening out, it was 6 am, and they notified the police for a safety check. The police took Edith to the emergency department where she was evaluated and hospitalized for 5 days with the goal of resuming her medication. She was released and sent to the mental health center for ongoing treatment and to see the psychiatrist. The social worker will complete an intake (this will be done with 2-3 students taking turns during the assessment, total time will be 80 minutes).

Facts about Edith:

- She is still manic so she talks very quickly and makes inappropriate jokes.

- She has never married, and admits to "sleeping around a lot especially when she is manic".
- She admits to increased gambling and has spent over $10,000 in the past year at a local casino.
- She has a very sketchy work history, claims she owns an art gallery in NY, has been an artist "painter" with her work shown at the Smithsonian, she claims that she has done business with "the Kennedy's and President Bush".
- She reports that her family has "disowned her" because she had an affair with Elvis Presley.
- She has difficulty answering the questions as she would rather discuss her "colorful past".
- She is dressed in loud, bright colors with her makeup thickly applies as if she were going out for the evening.
- She is pleasant and would rather casually talk than complete the assessment
- She is vague while discussing her finances and denies the need to work "I have enough money and connections to not worry".
- She denies any drug problems but admits to alcohol use, especially when she is gambling.

Appendix N:
Standardized Client Scenario: Schizophrenia

Symptoms of schizophrenia:

- Hallucinations – these are problems with sensory perception, which are real for the person who experiences them. They include, auditory hallucinations (including hearing voices, some positive but mostly negative telling the person that they are horrible, people are out to get them, etc.) and somatic hallucinations (the person believes that they are experiencing phenomena like electricity running through their body).
- Delusions – these are beliefs which are considered bizarre, are clearly not supported by the evidence yet are held in an unshakable manner by the person. Delusions can be part of a systematic thought or appear to be completely random. These are usually culturally specific, for example, people in the UK commonly claim that they are royal family.
- Interference with Thought – thought insertion is a form of delusion involving the belief that someone else's thoughts can be placed in the person's mind. This is perceived as thought control or thought broadcasting, where you believe that your private thoughts are being broadcast to the general public.
- Disorganized speech – frequent incoherence or losing train of thought
- Negative symptoms – which have to do with affect, usually people experience a flattened affect and difficulty expressing emotion (inappropriate affect).
- Paranoia – preoccupation with one or more delusions or frequent auditory hallucinations.

Client Scenario:
John is a student at a local university (age 19) who lives with his father and his stepmother. He was admitted to the local psychiatric hospital last month following an incident in which the police were involved. The events surrounding the admission are unclear, but it seems that John's stepmother called when his behavior became extreme and she felt threatened. The brief report from the hospital indicates that he has been diagnosed with schizophrenia and has been drifting in and out of contact with mental health services over the past 5 years. There is some evidence that he regularly abuses alcohol and the he likes to use recreational drugs, such as cannabis and ecstasy. He is a strong man and he can present in a rather threatening manner to people who annoy him and the hospital social worker reports that he has a "short fuse". John has been conditionally released from the hospital under the condition that he follows-up at the local mental health center. The social worker will complete an intake (this will be done with 2-3 students taking turns during the assessment, total time will be 80 minutes).
Facts about John:

- He reports feeling like a failure as his brother is very successful and attending Cambridge University, lives and works in London. When his father divorced and remarried his stepmother, they encouraged him to live with him and attend the university. He has not gotten used to the idea of being in a new family and has had difficulty adjusting to life with his stepmother (who he believes can read his thoughts and has plotted against him trying to get him institutionalized so that she can have his father to herself).
- He has resumed taking anti-psychotic medication but complains about feeling sick, difficulty concentrating, and doesn't like how "numb" he feels.
- He is currently hearing voices that tell him to hurt his stepmother and his father, although he denies ever acting on the voices.
- His affect is flat; he smiles inappropriately while discussing his symptoms.
- He reports feeling "strong and invincible with a mission to reunify his family, find his mother and make his parents get married again". He is very delusional about his ability to reunify his family.
- He reports that his stepmother is able to implant thoughts in his head and that she can hear what he is thinking, he expresses paranoid thoughts about her and that she is following him "wherever he goes".
- He has difficulty answering questions and staying on track; he becomes very tangential and requires constant redirecting to keep him on task.
- He reports using drugs and alcohol and has no desire to quit "I like the way they make me feel and the voices are dull when I drink and use drugs."
- This is a difficult client to portray due to the wide range of symptoms and the barriers to thinking clearly.
- He has low self-esteem and avoids people, he "sees" people looking at him, and he "feels/imagines" people are around the corner "waiting" for him.
- He has not been attending school, and is avoiding social contacts; he is isolative and preoccupied with his symptoms.
- He is unemployed and has not been taking care of his hygiene, eating habits are poor and he denies sleeping more than 5 hours due to the voices.

- He is paranoid about the questions that are being asked and goes off in other directions rather than answer them directly.

Appendix O:
Standardized Client Scenario: Schizophrenia

Symptoms of schizophrenia:

- Hallucinations – these are problems with sensory perception, which are real for the person who experiences them. They include, auditory hallucinations (including hearing voices, some positive but mostly negative telling the person that they are horrible, people are out to get them, etc.) and somatic hallucinations (the person believes that they are experiencing phenomena like electricity running through their body).
- Delusions – these are beliefs which are considered bizarre, are clearly not supported by the evidence yet are held in an unshakable manner by the person. Delusions can be part of a systematic thought or appear to be completely random. These are usually culturally specific, for example, people in the UK commonly claim that they are royal family.
- Interference with Thought – thought insertion is a form of delusion involving the belief that someone else's thoughts can be placed in the person's mind. This is perceived as thought control or thought broadcasting, where you believe that your private thoughts are being broadcast to the general public.
- Disorganized speech – frequent incoherence or losing train of thought
- Negative symptoms – which have to do with affect, usually people experience a flattened affect and difficulty expressing emotion (inappropriate affect).
- Paranoia – preoccupation with one or more delusions or frequent auditory hallucinations.

Client Scenario:
Maggie is a student at a local university (age 21) who lives with her boyfriend (who is also mentally ill), she met him at the hospital and they have been together for 1 year. She had been fairly stable on her medication but complains of continually hearing voices. She follows up with her psychiatrist who has recommended therapy in conjunction with medication as she reports "feeling overwhelmed". Her boyfriend has been diagnosed with depression so she is worried about him. She is trying to get through school and hopes to become a high school English teacher. She is bright, articulate and has good insight into her mental illness. She has a long history of hospitalizations and trials of medication with little relief from her auditory hallucinations. She is presenting at the mental health center for an intake (this will be done with 2-3 students taking turns during the assessment, total time will be 60-80 minutes).

- She reports feeling like a failure as her brother is very successful and attending Cambridge University, lives and works in London. She has limited support from her family as her mother has bipolar disorder and her father spends a considerable amount of his time taking care of her.

- She has recently started on a new anti-psychotic medication but complains about feeling sick, difficulty concentrating, and doesn't like how "numb" she feels.
- She is currently hearing voices that tell her to hurt her boyfriend, although she denies ever acting on the voices.
- Her affect is flat; she smiles inappropriately while discussing her symptoms.
- She reports "feeling tired of not having any personal time" as the voices are always present and she never feels alone.
- She reports that she often times thinks that her boyfriend is able to read her thoughts and that she can read his, but she is not paranoid and sees this as a 'sign that we should be together".
- She has difficulty answering questions and staying on track; she becomes very tangential and requires constant redirecting to keep on task.
- She denies any drug or alcohol use, "I already have trouble thinking why make it worse?"
- She acknowledges that she does not have the coping skills to manage her symptoms, besides taking medication.
- She has no social supports and reports feeling awkward with strangers and that the voices "alert her to stay away from mean people".
- This is a difficult client to portray due to the wide range of symptoms and the barriers to thinking clearly.
- She has low self-esteem and avoids people, she "sees" people looking at her, and she "feels/imagines" people are around the corner "waiting" for her.
- She has not been attending school, and is avoiding social contacts; she is isolative and preoccupied with her symptoms.

Appendix P- V:
Brief Standardized Client Scenarios:

Appendix P:
Client Scenario: Major Depression
Don is 27 years old who has recently been released from the psychiatric unit following a suicide attempt. Don reportedly took an overdose of his blood pressure medication after experiencing depressive symptoms over the past 8 months. His wife found him and called the police. He did not have any medical complications after he got his stomach pumped in the emergency room. Don refused voluntary hospitalization so he was committed for 7 days to the local psychiatric hospital. He has been released with a prescription for anti-depressants and a referral to the local mental health center. The social worker will complete an intake (this will be done with 2-3 students taking turns during the assessment, total time will be 80minutes).

Appendix Q:
Client Scenario: Major Depression
Ted is 67 years old who has recently been released from the psychiatric unit following a suicide attempt. Ted reportedly took an overdose of his blood pressure medication after experiencing depressive symptoms over the past 8 months. His wife found him and called the police. He did not have any medical complications after he got his stomach pumped in the emergency room. Ted refused voluntary hospitalization so he was committed for 7 days to the local psychiatric hospital. He has been released with a prescription for anti-depressants and a referral to the local mental health center. The social worker will complete an intake (this will be done with 2-3 students taking turns during the assessment, total time will be 80minutes).

Appendix R:
Client Scenario: Major Depression
Dee is a 37-year-old female. She is being referred to the mental health agency by her family physician that has been prescribing anti-depressants for the past 6 months and continues to report symptoms of depression. This is the first meeting at the mental health center, a social worker will complete and intake (this will be done with 2-3 students taking turns during the assessment, total time will be 80 minutes).

Appendix S:
Client Scenario: Bipolar Disorder
Bob, aged 29, has severe mania, which has been very difficult to control. Bob does not like to access mental health treatment and does not like to take medication "I like the high too much". He is homeless, does not have an employment record, and receives Social Security Disability when he is able to stay in one town for longer than a week or two. His family does not have contact with him and he has no friends except those on the street. He has recently been released from jail, after spending 7 weeks for loitering and causing a public disturbance. He is convinced that he is the next messiah and has messages from

God that he will yell at the top of his lungs in front of businesses that he believes need to be "saved" (such as Wal-Mart). His release was conditional on following up at the local mental health center. The social worker will complete an intake (this will be done with 2-3 students taking turns during the assessment, total time will be 80 minutes).

Appendix T:

Client Scenario: Bipolar Disorder

Edith, aged 25, has very severe mania, which was very difficult to control. Over the years she has relapsed a number of times after stopping her medication, lithium, although sometimes she had gone more than a year without any symptoms. Her home had changed within two days from being a comfortable middle-class dwelling to being a near wreck as she had scribbled a huge shopping list over every surface. Her neighbors heard her in the early morning talking loudly and playing music they were concerned and approached her but she denied any problems. They noticed that she looked "crazy" with lipstick and dressed for an evening out, it was 6 am, and they notified the police for a safety check. The police took Edith to the emergency department where she was evaluated and hospitalized for 5 days with the goal of resuming her medication. She was released and sent to the mental health center for ongoing treatment and to see the psychiatrist. The social worker will complete an intake (this will be done with 2-3 students taking turns during the assessment, total time will be 80 minutes).

Appendix U:

Client Scenario: Schizophrenia

John is a student at a local university (age 19) who lives with his father and his stepmother. He was admitted to the local psychiatric hospital last month following an incident in which the police were involved. The events surrounding the admission are unclear, but it seems that John's stepmother called when his behavior became extreme and she felt threatened. The brief report from the hospital indicates that he has been diagnosed with schizophrenia and has been drifting in and out of contact with mental health services over the past 5 years. There is some evidence that he regularly abuses alcohol and the he likes to use recreational drugs, such as cannabis and ecstasy. He is a strong man and he can present in a rather threatening manner to people who annoy him and the hospital social worker reports that he has a "short fuse". John has been conditionally released from the hospital under the condition that he follows-up at the local mental health center. The social worker will complete an intake (this will be done with 2-3 students taking turns during the assessment, total time will be 80 minutes).

Appendix V:

Client Scenario: Schizophrenia

Maggie is a student at a local university (age 21) who lives with her boyfriend (who is also mentally ill), she met him at the hospital and they have been together for 1 year. She had been fairly stable on her medication but complains of continually hearing voices. She

follows up with her psychiatrist who has recommended therapy in conjunction with medication as she reports "feeling overwhelmed". Her boyfriend has been diagnosed with depression so she is worried about him. She is trying to get through school and hopes to become a high school English teacher. She is bright, articulate and has good insight into her mental illness. She has a long history of hospitalizations and trials of medication with little relief from her auditory hallucinations. She is presenting at the mental health center for an intake (this will be done with 2-3 students taking turns during the assessment, total time will be 60-80 minutes).

Appendix W:

Biopsychosocial Work Assessment

History of present and past medical condition: _____

_____

_____

_____

_____

Legal Status

MDPOA	_____
POA	_____
GAL	_____
CO CPR Directive	_____
Guardian	_____
Living Will	_____

_____

_____

_____

_____

_____

_____

Vocational Status

Employed	_____
Disabled	_____
Retired	_____
Veteran	_____
Unemployed	_____
Student	_____

_____

_____

_____

_____

_____

_____

Financial

Insurance	_____
Medical Bills	_____
Medication	_____
Other Bills	_____
Source of Income	_____

_____

_____

_____

_____

_____

_____

STAMPER PLATE

Resource Information

Legal Assistance _____
Involvement with other agencies _____
Requires assistance w/ accessing resources _____

Concerns Related to Basic Needs

Food _____
Clothing _____
Shelter _____
Transportation _____
Childcare _____
Utilities _____

Safety Issues

Domestic Violence _____
Child Neglect / Abuse _____
Unsafe Behaviors _____
Elder Abuse / Neglect _____

Home Environment

House in poor condition / unsanitary _____
Meets appropriate level of care _____
Caregiver issues _____
DME Needs _____
Living Situation _____

Issues Affecting the Family

Disease Process _____
Psychological stresses _____
Grief Issues _____
Conflict Issues _____

Mental Health Status

Orientation (situation, person, place, time): _____

Mental Health Treatment/History:

_____
_____
_____
_____
_____
_____

Substance Abuse History:

_____
_____
_____
_____
_____

Symptoms (current or past history):
Depression___
Anxiety_____
Auditory Hallucinations _____
Visual Hallucinations_____
Thought Disorder (paranoia or grandiosity) _____
Sleeplessness _____
Cognitive Deficits _____
Other _____

Suicide History (assess for current suicidal ideation and past history):_____

_____
_____
_____

History of Violence (actions or thoughts) Towards Others:_____

_____
_____

DSM-IV-TR Diagnosis: Axis I_____
Axis II_____