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The Effects of Mental Health Stigma on Treatment Attitude within the Therapeutic Dyad: Therapist Beliefts in the Mental Health Recovery Process for Patients with Schizophrenia

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Dissertation Approval

This is to certify that the thesis presented to us by Michele R. Miele_____ on the _15th_ day of _May_____, 2014___, in partial fulfillment of the requirements for the degree of Doctor of Psychology, has been examined and is acceptable in both scholarship and literary quality.

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Abstract

Objective: Stigma maintains a belief that a recovery process is infeasible for patients with schizophrenia. As clients internalize stigma and therapists maintain a conceptualization of non-recovery, their core beliefs about recovery may become treatment barriers. This study investigated clinicians' attitudes towards recovery by evaluating the relationship between knowledge of schizophrenia, attitudes of stigma, and attitudes of tolerance held towards people with schizophrenia; included in the evaluation are years of experience working as a mental health professional. Method: This study is a cross-sectional survey design using a sample of 319 participants. The survey consisted of the following measures: knowledge of schizophrenia and attitudes (tolerance) held towards people with schizophrenia (SKAPS), attitudes (stigma) toward mental illness (MICA-4) and belief in the process of recovery (RKI). Results: The findings of this study suggest that 1) stigma exists along with recovery beliefs, 2) attitudes of tolerance are associated with less stigma of mental illness, and 3) attitudes of tolerance are associated with less belief in the recovery process. In an exploratory analysis, having experience in providing treatment to those with severe mental illness did not influence the associations between knowledge, attitudes (stigma and tolerance), and recovery. Therefore, the findings were found to be comparable among clinicians regardless of experience level. Conclusions: This study has indicated the need for advocacy for patients with schizophrenia and also awareness of mental health stigma. Mental health stigma has complex roots in society and can become a hidden construct that complicates the process of recovery for patients.

Table of Contents

List of Figures

List of Tables

Chapter 1 Introduction

Statement of the Problem

Schizophrenia is a psychiatric illness that is characterized by neurocognitive deficits in the perception or expression of reality, resulting in significant social or occupational dysfunction (American Psychiatric Association [APA], 2000). Combining the complexity of neurological, environmental, cognitive, and behavioral factors, this disorder has a prevalence rate of 0.7% in the United States alone and over 24 million individuals worldwide (Bradshaw & Roseborough, 2004). The overall annual cost associated with schizophrenia in the U.S. is approximately $62.7 billion from direct treatment, societal and family expenses (National Institute of Mental Health [NIMH], 2011; Wu et al., 2005). In addition to the direct medical costs associated with schizophrenia, the impact on the lives of persons diagnosed with schizophrenia creates a human cost of psychological distress (Thornicroft et al., 2004).

To help reduce the cost of psychological distress, a new framework for mental health care delivery has been developed through recovery transformation. The recovery model has exposed a need for redefining the process of recovery in order to offer patients greater hope and quality of life. The Substance Abuse and Mental Health Services Administration (SAMHSA) has developed a consensus statement of mental health recovery, defined as a journey of reaching one's potential through healing and transformation while living a meaningful life in his or her community despite a mental health disability (Bellack, 2006).

The recovery process of many individuals with mental illness, particularly those with schizophrenia, has been curtailed due to feeling devalued and discriminated against

within society because of their mental illness (Phelan & Link, 2004). Cultural stereotypes of patients with schizophrenia include being labeled as crazy, dangerous, incompetent, and not only responsible for their illness but also being unable to recover. Believing these stereotypical labels can produce additional inner psychological distress for the patient (Cavelti, Kvrgic, Beck, Rusch, & Vauth, 2011; Corrigan, 1998; Corrigan & Watson, 2002; Angermeyer, Beck, Dietrich, & Holsinger, 2004). Studies indicate that internalized stigma or self-stigma can negatively affect patients with schizophrenia if they embrace stigma as a self-fulfilling prophecy for failure to experience recovery (Berge & Ranney, 2005; Cavelti et al., 2011; Knight et al., 2003; Link & Phelan, 2002; Ritsher, Otilingam, & Grajales, 2003; Ritsher & Phelan, 2004; Watson, Corrigan, Larson, & Sells, 2007; Wright, Gronfien, & Owens, 2000).

Self-stigmatization can result in a reduction of self-esteem and an ambivalent attitude towards treatment (Cavelti, Beck, Kvrgic, Kossowsky & Vauth, 2012; Knight et al., 2003; Berge & Ranney, 2005; Cooper, Corrigan & Watson, 2003; Kleim, et al., 2008; Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001; Penn & Wykes, 2003; Sirey et al., 2001; Watson et al., 2007). Ambivalence ultimately affects the process of recovery by reducing self-efficacy (Corrigan & Watson, 2006; Corrigan et al., 2010; Sibitz, Unger, Woppmann, Zidek & Amering, 2011; Vauth, Klein, Wirtz & Corrigan, 2007). Thus reduction in self-efficacy can diminish the client's belief in his or her ability to change, which can impede treatment and his or her engagement in the recovery process (Barkhof et al., 2006; Fung, Tsang & Corrigan, 2008; Link, Mirotznik & Cullen, 1991; Lysaker, Buck, Taylor & Roe, 2008; Lysaker, Salyers, Tsai, Spurrier & Davis, 2008; Miller &

Rollnick, 2002; Mulder, Koopmans, & Hengeveld, 2005; Perlick et al., 2001; Ritsher & Phelan, 2004; Sirey et al., 2001; Struening et al., 2001).

Patients who experience self-stigma related to mental illness can develop strong beliefs that they are unable to experience recovery. This can result in ambivalence towards change (Cavelti et al., 2011). Ambivalence can reduce self-efficacy and continue to support the client's beliefs that he or she is unable to work towards recovery (Beck & Rector, 2001; Beck, Rector, Stolar & Grant, 2009; Cavelti et al., 2012; Miller & Rollnick, 2002). The recovery paradigm for patients with mental health illness is a recent development and may be characterized as a process of continual growth towards recovery. The intention is to build self-identity around the ability to discover and pursue personal meaningful goals and aspirations, which will also build a sense of self-efficacy. This expectation is viewed and promoted as realistic, despite their illness, and stands in sharp contrast to the patients' being disempowered by being externally or self-labeled, solely in reference to the adverse effects of their illness. (Davidson, O'Connell, Tondora, Staeheli & Evans, 2005).

However, treatment for schizophrenia continues to be approached from a medical model, and therefore, focuses largely on medication management, as opposed to working with the person to develop an individualized recovery plan that touches on all aspects of a person's life, seeing him or her as a partner in this process. A sole focus on medication treatment may ignore the fact that some of the most debilitating, cognitive-driven maladaptations to society and personal growth remain unaffected by medications; these include, for example social-avoidance, defeatist performance beliefs, negative expectancies for pleasure and success, and self-perception of limited cognitive resources

(Beck & Rector, 2001; Beck et al., 2009). Therefore, the need to provide treatment for such cognitively based symptoms that are unresponsive to medications has prompted expanding treatment using cognitive behavioral therapy and many recovery-oriented care treatments.

To provide structure and guidance for recovery-oriented services, SAMSHA has identified ten characteristics of effective treatment to be endorsed: self-direction, individualized and person-centered, holistic, nonlinear, strengths-based, peer support, respect, responsibility and hope. Hope resounds in the message that people can, and do, overcome the barriers and obstacles that confront them to begin recovery (Russinova, 1999). Several comprehensive treatments have been developed to assist clients in becoming involved with their overall treatment and recovery; one of the best known is Kim Mueser: Illness management and Recovery. This program helps patients learn how to better manage their illnesses in the context of pursuing their personal goals (Mueser, Meyer, Penn, Clancy, Clancy & Salyers, 2006). Other treatment modalities include family intervention, supported employment, skills training, and cognitive behavioral therapy. The Beck and Rector CBT model for schizophrenia helps clients restructure and process cognitive events. A particular area of interest in Beck's model used for treatment of schizophrenia is the identification of client barriers to treatment and the recovery process. Beck addresses how client's low expectations for happiness, pleasure, success and social acceptance can become barriers to treatment. Patients can become accustomed to a lifestyle of apathy, low energy and low motivation, which they often generalize into their approach towards treatment. These barriers contribute to ambivalence and fear of pursuing change, which is often due to a lack of self-confidence in the ability to recover.

Thus, identifying and addressing self-stigmatizing beliefs that hinder some patients' treatment attitudes may help in the recovery process (Beck et al., 2009; Turkington, Kingdon & Turner, 2002).

In addition to client barriers negatively impacting treatment effectiveness, the Beck and Rector (2009) model also addresses therapist barriers that impede the effectiveness of CBT for schizophrenia. Foremost, it is essential for therapists to understand that the way they view treatment for those with schizophrenia will ultimately affect the therapeutic process. Therapists are not immune to forming negative attitudes towards this population (Aggarwal, 2008; Kingdon, Sharma & Hart, 2004). Studies have found that mental health professionals hold similar stereotypical views as the general public towards those with mental illness and that they show little, if any, desire to interact closely with them (Lauber, Nordt, Braunschwieg & Rossler, 2006; Nordt, Rossler & Lauber, 2006; Servais & Saunders, 2007).

Studies also indicate that because therapists match the attitudes of patients who carry a belief that recovery is not possible, it reinforces and confirms this belief for both the therapist and the client (Link et al,. 1991; Beck et al., 2009; Kleim et al., 2008; Vauth, 2007). Therefore, it is helpful for therapists to be aware of their own beliefs and attitudes in regard to their conceptualization of schizophrenia and the recovery process. Often therapists, without an awareness of their treatment attitudes, may disengage from their patients. This withdrawal may be due to established beliefs about schizophrenia that are based on the biological disease model of the patient's limited cognitive capacities, and therefore on his or her limited recovery options (Beck et al., 2009). Inadvertently, the therapeutic rapport can become strained with a separated view of "us" and "them"

treatment attitude, reinforcing the patient's feelings of stigma (Beck et al., 2009; Vauth, 2007; Corrigan, Larson & Rusch, 2009).

The pursuit of mental health recovery for those with schizophrenia can lie in the balance between the expectations of both the therapist and the patient. For example, the therapist and client can have low-expectations of recovery, presenting barriers to therapy and ultimately reinforcing the patient's self-stigma and low self-efficacy. Hopelessness towards the patient's ability to recover leaves both the therapist and client in each one's own right feeling helpless. The patient's low self-efficacy is reinforced by his or her belief of inadequacy and can be further complicated by therapists who do not believe in the patient's ability to experience recovery. Unintentionally, therapists can bring attitudes of non-recovery into their treatment sessions that adversely impact the hope for recovery and further reinforce the patient's own disbelief in his or her ability to experience recovery.

Purpose of the Study

To date, very little research has been completed on the effects of therapist attitudes towards non-recovery. Therapist can be unaware of how their conceptualizations and schemas of the disorder of schizophrenia may include beliefs of non-recovery due to latent and unchallenged beliefs (Beck et al., 2009; Vauth, 2007; Corrigan et al., 2009). The attitudes held by therapists, along with self-stigma beliefs of a patient can determine the climate of the therapeutic bond and the success or failure of treatment and recovery. Therapists, like clients, are not immune to stereotypical views of society (Lauber et al., 2006; Nordt 2006; Servais & Saunders, 2007). One of these stigmatized beliefs is that recovery is not possible for patients with schizophrenia. Therefore, if clients internalize

this belief, their self-stigmatizing beliefs can then become a treatment barrier. Similarly, if therapists maintain firmly rooted in the disease concept of schizophrenia, their beliefs of the patient's inability to recover, also becomes a treatment barrier. The purpose of this study is to explore if there is a relationship between knowledge of schizophrenia and attitudes towards people with severe mental illness among therapists and also how this may impact therapists' beliefs that patients with schizophrenia have the ability to experience a process of recovery.

Chapter 2 Literature Review

The World Health Organization (WHO) estimates that one in four adults (approximately 57.7 million Americans) experience a mental health disorder every year. Mental illness is often on a continuum of varying degrees and can also be found co-morbid with other medical conditions and addictions. Common illnesses may involve a range of symptoms, including long lasting sadness or irritability, mood fluctuation, confusion, change in sleep or eating patterns, delusions, hallucinations, social withdrawal, thoughts of suicide, emotional distress (APA, 2000). Evidenced-based psychotherapy treatments for mental illness demonstrate 70 to 90% effectiveness rates in mental health recovery by reducing symptoms and promoting functional improvement. Nevertheless, society maintains a stereotypical belief that mental illness is non-recoverable, particularly for those one in seventeen cases defined as serious mental illness, such as schizophrenia (APA, 2012; Kessler, Chui, Demler, & Walters, 2005; NIMH 2011; National Alliance on Mental Illness [NAMI], 2012). In addition, although mental disorders continue to be the leading cause of disability in the United States, mental health professionals remain susceptible to the effects of social stereotypes and form biased beliefs similar to those who suffer with mental illness (Aggarwal, 2008; Kingdon et al., 2004; Shoham-Salomon, 1985; WHO, 2008).

Stereotypes and stigmatizing attitudes held by mental health professionals remain a controversial issue and few studies have examined this phenomenon. Particularly, due to their knowledge of mental disorders and professional status to uphold a positive caring outlook for their patients, stereotypes and stigmatizing attitudes among mental health professionals are scarcely recognized. Nordt (2006) reports his study to be the first to

explore attitudes of mental health professionals, compared with the attitudes of the general public about people with mental illness. Nordt found that although mental health professionals treat psychiatric disorders and understand the rights of individuals with mental illness, there was no difference found between professionals and the public in regard to stigmatized views of those with mental illness. The study concludes that becoming a mental health professional does not necessarily inoculate one from embracing stereotypes. The study also found that professionals had similar stereotypical views towards the mentally ill, and had no more desire to interact closely with them than the general public (Nordt et al., 2006).

In holding such views, therapists can be unaware of inhibitions that they may hold toward developing a rapport with their patients. When manifested, this disconnection between therapist and patient weakens the therapeutic rapport. Ultimately, if therapists support a separated view of the "us" and "them" mentality, they can inadvertently reinforce feelings of stigma and beliefs of non-recovery in their patients (Beck et al., 2009; Vauth, 2007; Corrigan et al., 2009). The patient's belief can create ambivalence towards treatment (Cavelti et al., 2012; Griffiths, Christensen & Jorm, 2008; Trusz, Wagner, Russo, Love & Zatzick, 2011). Therefore, the pursuit of mental health recovery for those with schizophrenia can be affected by the expectations both of the therapist and of the patient, particularly, if the patient already feels stigmatized by his or her condition. For example, both treatment attitude and barriers of low-expectations of recovery affect therapy and ultimately reinforces the patient's self-stigma and self-efficacy (Beck et al., 2009).

Studies indicate that a patient's level of self-stigma becomes a treatment barrier, thereby limiting their progress by decreasing his or her self-efficacy and eroding his or her confidence in recovery (APA, 2009; APA, 2012; Angermeyer et al., 2004; Cavelti et al., 2011; Corrigan, 2004; Link & Phelan, 2002; Corrigan & Watson, 2002). Further psychological harm or distress will be experienced by patients who internalize social stereotypes of schizophrenia; these include concepts such as being dangerous, incompetent, and responsible for their illness (Corrigan & Calabrese, 2005; Watson, et al., 2007). Stigma reinforces a core belief within patients that they are unable to recover. Unfortunately, the patient's uncertainty and lack of confidence in their ability to change reduces his or her self-efficacy to change (Beck et. al, 2009; Cavelti et al., 2012; NAMI, 2012). Therapists can further complicate this process by not believing in, or not supporting, the patient's ability to experience recovery. Unknowingly, therapists can convey an attitude of non-recovery in treatment that undermines hope for recovery and reinforces the patient's belief in non-recovery.

Recovery Transformation

Over the past few decades, major transformations in mental health care have resulted in a new framework that emphasizes the process of recovery for individuals with serious mental illness. In 2002, the President's New Freedom Commission (PNFC) addressed the disparity between research and practice. This transformation of the mental health system was designed to provide evidence-based treatments and to establish the idea that treatment providers, clients and their families would be partners in treatment. In addition, the report stated that treatment of mental health symptoms was not the main focus of recovery. Recovery was defined more inclusively as assisting those with mental

illness to be able to live, work, learn, and participate fully in their communities (Farkas, Gagne, Anthony, & Chamberlin, 2005; Mueser et al., 2006). Essentially, the PNFC gave rise to the voice of the Recovery Movement by implementing mainstream expectations of treatment outcomes to be inclusive of recovery, even in cases of SMI. Expectation of recovery is noteworthy, because the Recovery Movement had, for decades prior, been considered "alternative" to mainstream mental health care. At the heart of recovery transformation, the National Empowerment Center developed the empowerment model of recovery. According to this model, when people begin taking control of major decisions in their lives and resume key social roles, they can completely recovery from mental illness (Fisher, & Chamberlin, nd).

To fully understand the journey toward recovery transformation, it is important to note the previous progression of the Consumer Movement. A relevant precursor to the concept of recovery has its roots in the 1960s Civil Rights era. Specifically, the early Consumer Movement (late 1960s-1970s) was concerned with commitment laws and the upholding of civil rights for patients with mental illnesses who were housed in state institutions. Serious mental illnesses were historically viewed as incurable and largely untreatable. This view of hopelessness was pervasive and influenced systems, as well as society, to approach those who were mentally ill as people who needed to be isolated from society and maintained by medical protocols (disease models) that relied heavily on medication, shock therapy, and lobotomies. Aforementioned early concerns addressed by the Consumer Movement attracted militant activists who were focused on the liberation of oppressed people adversely labeled as mentally ill and "compulsorily committed" to state intuitions (Bellack, 2006).

The Consumer Movement was comprised largely of "ex-patients" (often self-referred as ex-inmates) and their supporters. These Ex-patients, regardless of their diagnosis, were told they had life-long mental illnesses and would never recover. Feeling dehumanized through mental illness labels, their goals were to create a Liberation Movement to close down the mental health system (Gayle, B, nd). Progressively, the Consumer Movement started to accept that mental health care may be needed; however, it should be on the terms of the consumer (patients, activist and advocates of the population under care). The first Consumer Movement resulted in the publication of an influential book by Judi Chamberlin, called "On Our Own: Patient Controlled" (1978). Chamberlin's work, as well as the work of some of her peers, is often credited with transforming societal and mental health systems by political action and advocacy.

The progression of the Consumer Movement was shaking the foundation of the medical (disease) model of mental illness. Specifically, the Consumer Movement viewed treatment as a process done with the patient as a member of an integrated treatment team; whereas, medical models viewed treatment as something done to the patient. As a result, the Consumer Movement set the stage for the development of the Recovery Movement. Collectively, these movements served catalyst to the transformation of mental health treatment and perspectives about mental illness on the societal, provider, and individual levels. As an outgrowth of both the Consumer and Recovery movements, the Alternatives Conference evolved from an advocacy/activist focus towards developing recovery goals of skills building and promoting wellness and peer support (Gayle, B, nd).

The Recovery Movement defines recovery as a process that occurs over time, in a non-linear fashion (Bellack, S, 2006). Recovery models had the advantage over the early

Consumer Movement due to having access to long-term study outcomes for people with serious mental illness who were alternatively treated (not by medical model protocols). The Recovery Movement also advantaged from collaboration with Judi Chamberlin who was, by that time, well versed in how recovery transformation should occur. A multiple analysis study prepared with assistance of Judi Chamberlin for the National Empowerment Center developed a recovery-based mental health system that would embrace the following values: (1) Self-Determination, (2) Empowering relationships based on trust, understanding and respect, (3) Meaningful roles in society, and (4) Elimination of stigma and discrimination (Fisher, & Chamberlin, nd). Many of the cited studies demonstrated that not all patients experience deteriorating chronic mental illness conditions, which was in contrast to the mainstream medical models. This transformation led to the focus on recovery as the primary emphasis, as opposed to the initial focus of the Consumer Movement which was liberation from oppression. Accordingly, it was stressed that recovery oriented services needed to embrace hope as a fundamental attitude for providers; more pointedly, it is the hope that people can, and do, overcome the barriers and obstacles that confront them in their recovery journeys (Russinova, 1999).

However, the more advanced and influential the Consumer Movement and the Recovery Movement became, the more these models induced variation into treatment protocols, opinions, resource channels and recovery definitions. In 2004, in response to PNFC, SAMSHA took aim at finding an overarching definition for the recovery paradigm, attempting to draw consensus on what recovery means for individuals with serious mental illnesses. At the SAMHSA conference, recovery was defined as a journey of reaching one's potential through healing and transformation while living a meaningful

life in his or her community despite the mental health disability. Upon agreement of a draft definition of recovery, SAMSHA also identified ten characteristics of effective Recovery-Oriented Services (ROS) to be endorsed: Self-Direction, Individualized and Person-Centered, Holistic, Nonlinear, Strengths-Based, Peer Support, Respect, Responsibility, and Hope (Bellack, 2006).

To support recovery transformation as research and science progress, the terminology used to frame people's experiences and attitudes must also evolve. Historically, the term recovery referenced by the medical model indicated that patients returned to baseline functioning and were completely free from disease. In contrast, recovery of mental illness refers to a process through which the patient regains effective functioning and the ability to experience quality of life amidst residual symptoms (Davidson, et al., 2005). Regardless of the specific physical or mental ailment, it is important to maintain the goal of improved quality of life during the process of recovery (Silverstein, & Bellack, 2008; Hamm, Hasson-Ohayon, Kukla, & Lysaker, 2013). Recovery also refers to a process of continual growth as the client builds his or her self-identity by pursuing personal meaningful goals and aspirations, as opposed to identifying one's self solely in reference to the illness and/or diagnosis (Davidson, et al., 2005).

To promote the recovery movement and reduce stigma for people with serious mental illness, the APA endorsed a resolution to support mental health recovery. Dr. Norman Anderson, PhD., CEO of the American Psychological Association, speaks of recovery for people with serious mental illness endorsed by the governing Council of Representatives in 2009:

> Until fairly recently, it was widely believed that people with serious mental illness – such as schizophrenia, bipolar disorder or severe depression – could never recover. Such people were often placed in institutions and left to languish for years. Fortunately, this is changing. . . . psychology is evolving, through research and evidence-based practice, to help people to reach their full potential (APA, 2012).

APA supports the notion that recovery includes not only improvement of symptomology but also overcoming the negative effects of being a patient with a mental illness, such as rejection, stigmatization, poverty, substandard housing, isolation, unemployment, loss of valued social identity, loss of sense of self, and purpose in life (Davidson et al., 2005).

As a result, the Recovery Movement promotes the process of recovery and reduction of stigma towards mental illness. Effective reductions of stigma rely on evidence-based treatment outcomes indicating that symptoms of mental illness can be measurably reduced as patients develop new skills and improve quality of life. The recovery paradigm requires that both mental health providers and their clients no longer believe that mental illness is an incurable state of mind (Calabrese & Corrigan, 2005; Smith et al., 2011). To advocate for humane and progressive mental health care, treatment providers need to embrace the constructs of hope, empowerment, self-determination, responsibility, growth, strength and a renewed sense of self-efficacy for all people, particularly those with schizophrenia (Russinova, 1999).

Schizophrenia

Widely recognized as one of the most stigmatized mental health conditions, schizophrenia has traditionally been viewed as non-recoverable. This chronic psychotic

disorder is characterized by neurocognitive deficits in the perception or expression of reality and a deteriorating course of pre-morbid social or occupational dysfunction (APA, 2000, 2009; Vauth, 2007). Lifetime prevalence is often comorbid with clinical depression, anxiety disorders, social problems, substance abuse, and decrease in life expectancy of 10-12 years, as well as an increase in suicide rate (Pennington, 2002).

Symptoms of schizophrenia are classified as positive or negative (APA, 2000). Positive symptoms are distortions of normal functioning manifested as hallucinations, delusions and disorganized speech and behavior. These positive symptoms although easier to notice are not always present (Beck & Rector, 2001; 2005). Negative symptoms are characterized by a reduction of normal functioning and manifested as perception of deficient cognitive resources, defeatist performance beliefs, social-aversion attitudes, and negative expectancies for pleasure and success (Beck et al, 2009). Although negative symptoms are more difficult to identify, they limit the client's ability to make and execute plans in his or her everyday life (APA, 2000; Yogev, Sirota, Gutman, & Hadar, 2004).

Treatment for Schizophrenia

Treating patients with schizophrenia has been met with cynicism since its inception. In 1893, Emil Kraepelin was the first psychiatrist to diagnosis schizophrenia and referred to it as dementia praecox. He believed the disorder to be a neurodegenerative disorder with no prognosis for recovery. In fact, if any recovery was noted it was argued that the patient had originally been misdiagnosed. In 1908, psychiatrist Eugen Bleuler found the disorder to be disorganization of thinking and not dementia, offering hope towards some degree of recovery (Pennington, 2002).

Treatment in 1929 for schizophrenia included sodium chloride injections, metal salts injections, fever therapy with typhoid injections, horse serum injections through lumbar puncture, human serum injections, partial thyroidectomy, and occupational therapy (Hinsie, 1999). In 1938, the medical approach of analysis and treatment of the severely mentally ill also included lobotomies, insulin shock therapy, and electroconvulsive therapy (ECT). After decades of controversy, the medical model endorsed the biosocial approach for treating schizophrenia, moving from institutionalization to treatment through hospitalization care and community services (Grob, 1985).

Although the biosocial treatment approach encouraged shorter hospital stays and therapeutic treatment among public health programs, medication remained the first line of treatment (Pennington, 2002). However, despite compliance with medication regimens, 60% of patients with schizophrenia continue to experience residual positive and negative symptoms (Christodoulides, Dudley, Brown, Turkington & Beck, 2008). Treatment for schizophrenia, primarily provided through psychiatry and medication, has evolved into outpatient individual therapy, group therapy, family therapy, and case management over the past few decades (Grob, 1985; Hinsie, 1999; Beck & Rector, 2001). Treatment modalities focus on psychoeducation for the patient and their family about schizophrenia, treatment compliance to avoid relapse, social learning of interpersonal skills, coping skills and management of symptoms (Barlow, 2007).

In spite of pursuing mental health recovery for patients with schizophrenia, societal beliefs remain strong that schizophrenia is non-recoverable (Smith, Reddy, Foster, Asbury & Brooks, 2011). The long-term impact of Kraepelin's original

pessimistic view of recovery of schizophrenia remained in society for more than a century and more optimistic views made only minute progress until 1980 (Calabrese & Corrigan, 2005). However, since the 1980s, treating patients with schizophrenia continues to be challenging due to this prevailing pessimistic perception of recovery. This misconception of recovery within society results in the outcome of patients having low expectations for their own mental health progress. Consequently, experiences of stigma further exacerbated their symptoms. Factors attributable to stigma often fade into the patient's symptomology and remain unnoticed and unaddressed. The following section will review how patients with schizophrenia can be affected by self-stigma and how this remains a hidden construct within their treatment, which can further complicate the patient's ability to recover.

Schizophrenia, Stigma and Self-Stigma

Schizophrenia becomes complex not only by the symptomology of the illness but also by long-standing societal views of the disorder. Historically, patients with schizophrenia were isolated from society and viewed as being 'crazy' and unable to recover. Through the years, prejudicial and discriminatory stereotypes began to form; such as, "They're dangerous", "I don't like those crazy people", and "They shouldn't be out in society". This stigma against people with schizophrenia elicited a separated view in society of the 'us and them' mentality (Beck et al., 2009; Vauth, 2007; Corrigan et al., 2009). As these views remained stagnant over time, mental health stereotypes developed. Patients were labeled as socially unacceptable and were treated as a separate sect of society. Demoralization through social stigma elicited a persistent failure to cope with the illness, resulting in feelings of helplessness, diminished self-esteem, isolation,

incompetence, hopelessness, and loss of meaning for life with a possible wish to die. In due course, social stigma serves as a major obstacle to recovery by weakening the patient's self-esteem and personal worth, producing low expectation for change (Calveti et al., 2011; Hendrichs, 2005; Onken, Craig, Ridgway, Ralph & Cook, 2007; Ritsher et al., 2003; Kleim et al., 2008).

Lysaker, Davis, Warman, Strasburger, & Beattie (2007) found that patients diagnosed with schizophrenia showed an increase in depression and a decrease in self-esteem due to internalized stigmatization during 6-month follow-up studies. Low self-esteem in individuals with schizophrenia is common; however, self-esteem is also adversely affected by stigma (Beck et al, 2009). Therefore, although low self-esteem is expected among negative symptoms, the construct of stigma remains unaddressed and hidden within symptomolgy and poor treatment outcomes (Cavelti et al., 2011). Unfortunately, there has been little research to address this quagmire (Knight, 2006; Lysaker et al., 2007; Ritsher & Phelan, 2004; Sibitz, et al., 2011; Vauth, 2007).

The self-esteem of patients with schizophrenia can be diminished by self-stigma if they identify with negative stereotypes of incompetence (Corrigan, 1998; Corrigan & Watson, 2002; Angermeyer et al., 2004). Regardless of the level of discrimination that the patients encounter, their beliefs and perceptions of being devalued by stigma are the elements that greatly affect their self-esteem (Link, 1987; Link et al., 1991; Rogers, Chamberlin, Ellison & Crean, 1997; Corrigan & Penn, 1999; Corrigan, Faber, Rashid, & Leary, 1999; Wright et al., 2000; Link & Phelan, 2001; Camp, Finlay & Lyons, 2002). Negative self-views lead to self-isolation in order to protect themselves from their perceived stigma (Lencz, Smith, Auther, Correll & Cornblatt, 2004).

Several studies have found that psychological harm caused by self-stigma impedes treatment by eroding the patient's self-esteem, self-efficacy and his or her belief in recovery (Rosenfield, 1997; Angermeyer & Matschinger, 1999; Sirey et al., 1999; Cooper et al., 2003; Phelan, Link, Stueve & Pescosolido, 2000; Link et al., 1991; Wright et al., 2000; Link & Phelan, 2001; Perlick et al., 2001; Struening et al., 2001; Sirey et al., 2001; Vauth 2007). Corrigan, Rafacz, & Rusch (2011) found that after patients become aware of associated stereotypes, agree with them, and internalize the stigma, their levels of hopelessness and self-esteem were negatively impacted. Results of this study were consistent at the 6-month follow-up, indicating the stability of stigma and its negative impact on self-esteem and hope for recovery (Corrigan, Rafacz, Rusch, 2011).

Psychological distress tends to increase as self-stigmatization and diminished self-esteem becomes a part the patient's schema (Masuda & Latzman, 2011). Cavelti, Kvrgic, Beck, Rusch, & Vauth (2011) examined the relationships between self-stigma beliefs and demoralization among individuals with schizophrenia. Evidence was found that patients with beliefs of self-stigma experienced higher levels of demoralization. This demoralization also showed an adverse effect on the patients' positive and negative symptoms of schizophrenia. This study highlights the importance of the way in which stigma increases demoralization through hopelessness, negative self-esteem and depression, thus collectively resulting in poor recovery for the patient (Cavelti et al., 2011; Staring, Van der Gaag, Ven den Berge, Duivenvoorden & Mulder, 2009).

Further evidence supports the fact that the maintaining factor between self-stigma and demoralization is the patient's ability to change his or her belief or self-schema (Masuda & Latzman, 2011; Masuda, Price, Anderson, Schmertz, & Calamaras, 2009).

Therefore, taking an active role in treatment is essential in order to help clients change or alter their beliefs. Unfortunately, Tsang, Fung, & Chung (2010) found that patients with self-stigma often withdraw and limit their collaboration with others (Perlick et al., 2001; Corrigan, 2004; Vauth et al., 2007). Multiple studies have affirmed that the cycle of stigma produces low self-esteem and feelings of hopelessness, causes the patients to doubt the benefits of treatment, and frequently results in withdrawal (Corrigan & Watson, 2002; Corrigan, 2004; Fung, Tsang, Corrigan, Lam & Cheng, 2007; Fung et al., 2008; Rosenfield, 1997; Watson & Corrigan, 2001).

To encourage active involvement in treatment, it is imperative to address feelings of stigma and instill hope for the patient's recovery (Barkhof et al., 2006; Chou et al., 2012; Miller & Rollnick, 2002; Ng & Tsang, 2002). This approach addresses concern for patients who frequently keep their mental illnesses a secret to avoid further stigmatization (Kleim et al., 2008). Yet, challenges persist even after a patient is in treatment because negative effects of self-stigma serve as a barrier to treatment, inhibiting a patient's readiness for change and the belief in his or her ability to recover (Beck et al., 2009; Cavelti et al., 2012; Miller & Rollnick, 2002). Prior studies demonstrate that devaluation through stigma and dysfunctional coping strategies, such as avoidance and ambivalence, results in reduced self-efficacy (Cavelti et al., 2012; Cooper et al., 2003; Sirey et al., 2001). Low self-efficacy slips into the patient's symptomology and remains a hidden construct within his or her treatment, which further complicates the ability to recover. In the resolution for recovery, APA endorses therapeutic interventions that address constructs such as self-efficacy and self-esteem because of their interference with the patient's recovery process. An approach to promote recovery aptitude while providing

treatment for these cognitively based symptoms has prompted treatment using cognitive behavioral therapy (CBT). This study particularly focuses on the Beck model because of his inclusion of the therapist and client barriers that will be addressed.

Beck & Rector's Model of Cognitive Behavioral Therapy for Schizophrenia

Beck and Rector constructed a model of CBT to meet the specific needs of those suffering with schizophrenia. This model helps patients develop awareness about the stressors of their illness, as well as how they perceive and respond to those stressors (Beck & Rector, 2001; Beck et al., 2009). The authors discuss the importance of using normalizing to help patients understand their symptoms and recognize that they are not alone (Beck et al., 2009). For instance, delusional beliefs can be generated by a lack of consensual validation, which contributes to 10–15% of the general population experiencing paranoid thoughts. Likewise, hallucinations can be generated by lack of sleep, which contributes to 2.5 - 4% of the general population experiencing hallucinations (Zimmerman et al., 2005).

Beck and Rector's model of CBT for schizophrenia has offered great optimism for recovery for schizophrenia by helping the clients to evaluate their beliefs about their symptoms (Beck et al., 2009; Freeman & Garety, 2006; Rector & Beck, 2002; Zimmerman et al., 2005). A sense of low self-efficacy often interferes with the ability to evaluate their own symptoms such as voices and hallucinations. Hallucinations are often a result of the patients' misinterpretations of their own thoughts (Freeman & Garety, 2006). Unfortunately, patients with schizophrenia are often separated from society as being "crazy" and endure discrimination and stigmatization. As a result, they can view

themselves as outcasts of society and perceive themselves as hopeless and unable to recover (Beck et al., 2009; Vauth, 2007; Corrigan et al., 2009).

Devaluation through stigmatization further damages a patient's self-esteem and sense of self-efficacy. Thus, low self-esteem and low self-efficacy are critical factors to be addressed in treatment for schizophrenia (Beck et al., 2009). It is imperative to use validation to help clients challenge and restructure their negative self-views and perceptions about their illness (Beck et al., 2009; Freeman & Garety, 2006). Therefore, all CBT treatment strategies begin with the essential first step of establishing a trusting rapport and validating the patient's experiences (Beck et al., 2009; Rector & Beck, 2002; Turkington, Kingdon & Turner, 2002). The Beck & Rector CBT model for schizophrenia focuses on establishing a collaborative therapeutic relationship, setting goals, teaching the patient strategies to manage and reduce symptoms, also addressing potential barriers to treatment (2009).

Barriers to Treatment

In the Beck & Rector model (2009), Beck identifies treatment barriers that can work against positive ongoing treatment, and thereby limit mental health recovery. Efforts to mitigate these barriers rely on developing a strong client therapist rapport in which both parties share responsibility for progress and both are motivated to work toward effecting change. Although many patients struggle with feeling demoralization, the success of CBT requires strategies to overcome feelings of hopelessness and ambivalence in order to pursue change. The first step to diminish ambivalence is the therapist's willingness to advocate for the client and provide genuine support for the client's efforts toward change and stigma reduction (Beck et al., 2009). Meanwhile,

therapist must also be aware of how his or her own personal attitudes about the patient's recovery can create barriers to the success of treatment.

Therapist Barriers. Therapists inadvertently are affected by societal views of stigma, demonstrating that they are not immune to the effects of societal stereotyping (Aggarwal, 2008; Kingdon et al., 2004). Historically, schizophrenia has been viewed as a serious mental illness from which recovery is not possible. Fortunately, based on scientific research, this disorder no longer has to be viewed as a detrimental disorder but as one on a continuum with varying degrees of symptomology (APA, 2009). Understanding variance allocates for more serious cases and less serious cases giving movement and flexibility to experiences of recovery. Yet in the perspective of many, the disorder continues to be viewed under the less scientific social stigma model of being non-recoverable. Therefore, it is essential for therapist to be self-aware of his or her own conceptualization of schizophrenia recovery and of any potential biases that he or she may hold. Recognizing that the views of the therapist will ultimately affect the therapeutic process, it is important for therapist to identify his or her beliefs as potential barriers to treatment (Beck et al., 2009).

The continuum model for schizophrenia details different types and severity levels to the disorder and the APA recovery initiative promotes a process of recovery for all patients to promote quality of life and wellness for each individual, regardless of severity (APA, 2009). It is necessary that clinicians help the client develop hope for recovery and the self-efficacy needed to make appropriate changes. If therapists enter the therapeutic relationship with a biased belief of recovery, feelings of hopelessness may be transferred to the patient, thereby reinforcing his or her belief of being unable to recover. The goal

and process of therapy is to enhance recovery through an empathic connection and rapport within the therapeutic dyad (Beck et al., 2009). While adhering to the biological disease state of schizophrenia, many therapists believe recovery is unlikely due to the patient's limited cognitive resources. Their uncertainty interferes with the workings of the therapeutic rapport, and low expectations permeate the sessions, beginning with the therapists, because they doubt their own abilities to understand their patients (Beck et al., 2009).

Rapport building occurs when therapists use reflective listening and validate the patient's experiences of what it must be like to see the world through the patient's point of view. Although therapists can often relate to and understand their client's experiences, they find it more difficult to establish this connection with patients who may be experiencing psychotic symptoms. Being hindered to broach validation, an essential aspect of therapy, can inadvertently support the "us" and "them" mentality. Unintentionally, this treatment attitude held by the therapist can maintain a patient's self-stigma (Beck et al., 2009; Vauth, 2007; Corrigan et al., 2009). Interestingly enough, psychotic symptoms are often a small part of a patient's symptomology, yet it can become a focal point of disparity in the therapeutic relationship (Beck, et al., 2009).

Therapists are often skeptical about using CBT methods for patients with schizophrenia due to a belief that psychotherapy cannot work for schizophrenia because of the patient's cognitive impairments (Beck et al., 2009; Rector & Beck, 2002). However, it is vital that therapists are willing to be self-reflective about their inhibitions to use 'talk therapy' with patients with schizophrenia. Does it feel threatening? Is it due to their personal schematic stereotypes of patients with schizophrenia being delusional,

dangerous, and crazy? Therapist may be unaware of their stigma biases and be less apt to challenge their beliefs with self-reflection because their views are based on a disbelief of recovery for schizophrenia (Grob, 1985; Hinsie, 1999). Unfortunately, because the therapist matches the views of the patient on his or her inability to recover, it reinforces and confirms the belief to both to therapist and to client (Link et al, 1991; Beck et al., 2009; Kleim et al., 2008; Vauth, 2007).

These treatment attitudes are often overlooked in the delivery of therapy. Stigma biases from both the therapist and client can seemingly slip unnoticed into the themes of the patients' symptomology and low expectations for progression. By reducing bias and improving treatment attitudes, the therapist can instill hope for the patient, allowing the patient to challenge his or her own feelings of stigma and low self-efficacy. As an ethical duty, therapists are obligated to provide quality care, reduce disparity, and advocate for the patient's recovery (APA, 2010). Although CBT for schizophrenia moves at a slower pace, it is imperative to allow the patient to dictate the speed at which treatment takes place, regardless of the diagnosis. Adjusting to the needs of the patient gives the patient validation, feelings of being understood, and sets the stage for a working therapeutic relationship to assist the patient in developing alternative beliefs about his or her ability to recover.

Client Barriers. Negative symptoms serve as a barrier to effective CBT treatment (Beck et al., 2009). If the patient has low expectations for happiness, pleasure, success and social acceptance, he or she will likely be ambivalent and fearful to pursue change. When patients become accustomed to a lifestyle of apathy, low energy and low motivation in their daily routines, they tend to generalize this behavior into their

approaches to therapy. Their ambivalence towards therapy is often due to their lack of confidence in their ability to recover. Thus, it is imperative to identify self-stigmatizing beliefs that hinder the patients' treatment attitudes. For example, depression is often viewed as expected negative symptoms for this population as opposed to their responses to stigmatization (Beck et al., 2009).

Additional client barriers to effective CBT treatment are thought to be disorder and cognitive rigidity (Beck et al., 2009). Many patients with thought disorder report benefits from merely being "listened to." Therapists must become active listeners, listening for subtle changes in client speech patterns as well as summarizing frequently for the patient in order to strategically refocus the conversation. Therapist should also communicate empathy and acceptance, which can elicit motivation. As the patient grows in the belief that the therapist truly cares for him or her and respects each as a person, the patient will begin to let down his or her defenses and consider collaborating with the therapist to restructure his or her cognitions. Releasing the barrier of cognitive rigidity liberates him or her to consider and explore alternative beliefs about recovery and the use of more adaptive coping skills (Beck et al., 2009).

The Impact of Treatment Attitude and Self-efficacy

The potential for mental health recovery for those with schizophrenia is influenced by the expectations and self-efficacy of both the therapist and the patient. For example, when low expectations on a part of the client interact with low expectation for improvement on the part of the therapist, progress is impeded and the probability of recovery is significantly reduced. Hence, both treatment attitudes and barriers within the therapeutic dyad ultimately reinforce the patient's self-stigma (Cavelti et al., 2011).

Hopelessness towards the patient's ability to recover leaves both the therapist and client in each one's own right feeling helpless and ineffective (Corrigan, et al., 2009). The patient's low self-efficacy is not only reinforced by t his or her personal beliefs of inadequacy but is further complicated by therapists who do not support the patient's recovery. Inadvertently, however, the therapist is often unaware of how their treatment attitude towards the patient's recovery impacts the loss of hope for recovery within the therapeutic dyad (Corrigan & Watson, 2006; Beck et al., 2009).

APA continues to endorse recovery-oriented treatment to expand a consumer input, person-based approach that encourages mental health professionals to place the patient's needs first. Within this therapeutic dyad, therapist are reminded to consider all psychological factors of self-esteem and self-efficacy while modifying treatment protocols and case conceptualizations appropriately for each case (APA, 2012; Beck, 1995; Beck et al., 2009). Thus, developing an evidence-based conceptualization of the relationship between self-stigma and self-efficacy for patients with schizophrenia will aid in more effective clinical interventions (Cavelti et al., 2012). When a client enters therapy, it is essential to integrate all relevant data within the case conceptualization to develop a comprehensive treatment plan (Beck, 1995). Continuing in this approach, the therapist evaluates and assesses the information, including the assessment of feelings of stigmatization, and develops treatment goals to provide the most effective evidence-based treatment (Freeman, Felgoise, & Davis, 2008). In recent years, patient-centered care has allowed the shift to an overall, global comprehensive model, fully integrating all aspects of recovery.

Modifying treatment protocols has been demonstrated through evidence-based research to be more effective for patient care (Trusz et al., 2011). Research suggests that mental health stigma erodes recovery because it works directly against the positive effects of ongoing treatment (Rosenfield, 1997). Stigma has a deteriorating effect on a patient's level of morale and motivation to move towards recovery (Cavelti et al., 2011; Corrigan & Watson, 2006; Corrigan et al., 2010; Sibitz et al., 2011; Vauth et al., 2007; Miller & Rollnick, 2002; Barkhof et al., 2006; Mulder et al., 2005). Link, et al. (1991) concluded that the use of avoidant coping strategies to deal with stigma is harmful and reinforces negative feelings of devaluation. In order to successfully alter long-standing core-beliefs of the patient's inability to recover, therapists can adapt CBT protocols to include self-stigma reduction and greater self-efficacy as verifiable treatment goals (Beck et al., 2009; Link et al., 1991; Rector & Beck, 2002; Vauth, 2007; Turkington et al., 2002).

It is possible to modify treatment protocols, but how are treatment attitudes modified? Therapists may not want to carry the weight of the responsibility; however, it is their professional duty to align their beliefs towards patients, free of prejudices, discriminations and biases regardless of ethnicity, gender, religion, and disability. It is an ethical responsibility in the profession of psychology to provide quality care supporting recovery with an oath of benevolence and nonmaleficence (APA, 2010). The actual treatment protocols can be adjusted to help meet the specific needs of a client; yet the question that remains is how the attitudes or beliefs of the therapist modified are? The underlying principle for this study is to bring awareness to mental health professionals to be self-reflective about the possible attitudes, biases and prejudices that they may hold

about clients, particularly those with schizophrenia who often must endure the effects of self-stigma (Link et al, 1991; Beck et al., 2009; Kleim et al., 2008; Vauth, 2007). After these hidden constructs are disclosed, therapist can begin to address the effects of stigma and counteract these adversities by restoring the patient's hope of recovery. As the therapist instills hope and a belief in the patient's ability to recover, the patient can then begin to restore his or her own positive self-image as a worthy individual who is no longer set apart from society as 'abnormal.'

Chapter 3 Hypotheses

Mental health recovery is defined as a process of continual growth as the client builds his or her self-identity by pursuing personal meaningful goals and aspirations, as opposed to identifying self solely in reference to his or her illness and/or diagnosis (Davidson, et al., 2005).

Research Question

The present study will explore the correlation between the knowledge of schizophrenia and attitudes toward people with severe mental illness, such as schizophrenia, among mental health clinicians. Does knowledge of schizophrenia and attitudes toward mental illness impact the clinicians' beliefs that patients with schizophrenia have the ability to experience a process of recovery? The variables will be measured using standardized assessment instruments: the Schizophrenia Knowledge, Attitudes and Perceptions Scale (SKAPS), measuring knowledge of schizophrenia and attitudes (tolerance) held towards people with schizophrenia; the Mental Illness Clinicians' Attitude Scale (MICA-4), measuring attitude (stigma) of clinicians towards mental illness; and the Recovery Knowledge Inventory Scale (RKI), measuring the belief in a process of recovery.

Hypothesis Statements

Hypothesis 1. A statistically significant negative correlation will be found between attitudes (stigma) towards mental illness, as measured by the MICA-4 scale and belief in the process of recovery, as measured by the RKI scale. These scores indicate that as the therapist's attitude (stigma) towards mental illness increases his or her belief in the patient's ability to experience a process of recovery decreases.

Hypothesis 2a. A statistically significant negative correlation will be found between knowledge of schizophrenia, as measured by the SKAPS Knowledge subscale, and attitude (stigma) towards mental illness, as measured by the MICA-4 scale. These scores indicate that as knowledge of schizophrenia increases, the therapist's attitude (stigma) towards mental illness decreases.

Hypothesis 2b. A statistically significant negative correlation will be found between SKAPS Attitude subscale, measuring attitude (tolerance) towards schizophrenia and the MICA-4 scale, measuring the attitude (stigma) towards mental illness. These scores indicate that as attitude (tolerance) of schizophrenia increases, the therapist's attitude (stigma) towards mental illness decreases.

Hypothesis 3a. A statistically significant, positive correlation will be found between the knowledge of schizophrenia, as measured by the SKAPS Knowledge subscale and the belief in the process of recovery, as measured by the RKI scale. This will demonstrate that as the therapist's knowledge of schizophrenia increases his or her belief in the patient's ability to experience recovery also increases.

Hypothesis 3b. A statistically significant, positive correlation will be found between the attitudes (tolerance) held towards people with schizophrenia, as measured by the SKAPS Attitude subscale and the belief in the process of recovery, as measured by the RKI scale. This will demonstrate that as the therapist's attitude (tolerance) of schizophrenia increases his or her belief in the patient's ability to experience recovery also increases.

Hypothesis 4. As per demographic information, it is hypothesized that a correlation will be found between years of experience in working as a mental health

professional (Table 1d) and the following subscales: a) SKAPS Knowledge, measuring knowledge of schizophrenia b) SKAPS Attitude, measuring attitude (tolerance) of schizophrenia c) MICA-4, measuring attitude (stigma) and d) RKI, measuring belief in the process of recovery. Although a relationship is predicted there is little evidence to support a positive or negative relationship, exclusively.

Chapter 4 Method

Overview

To date, little research has been conducted on the effects of therapists' negative attitudes toward recovery. Therapists can often be unaware of how their conceptualization of schizophrenia includes disbeliefs of recovery due to latent and unchallenged theories and schemas. These attitudes held by therapists, in addition to self-stigma beliefs of the patient, can determine the climate of the therapeutic bond and the success or failure of treatment and recovery (Beck et. al., 2009; Lauber et al., 2006; Nordt 2006; Servais & Saunders, 2007). A core belief of being unable to recover becomes a treatment barrier when clients internalize stigma. Similarly, a related source of treatment barriers may emerge if the therapist's disbelief in recovery for patients with schizophrenia is entrenched within his or her conceptualization of the disorder. This study investigated the relationship between knowledge of schizophrenia, attitudes (tolerance) held toward people with schizophrenia, attitudes toward mental illness, and years of experience working as a mental health professional, compared with the clinician's beliefs about the process of recovery for patients with schizophrenia.

Design and Design Justification

This study is a cross-sectional survey research design using a sample of 319 participants who completed the survey, with the following variables: knowledge of schizophrenia (SKAPS Knowledge) and attitudes (tolerance) held toward people with schizophrenia (SKAPS Attitude), attitudes (stigma) toward mental illness (MICA-4) and the belief in the process of recovery (RKI). Leveraging email and Internet utilities to survey mental health professionals, via closed ended questions and Likert rating scales,

facilitated the collection of large amounts of information in a relatively short time. This survey design yielded an effective characterization of a large therapist population and employed standardized questions and response options to ensure reliability of the outcome. Noteworthy research has demonstrated that this form of standardizing offers more precise measurement due to limited responses in a uniform manner, which increases the reliability that similar data can be collected across a large targeted population (Rea & Parker, 2005; Scholle & Pincus, 2003).

Participants

Survey participants consisted of mental health professionals who are currently practicing and providing psychotherapy treatment. They were selected without regard for ethnic, cultural or racial background. Participants varied in gender, age, years of experience as a mental health professional, clinical theoretical orientation, and experience in providing treatment to patients with severe mental illness.

Inclusion Criteria

Participants included in the study were required to be a licensed master or doctoral level therapist actively performing psychotherapy in an outpatient setting. Participants provided therapy consistently for at least one year prior to the study. Participants included both mental health professionals who have provided treatment to patients with schizophrenia and also those who have not provided treatment to patients with schizophrenia. The rationale to include all mental health professionals, regardless of having experience providing treatment to patients with schizophrenia, was to explore the effect of attitudes (stigma) and beliefs of recovery in therapist, regardless of their prior knowledge or experience of working with this population.

Exclusion Criteria

Participants who work in the mental health field with a bachelor's degree or unlicensed master level degree were excluded from the study. Licensed therapists and doctoral level psychologists who have not provided therapy in an outpatient setting or an inpatient setting within the past year prior to the study were also excluded.

Recruitment

A sample of participants (N= 319) were recruited via an email invitation through psychological associations such as American Psychological Association (APA), Philadelphia Society for Psychoanalytic Psychology (PSPP), Psychological Association of Pennsylvania (PPA), and social media sites such as Linkedin, and Facebook. Participants received an email invitation (Appendix A) that included a description of the study. Snowballing technique was utilized as participants forwarded the study link to other potential participants that met the criteria for the study.

Measures

Demographic Questionnaire. The demographic questionnaire (Table 1) yielded information from each participant regarding gender, age, professional job title, number of years of experience, clinical theoretical orientation, and knowledge about whether or not they have provided treatment to patients with schizophrenia.

Mental Illness: Clinician's Attitudes (MICA-4) Scale. The MICA-4 Scale is designed to measure attitudes of mental health care professionals toward people with mental illness (Kassam, Glozier, Leese, Henderson & Thornicroft, 2010). The MICA-4 scale is self-administered and requires about 5 minutes to complete the assesment. The MICA-4 item pool consisted of 16 items to measure attitudes, using a five-point Likert

scale (from strongly agreeing with the statement to strongly disagreeing with the statement). A person's MICA score is the sum of the scores for the individual items. The sum of the scores for each item produces a single overall score; a high overall score indicates a more negative (stigmatizing) attitude. The MICA scale showed good internal consistency, $\alpha = 0.70$ with test-retest reliability 0.80 (Kassam, et al., 2010).

Schizophrenia Knowledge, Attitudes and Perceptions Scale (SKAPS). The SKAPS was designed to measure perceptions, general attitudes and knowledge of schizophrenia and mental illness (Reddy and Smith, 2006). The SKAPS Knowledge subscale consists of 12 true/false items about schizophrenia (e.g. ‘‘T/F-Psychosis is the complete loss of reality and rational thoughts’’). In addition, several myths associated with this mental illness are included (e.g. ‘‘schizophrenia can be caused by substance abuse’’ and ‘‘All people with schizophrenia experience auditory or visual hallucinations’’). The SKAPS Attitude subscale measure uses a five-point Likert scale (from strongly agreeing with the statement to strongly disagreeing with the statement) and includes 13 items; such as, ‘‘Individuals with schizophrenia are victims of their disease and should be treated with empathy", and ‘‘Individuals with schizophrenia do not need medications; they just need to change their thought processes and behaviors". The attitude subscale is scored in relation to tolerance; high scores indicate a greater level of tolerance and support for people with schizophrenia. The SKAPS demonstrated internal consistency $\alpha = 0.71$. It should be noted that this scale is still under research attention for further validation. Permission was granted to use the scale and agreement was made to allow the data from this study to become a part of the validation process for the scale (Reddy and Smith, 2006).

Recovery Knowledge Inventory (RKI). The RKI measures providers' knowledge and attitudes regarding recovery-oriented practices in four domains: roles and responsibilities in recovery, non-linearity of the recovery process, roles of the client and peers in recovery, and expectations regarding recovery. The author included the final domain of expectations due to the importance of assessing provider's expectations regarding recovery and the client's ability to experience recovery (Bedregal, O'Connell & Davidson, 2006). For example, items include, "The concept of recovery is equally relevant to all phases of treatment" and "Defining who one is, apart from his/her illness/condition, is an essential component of recovery." Each item is rated on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree); high scores represent greater understanding of recovery. In a noteworthy Meehan & Glover study (2009), internal consistency of the validity of the RKI was found at an $\alpha = 0.83$ for the total scale score (Bedregal et al., 2006; Meehan & Glover, 2009).

Procedure

An email cover letter was sent to all participants via email addresses, listservs, and Linkedin. Security of information and confidentiality was ensured through use of Survey Monkey. Participants completed a survey questionnaire through Survey Monkey based on the hypothesis of the study, which included the following instruments: SKAPS, MICA-4, RKI and a demographic questionnaire. The survey consisted of 61 aggregated questions and required approximately 20 minutes for respondents to complete. Data were then uploaded into an SPSS file for statistical analysis of results. Aggregated study findings, in written format with descriptive figures and tables, are available to participants upon request to demonstrate results.

Chapter 5 Results

Descriptive Analysis

All participants completed the entire survey. The study sample consisted of 319 survey participants, 165 males and 154 females. Age ranges of participants were as follows: 75 participants, age 20-39; 168 participants, age 40-59, and 76 participants age, 60-70 and older. All participants were licensed mental health professionals consisting of 181 psychologist, 54 psychiatrist, 19 professional counselors, 27 master-level therapist, and 38 master-level social workers. Additionally, in years of experience working as a mental health professional, there were 181 participants with 1-20 year(s) experience and 138 participants with 21-40+ years of experience. Clinical theoretical orientations that were represented included: cognitive behavioral therapy, 87 participants; psychodynamic, 77 participants; biopsychosocial model, 47 participants; humanistic, 31 participants; family systems, 26 participants; and other (i.e., integrative, eclectic, existential, neurobehavioral, and transtheorectical), 36 participants.

Additionally, 248 participants had experience providing treatment to patients with severe mental illness, but 71 did not have experience providing treatment to patients with severe mental illness. Of those 248 participants, 178 had 1-15 year(s) of experience providing treatment to patients with schizophrenia and 70 had 15-30+ years providing treatment to patients with severe mental illness. Of those same 248 participants, 169 had provided treatment to people with schizophrenia within the past three years of their active clinical practice, but 79 had not. Similarly, of those 248 participants, 202 had historically treated 10 or fewer patients with schizophrenia in a typical month, 38 had treated 11-50 patients, and 8 had treated 51-70+ patients within a typical month (Table 1).

ANOVA Analysis

Descriptive statistics of the mean and standard deviations of the scales indicate that neither ceiling nor floor effects were found (Table 2). ANOVA analyses were conducted to explore differences in means among the sample demographics and all four subscales: the Schizophrenia Knowledge, Attitudes and Perceptions Scale (Subscales: SKAPS Knowledge: M= 4.9, SD=1.4 and SKAP Attitude: M=36.7, SD=3.8), the Mental Illness: Clinicians' Attitude Scale (MICA-4: M=32.0, SD=6.5), and the Recovery Knowledge Inventory Scale (RKI: M=59.9, SD=6.5). In reference to gender (Table 3), age (Table 4), clinical theoretical orientation (Table 5), and experience providing treatment to patients with severe mental illness (Table 6) showed no statistically significant differences among the scales. In reference to Job title (Table 7), statistically significant differences were found between Job title and the RKI: $F(4, 314) = 4.52$; $p < .001$. In reference to years of experience as a mental health professional (Table 8), statistically significant differences were found between Years of experience as a Mental Health Professional and SKAPS Knowledge: $F(8, 310) = 2.93$; $p = .004$.

Statistical Analysis

The current study used a correlational analysis to examine the relationships between the independent variables: the knowledge of schizophrenia and attitudes (tolerance) held toward people with schizophrenia (SKAPS), attitudes of clinicians toward mental illness (MICA-4), Years of Experience (Table 1d) and the dependent variable: the belief in a process of recovery (RKI). An additional exploratory analysis was evaluated between two treatment groups: participants with experience providing

treatment to patients with schizophrenia (Tx/withEx) and participants who have no experience providing treatment to patients with schizophrenia (Tx/withoutEx).

Correlational Analysis

Correlational Matrix for Hypothesis 1-3:

Table 9

Correlations - SKAPS-K, SKAPS-A, MICA-4, and RKI

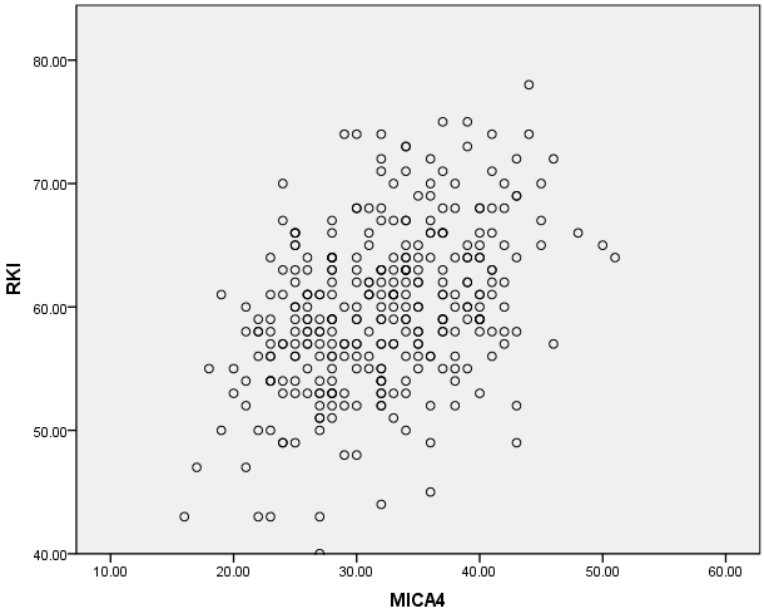
	SKAPS-K	SKAPS-A	MICA-4	RKI
SKAPS-K	--			
SKAPS-A	-0.126	--		
MICA-4	0.045	-0.502*	--	
RKI	0.099	-0.297*	0.413*	--

Note: Correlations for participants (n=319) are presented in the table above.
*Coefficient is significant at 0.01 levels.

Hypothesis 1. A Pearson correlation addressed the relationship between MICA-4 (attitude/stigma) and RKI (belief in recovery). The correlation was found to be statistically significant, r (317) = .413, $p < .001$, indicating a moderate positive association between MICA-4 and RKI (Table 8). These scores demonstrated that as

negative attitude (stigma) towards mental illness increased, belief in recovery process also increased. Although significant, this finding was contrary to the forecasted direction of the relationship. It was proposed that a negative correlation between these two measures would be found.

Figure 1: MICA-4 and RKI (Recovery)



Note: Relationship between scores on MICA-4 and RKI taken by participants. r (n=319) = 0.413, $p < .001$

Hypothesis 2a. A Pearson correlation addressed the relationship between SKAPS Knowledge and MICA-4 (attitude/stigma). The correlation was not found statistically significant, r (317) = .045, p = .420, indicating no association between SKAPS Knowledge and MICA-4 scale (Table 8). These scores indicate that for this sample there was no relationship between knowledge of schizophrenia and attitude (stigma) towards mental illness.

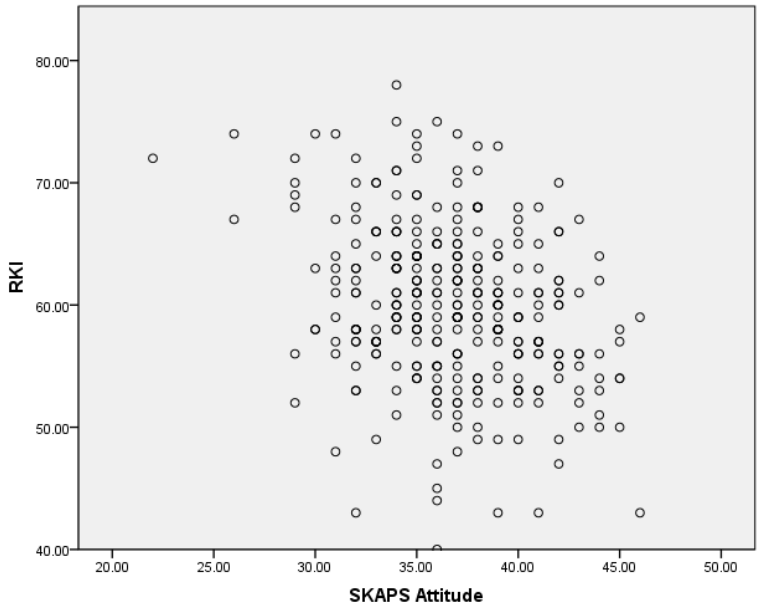
Hypothesis 2b. A Pearson correlation addressed the relationship between SKAPS Attitude (tolerance) and MICA-4 (stigma). The correlation was found to be statistically significant, r (317) = -.502, p < .001, indicating a moderated negative association between SKAPS Attitude and MICA-4 (Table 8). These scores support the hypothesis (2b) and indicate that for this sample, as attitudes of tolerance toward schizophrenia increase, attitudes (stigma) toward mental illness decrease.

Hypothesis 3a. A Pearson correlation addressed the relationship between SKAPS Knowledge and RKI (belief in recovery). The correlation was not found to be statistically significant, r (317) = .099, p = .076, indicating no association between SKAPS Knowledge and RKI (Table 8). These scores indicate that for this sample, there was no relationship between knowledge of schizophrenia and belief in the recovery process.

Hypothesis 3b. A Pearson correlation addressed the relationship between SKAPS Attitude and RKI. The correlation was found to be statistically significant, r (317) = -.297, p < .001, indicating a low to moderate negative association between SKAPS Attitude and RKI (Table 8). These scores indicate that, for this sample, as attitude (tolerance) towards schizophrenia increases, the belief in recovery process decreases.

Although significant, this finding was contrary to the stated direction of the relationship. It was proposed that a positive correlation between these two measures would be found.

Figure 2: SKAP-Attitude and RKI (Recovery)



Note: Relationship between scores on SKAPS-A and RKI **taken by participants. r (317) = -.297, *p* < .001**

Hypothesis 4. A correlation will be found between years of experience working as a mental health professional (Table 1d) and the following: (a) SKAP Knowledge, measuring knowledge of schizophrenia; (b) SKAP Attitude, measuring attitude (tolerance) towards schizophrenia; (c) MICA-4, measuring the attitude (stigma) towards

mental illness, and (d) RKI, measuring belief in the recovery process. A Spearman's Rank correlation was used. The correlation between Years of Experience and SKAP Knowledge was found to be statistically significant, $r(317) = .189$, $p < .00$, indicating a weak positive association; these scores demonstrate that, for this sample, as years of experience increase, knowledge of schizophrenia increases. The correlation between Years of Experience and SKAP Attitude was not found statistically significant, $r(317) = .126$, $p < .02$, indicating no association; these scores indicate that, for this sample there was no relationship between years of experience and attitude of schizophrenia (tolerance). The correlation between Years of Experience and MICA-4 was not found statistically significant, $r(317) = -.068$, $p = .22$, indicating that, for this sample there was no relationship found between years of experience and attitudes (stigma) toward mental illness. The correlation between Years of Experience and RKI was not found statistically significant, $r(317) = -.005$, $p = .93$; for this sample no relationship between years of experience and belief in recovery process was found.

Table 10

Correlation - Years of Experience and SKAPS-K, SKAPS-A, MICA-4, RKI

	Years of Experience
SKAPS-K	0.189*
SKAPS-A	0.126
MICA-4	-0.068
RKI	-0.005

Note: Correlations for participants (n=319) are presented in the table above.
*Coefficient is significant at the 0.01 level.

Exploratory Analysis. The continuous variables were also examined within the sample of two subgroups, Tx/withEx: participants with experience providing treatment to patients with severe mental illness; Tx/withoutEx: participants who have no experience providing treatment to patients with severe mental illness (Table 1f); and each variable: SKAP Knowledge, measuring knowledge of schizophrenia, SKAP Attitude, measuring attitude (tolerance) towards schizophrenia, MICA-4, measuring the attitude (stigma) towards mental illness and RKI , measuring belief in the recovery process. Table 11 illustrates the mean and standard deviation of each subgroup and scales. To evaluate if differences are found between treatment groups, four independent samples t-tests for equality of group means with Levene's test for equality of variances were conducted (Table 12). The t-tests illustrated that no statistically significant differences were found between groups. Therefore, having experience or not having experience in treating those

with severe mental illness was not found to be a discriminate factor on the variables examined: knowledge of schizophrenia, tolerance towards schizophrenia, attitude towards mental illness and beliefs in recovery.

Table 11

Summary Statistics for Primary Variables by Groups: Treat Severe Mental Illness – Yes or No

	Treat severe mental illness	N	Mean	Std. Deviation	Std. Error Mean
SKAPS Knowledge	Yes	247	4.8462	1.41156	.08982
	No	72	4.9028	1.40582	.16568
SKAPS Attitude	Yes	247	36.7773	3.76481	.23955
	No	72	36.4861	4.07670	.48044
MICA4	Yes	247	31.7004	6.37125	.40539
	No	72	33.3750	6.92503	.81612
RKI	Yes	247	59.5466	6.62749	.42170
	No	72	61.0833	5.81341	.68512

Note: Summary statistics for scales in reference to having experience providing treatment to those with SMI (n= 247) or no experience providing treatment to those with SMI (n=72).

Table 12

Independent Samples t-Test for Equality of Group Means with Levene's Test for Equality of Variances

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
SKAPS Knowledge	Equal variances assumed	.000	.988	-.300	317	.765
	Equal variances not assumed			-.300	115.972	.764
SKAPS Attitude	Equal variances assumed	3.442	.065	.567	317	.571
	Equal variances not assumed			.542	108.750	.589
MICA4	Equal variances assumed	.633	.427	-1.924	317	.055
	Equal variances not assumed			-1.838	108.454	.069
RKI	Equal variances assumed	.319	.572	-1.778	317	.076
	Equal variances not assumed			-1.910	129.618	.058

Note: t- test and Levenes test of equality between groups and scales.

Chapter 6 Discussion

Summary of Findings

Mental health professionals can hold similar negative attitudes toward a patient's ability to experience recovery when compared with those held by the general public (Aggarwal, 2008; Kingdon et al., 2004; Lauber et al., 2006; Nordt 2006; Servais & Saunders, 2007). As a result, stigmatizing attitudes toward this population can remain active, generating self-stigma and demoralization for the patient. There is evidence that patients who perceive devaluation or rejection by society have poorer treatment outcomes (Jorm et al., 1999). Therefore, it is essential that mental health professionals be aware of any stereotypical views that they may hold toward their clients with schizophrenia. The attitude of the therapist, combined with the self-stigmatized beliefs of the patient, sets the tone of the therapeutic bond within this dyad, which is the determinant for the success or failure of treatment and recovery (Beck et al., 2009).

This study explored if the variables of knowledge of schizophrenia and attitudes (tolerance) held toward people with schizophrenia, attitude of clinicians towards mental illness, and years of experience as a mental health professional were related to believing in the process of recovery for patients with schizophrenia. An additional exploratory analysis examined differences amidst these constructs between participants who have experience providing treatment to patients with severe mental illness, such as schizophrenia, and participants who have no experience providing treatment to this population. The data for this study were collected from a sample that, within the confines of the inclusion and exclusion criteria were diverse in terms of gender, age, professional title, years of experience and experience providing treatment to patients with severe

mental illness.

The results of the current study support only one of the four hypotheses. Results from testing hypothesis 1 indicate that increases in attitudes of (stigma) towards mental illness are associated with increases in belief in recovery process. These results, although opposite of the proposed, hypothesized direction, may illustrate that although a positive belief in the recovery processes may exist, it also illuminates the existence or prevalence of an attitude of stigma towards mental illness, because stigma also continues to be elevated. Hypothesis 2a indicated that there was no association found between knowledge of schizophrenia and attitude (stigma) towards mental illness. However, 2b indicated that there was an association between tolerance and stigma; as professionals showed greater tolerance towards people with schizophrenia there was found to be a reduction in attitude (stigma) towards mental illness. Hypothesis 3a indicated there is no association found between knowledge of schizophrenia and belief in the recovery process. However, 3b indicated an association between tolerance and recovery beliefs. These results, although opposite to the proposed direction hypothesized, appears to support that having a greater attitude of tolerance towards schizophrenia is associated with a diminished belief in recovery. Hypothesis 4 indicated an association between years of experience as a mental health professional and greater knowledge of schizophrenia. However, years of experience were not related to attitudes of tolerance, attitudes of stigma, or beliefs in the recovery process. Therefore, according to the results of this study, although years of experience increase knowledge of schizophrenia, years of experience had no impact on level of tolerance, attitudes of stigma or recovery beliefs.

Of some interest, in the exploratory analysis there were observations to determine if difference might exist between two groups, i.e., those with experience providing treatment and those with no experience providing treatment to those with severe mental illness. No differences were found between groups, indicating that having experience or not having experience in treating those with severe mental illness was not found to differentiate providers on their knowledge of schizophrenia, tolerance towards schizophrenia, attitude towards mental illness and beliefs in recovery.

When looking at the effect of years of experience as a mental health professional, it was found that the longer someone had worked in the field, the higher the person's scores were on the knowledge of schizophrenia scale. This may lead an intuitive suggestion that knowledge and experience would favorably influence more positive attitudes toward those with schizophrenia, fewer stigmas and a belief in their recovery process. Intuitively, one may also surmise that a combination of these factors could complement efforts of transformation to the recovery ideologies. However, this study found that knowledge showed no relationship to stigma beliefs, or to higher acceptance of the recovery framework.

Although knowledge shows no effect, this study could support an argument that positive attitudes toward patients with schizophrenia may lead to a reduction in stigma and a corresponding belief in recovery. This argument was tested by observing the difference between groups of those with experience in treating patients with schizophrenia and those without experience in treating schizophrenia. The findings revealed no difference between these groups, indicating that having experience did not lead to more favorable attitudes of tolerance and recovery beliefs, or to a reduction of

stigma beliefs. It is possible that a bias towards treatment failures prevails among those with more years of experience, especially for those providers who may work in inpatient setting. This bias might explain the reason why those who know more about schizophrenia may have more negative beliefs about the recovery possibilities for people with serious mental illnesses in general and with schizophrenia specifically. In 2006, Davidson, et al, identified the top ten reasons why providers may be reluctant to fully embrace the recovery model. These concerned are highlighted as, 1) recovery increases providers' exposure to risk and liability; 2) devaluation of professional intervention; 3) recovery-oriented services are neither reimbursable nor evidence-based; 4) introduction of new services (resource/funding concerns); 5) recovery requires active treatment and the cultivation of insight (some patients do not recognize their illnesses); 6) recovery (conceptual model) in mental health is an irresponsible fad; 7) recovery is believed to be achievable by a very small percentage of people; 8) recovery means that the person is cured, yet it is a contradiction to the status of the person under care who is still ill; 9) recovery-oriented care adds to the burden of mental health professionals (who are already overloaded and under resourced); 10) recovery is old news (too much hype).

Of particular interest to this study, from Davidson's top list, would be the view that recovery is an irresponsible fad and the belief that recovery is achievable only by a small percentage of people affected by SMI. Accordingly, it is also possible that the knowledge and experiences of this sample are the result of established beliefs and schemas about this population. Schema describes an organized pattern of thought that organizes information and becomes a mental structure of preconceived ideas; a framework representing some aspect of the world. Once schemata are developed, people

are more likely to notice things that fit into their schema, and view contradictions to the schema as exceptions. Schemata have a tendency to remain unchanged, even in the face of contradictory information (Padesky, 1994).

This is often how stereotypes develop: Stereotypes are a widely held but fixed and oversimplified image or idea of a particular type of person or thing. Once people develop stereotypes about persons, groups or concepts because of fixed schemas, they are difficult to change even in lieu of new information, knowledge and observational experience such as working with patients with schizophrenia (Calvelti et al., 2011). Fixed stereotypes over time have contributed to the natural outcome of the next construct, tolerance. Tolerance is an expression of sympathy or understanding that invokes acceptance for a particular type of person or thing yet inhibits its growth. Therefore, tolerance may yield acceptance and support the reduction of stigma towards patients with schizophrenia, yet, adversely, may also fail to promote a belief in recovery.

The findings of this study demonstrate that as tolerance towards schizophrenia increased, attitudes of stigma toward mental illness decreased; however, beliefs in the recovery process also decreased. Therefore, tolerance helps to reduce stigma, but it is also associated with a disbelief in recovery. Therapists who display a sympathetic tolerance towards people with schizophrenia could be unaware that they may hold stereotypical views of individuals with serious mental illnesses and with the patient's ability to recover. Perhaps these therapists have not embraced the paradigm of recovery into their service provision or perhaps they have not received adequate training in what providing recovery-oriented services entails.

Under the recovery framework of care provision it is imperative to give hope,

empowerment and a sense of self-efficacy to motivate clients towards their process of recovery. In the past, therapists and other mental health providers may have limited the provision of these constructs in order not to give patients "false" hope, given the formerly prevailing beliefs about the negative long term outcome trajectories of serious mental illnesses. When therapists' schemas of people with schizophrenia are not challenged by a changing knowledge base and more positive experiences, their schemata develop into stereotypes. Stereotypes can reinforce the belief in the patient's inability to recover, narrowing providers to the option of embracing tolerance for the patient. Therefore, although tolerance helps to diminish stigma, it also maintains beliefs that patients are unable to recover, particularly if a paternalistic stance of care-taking continues to prevail. This ultimately compromises a process of recovery for those with schizophrenia.

Unfortunately, mental health providers have also been reluctant to fully embrace the recovery model due to a misunderstanding of how recovery in mental illness is defined. As evidenced by these findings, it is essential to provide more comprehensive training and exposure for providers to individuals with SMI who have had successful recovery experiences. It is also vital to understand the process of recovery and how it is defined; by means of progressive interpretation, recovery is not a symptom-free outcome or a return to baseline functioning. Rather, it is the rediscovery of a multidimensional sense of self over time, including the identification of meaningful goals, the restoration of a good quality of life and the perception of self that is not solely defined by the person's mental health disorder (Davidson, O'Connell, Tondora, Staeheli, & Evans, nd.).

Limitations of the Study

A survey design was used in order to obtain a large amount of data in a relatively short period of time. Self-report surveys do not represent a random sample from the population of all therapists that were reached with the email invitation, or indeed the population of all practicing therapists. Therefore, the generalizability of the results needs to be approached with caution. The use of a self-report survey posed a threat to demand characteristic because participants may answer the questions in ways they believe they are expected to answer. Professionals may answer in ways that are expected in accordance with their professional status, as opposed to giving a more truthful response that more accurately reflect their beliefs. Although participation was anonymous, this fact may have not fully ensured that participants felt comfortable in reflecting their own personal attitudes.

Another potential limitation to this survey is the way in which the participants interpreted the questions. The response of the participant can be inaccurate due to untruthfulness, misunderstanding, desire to please the surveyor, or even the manner in which the question is asked and the choice of responses available to allow them to reflect their most correct answer accurately (Rea & Parker, 2005; Scholle & Pincus, 2003). Therefore, when surveying a professional population sample, individual interpretation of questions and answering with no inhibitions or expectancies of how they should answer the question as a professional becomes challenging. (Rea & Parker, 2005; Scholle & Pincus, 2003). Additionally, it is important to note that accurate belief values are difficult to analyze in terms, such as "agree/disagree," "true /false," etc. Even 'yes' or 'no' questions can be difficult to pin down because the participant may choose the most

correct answer, if neither choice is actually valid. For example, the participant may choose to select “no” if the choice “on a single occasion” is unavailable (Rea & Parker, 2005; Scholle & Pincus, 2003).

Given the subjective nature of the data source being survey responses, it is possible that the knowledge data collected are inclusive of biases influenced by established beliefs and schemas about this population. Additionally, the years of experience data were collected and analyzed with use of artificial grouping. Artificial grouping in the category of years of experience was used for simplification of respondent input and automated data collection for analysis. Specifically, responses to years of experience were stratified in groupings of 1-5, 6-10, 11-15, 16-20, 21-25, 26-30, and 31-35. This stratified approach is recognized as artificial grouping due to the formation of discrete data sets used in continuous data analysis (e.g. using the data to derive mean and standard deviation). As a result, the average of each group may or may not be accurately representative, as compared with the potential outcome without stratification. Artificial grouping neutralizes the weight of influence from within the sub-group. For example, respondents with 1 year of experience would be weighted equally with those with 5 years of experience. A difference of four years of experience could result in a measurable shift in one’s understanding. Therefore, it is possible that there were differences within sub-groups that were not discernible through analysis, due to the grouping. Considering these concerns of undetectable differences from within the subgroups, artificial grouping is not the best way to represent scores based on years of experience.

Similar to the limitations revealed in the use of artificial grouping, it is important to disclose that the SKAP-K scale used to represent the construct of knowledge may not

accurately represent professional-level knowledge of schizophrenia. Although this study indicated that knowledge showed no relationship to stigma beliefs or beliefs in recovery, the first concern pertains to the immaturity of the SKAP-K scale and its associated assessment value. However, it was the best available scale at the time of this study. The second related concern was the specific content of the questions, which pervasively supports assessment of attitudes and perceptions more than knowledge expected of a clinician. Most of the questions focus on a societal/general type of knowledge of schizophrenia as opposed to a clinical knowledge of the disorder of schizophrenia.

Possible improvement to the SKAP-K scale may be shifting the expectation of knowledge level through content revision. For instance, presenting questions such as "schizophrenia is categorized as a spectrum disorder with severity on a continuum" and "not all patients with schizophrenia have the same level of cognitive deficits" would be more consistent with a clinician level of knowledge. Likewise, elimination of questions such as "Individuals with schizophrenia behave violently" would further support a distinction of knowledge corresponding with the expectation of a clinician, as opposed to general societal views. Moreover, balancing between major conflicting views within the professional community (e.g. historical views compared with newer evidence-based views) may be advantageous. For example, the question "T/F through treatment and medication, schizophrenia can be cured" could be balanced with a question such as, "T/F a person with schizophrenia may experience recovery through effective intervention and treatment."

Relevance to the Theory and Practice of Psychology

As a professional responsibility, mental health professionals should pursue the abolishment of discrimination and stigmatization of those suffering from mental illness. In following the Ethical Principles of Psychologists and Code of Conduct (APA, 2010), psychologists are expected to make every effort to do no harm towards those whom they serve and to endorse every effort to benefit them. The ethics code states that psychologists should treat clients with respect and dignity, regardless of disability. In addition, psychologists are to abolish any biased views based on cultural, individual and role differences and not to participate deliberately in or disregard the activities of others, based upon prejudice. As an ethical duty to ensure quality of care and reduction of harm, it is imperative for therapists to be aware that they are not immune to assuming social attitudes of stereotyping, particularly involving the population they serve. While following best practices of psychology as patient advocates, it is imperative that mental health professionals are mindful of their own attitudes, in an effort to reduce any unintentional negative effects on patients and the public.

Due to social stereotypes and stigmatization, mental health professionals have been found to have the same negative , if not more negative, views of serious mental illnesses as the general public (Lauber et al., 2006; Nordt 2006; Servais & Saunders, 2007). The Nordt (2006) study found that although mental health professionals treat psychiatric disorders and understand the rights of individuals with mental illness, neither of these factors results in less stereotypical views towards the patients nor a willingness to interact closely with them. Therapists' disengagement from their patients can occur outside of their awareness and might occur due to feeling uncomfortable with symptoms

of severe mental illness, such as psychosis. However, psychosis is often a small part of a patient's symptomology (Beck et al., 2009), yet it becomes a focal point within the therapeutic relationship. As a result, therapists might inadvertently support an "us" versus "them" mentality. For these therapists, the therapeutic rapport with their patients might become strained, leaving the patient to feel abandoned, unsupported, and stigmatized (Beck et al., 2009; Vauth, 2007; Corrigan et al., 2009).

Less social stigma experienced from the public and from the mental health professionals will aid in decreasing the self-stigma experienced by some patients with schizophrenia. This decrease in self-stigma will allow room for the patient to develop greater self-efficacy. In order to reduce unintentional negative effects of treatment attitudes, therapists should examine their attitudes towards mental illness and recovery to be sure that remnants of disbelief are not clouding their professional obligations to instill hope and encourage recovery (Jacobson, 2004). As therapist become more hopeful about the patient's ability to recover, the patient will also be able to begin to embark on his or her process of recovery.

Implications of this study affirm that attitudes of stigma exist toward mental illness and that tolerance maintains a disbelief in recovery for patients with schizophrenia. Contrary to expectations and previous research findings; increased knowledge about schizophrenia was not related to holding fewer stigmatizing beliefs or positive views about the recovery paradigm. Therefore it is essential to increase knowledge about the recovery paradigm and the ability for people with serious mental illnesses, including schizophrenia, to recover and live meaningful lives. Increased research evidence and knowledge translation will hopefully result in treatment providers

changing their existing schema of conceptualizing serious mental illnesses largely in a disease and/or medical model framework. This advocacy will help transform social views of stigma toward mental illness and allow for greater understanding of mental health care. Empowering the public with greater knowledge and awareness of mental health recovery, social stigmas toward mental illness will hopefully decline and recovery will continue to take hold as an overarching framework for mental health care.

Suggestions for Future Research

The findings of this study lead to further credence for awareness that stigma towards mental illness remains prevalent, particularly for those with schizophrenia, even among treatment providers. It also shows that much work needs to be done with regard to treatment providers' beliefs and knowledge about the recovery paradigm for people with serious mental illnesses. In order to make advancements in the treatment of schizophrenia, it is imperative to dispel the misperception that individuals with serious mental illnesses cannot experience recovery. Advancing knowledge and conceptualizations of schizophrenia will empower professionals and the public to dismantle century-old myths that people with schizophrenia are dangerous, violent, unpredictable and unable to recover. Combined with the provision of evidence-based treatments, knowledge becomes the catalyst of hope that recovery is possible.

Developing training programs is key to reducing treatment attitudes associated with stigma. Providing evidence-based treatments such as CBT for individuals with schizophrenia is futile if the therapist is convinced that the patient cannot improve or recover. Therapist' belief in the potential of a recovery outcome for their patients is essential, even when the patients' cognitions may be limited. Furthermore, training

therapist how to treat and relate to symptoms of psychosis is paramount in improving the process of validating the patients' experiences. Gaining a better, emphatic understanding of what patients experience encourages the development of a more trusting therapeutic bond between the therapist and patient. Therapist can better assume the role as the patients' advocate when the therapist understands and embraces the concept of recovery. Likewise, in order to combat the patients' self-stigma, a factor that affects approximately 33% of patients with SMI, the therapist will need to modify CBT with additional anti-stigma interventions to motivate patients to start believing in their own recovery potential and self-worth (Link et al., 1991).

Although the diagnosis of schizophrenia lies on a continuum, it is important to recognize that severity of the disorder can dictate a patient experience of the recovery. Each client will work towards his or her own meaning of recovery and quality of life, depending on the nature of each one's personal needs, such as housing, employment, self-efficacy, and empowerment. Therefore, the 2009 APA resolution supports modifying treatment protocols to meet the needs of each patient for more effective patient outcomes. Research is needed regarding the effectiveness of treatment protocols such as CBT and other evidence based treatments, as well as the effectiveness of modifying treatment protocols to include psychological interventions for treatment of stigma related barriers (McGurk, Mueser, Feldman, Wolfe, & Pascaris, 2007). It would also be of interest to investigate the patient's level of self-efficacy within treatment sessions to evaluate if the effects of stigma, held by patients, providers or society, may be interfering with the patient's level of personal competence to pursue a process of recovery. In addition, as evidenced in many previously cited studies, the active engagement of patients in their

own recovery is vital to favorable and sustained outcomes. Therefore, to build on the successes already achieved in transforming treatment protocols and attitudes, it is important to continue further research on the psychological constructs involved in the recovery process such as hope, self-efficacy, self-determination, and empowerment (Lysaker et al., 2003; Roe 2001, 2003).

There has been minimal research conducted on the topic of the therapist attitude towards mental illness and the effect it may have on treatment outcomes (Wahl & Aroesty-Cohen, 2010). Stereotypes and misconceptions of patients with schizophrenia commonly held by the general public and shared by therapists are topics worthy of further investigation (Nordt, 2006). People who have experienced mental illness suffer as much from other people's responses and expectations, or lack of expectations, as from the symptoms of the illness itself (Beck et al., 2009; Staring et al., 2009). Future research on the recovery process for patients with schizophrenia and training programs for therapists to develop a more appropriate and updated conceptualization of the disorder of schizophrenia is paramount for change (Gray, 2002; Rector & Beck, 2002).

Conclusion

This study demonstrated an ongoing need for advocacy for individuals with schizophrenia, as well as a need for continued, raised awareness about the social stigma these individuals encounter. Stigma has complex roots in society and often goes unnoticed and unaddressed. Stigma complicates the process of recovery for patients for many reasons and it also interferes with people’s willingness to seek professional help due to a fear of being labeled. If such individuals seek help and encounter treatment providers who do not embrace the belief that individuals can change, grow and recover,

hopelessness will permeate the tone of the session. Therefore, it is imperative for therapists to be aware of their own attitudes toward recovery for individuals with schizophrenia. It is also important that the therapist remain cognizant of his or her client's experience of stigma. As a local clinical scientist, psychologist should maintain an awareness of how stigma affects not only the patient's belief of his or her own recovery process but also how societal views of mental health and illness play a major role in the recovery cycle.

Psychologists are encouraged to support and promote efforts to reduce stigma and endorse recovery for people with severe mental illnesses. Promoting the recovery paradigm begins with assessing therapists' own attitudes towards mental health and belief in recovery. Therefore, as true patient advocates, therapists should understand that they are not immune from holding attitudes based on social stereotypes. Therapists need to be encouraged to use self-reflection to examine their attitudes toward patients with schizophrenia, including their professional dedication to the model of recovery. Advocating for people with mental health disorders encourages providers to become more hopeful about their clients' opportunities for recovery. Research and effective treatment that promotes recovery principles for individuals with serious mental illnesses will provide the best evidence to alter core beliefs about mental illness and reduce the barriers of stigma. The APA resolution for mental health recovery (2009) endorses the need for patients to be accepted as valued individuals in their communities as part of their recoveries.

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Tables

Table 1: Demographic Information

a) As a licensed mental health professional what best describes your job title?

Job Title	No. of Responses	Percentage of Responses
Psychologist	181	56.74%
Psychiatrist	54	16.93%
Professional Counselor	19	5.96%
Masters-level Therapist	27	8.46%
Masters-level Social Worker	38	11.91%
Total	319	

Note: The largest group of respondents was psychologists (56.21%), while the smallest group represented was professional counselors (5.90%).

b) What is your gender?

Gender	No. of Responses	Percentage of Responses
Male	165	51.72%
Female	154	48.28%
Total	319	

Note: Males (51.72%) were represented slightly higher in this study than were females.

c) Which category below includes your age?

Age Group	No. of Responses	Percentage of Responses
20-29	14	4.39%
30-39	61	19.12%
40-49	75	23.51%
50-59	93	29.15%
60-69	61	19.12%
70 or older	15	4.70%
Total	319	

Note: Participants age 50-59 were the highest represented group in the study. The least represented group were ages 21-29 (4.39%)

d) How many years of experience do you have working as a mental health professional?

Years of Experience	No. of Responses	Percentage of Responses
1-5	53	16.61%
6-10	52	16.30%
11-15	49	15.36%
16-20	27	8.46%
21-25	49	15.36%
26-30	35	10.97%
31-35	33	10.34%
36-40	13	4.08%
40 or more	8	2.51%
Total	319	

Note: Participants with 1-5 years of experience working in mental health were the highest represented group (16.61%), slightly higher than 6-10 years (16.30%). Participants with 40 of more years of experience were the least represented group (2.51%).

e) What best describes your clinical theoretical orientation?

Orientation	No. of Responses	Percentage of Responses
Behavioral	15	4.70%
Humanistic	31	9.72%
Psychodynamic	77	24.14%
Family systems	26	8.15%
Biopsychosocial Model	47	14.73%
Cognitive Behavioral Therapy	87	27.27%
Other	36	11.29%
Total	319	

Note: Cognitive Behavioral Therapy (27.27%) was the highest clinical theoretical orientation among participants. Behavioral (4.70%) was the least represented orientation among participants.

f) Do you have experience providing treatment to patients with severe mental illness?

Answer Choice	No. of Responses	Percentage of Responses
Yes	248	77.74%
No	71	22.26%
Total	319	

Note: 78% of the participants had experience treating patients with a severe mental illness.

g) How many years of experience do you have treating patients with schizophrenia?

Years of Experience	No. of Responses	Percentage of Responses
1-3	74	29.84%
4-6	42	16.94%
7-10	35	14.11%
11-15	27	10.89%
16-20	20	8.06%
21-25	20	8.06%
26-30	15	6.05%
Over 30	15	6.05%
Total	248	

Note: Participants with 1-3 years of experience treating patients with schizophrenia were the highest represented group (30%). Participants with 25-30 and 30 or more years of experience were the least represented groups (6%).

h) Within the past three years of your active clinical practice, have you provided treatment to people with schizophrenia?

Answer Choice	No. of Responses	Percentage of Responses
Yes	169	68.15%
No	79	31.85%
Total	248	

Note: In the last three years, 68% of participants have provided treatment to people with schizophrenia.

i) Within a typical month, how many patients with schizophrenia do/did you treat?

No. of Patients	No. of Responses	Percentage of Responses
5 or less	169	68.15%
6-10	33	13.31%
11-25	27	10.89%
26-50	11	4.44%
51-74	3	1.21%
75 or over	5	2.02%
Total	248	

Note: Participants that treated 5 or less patients with schizophrenia (68%) in a typical month was the highest represented group in the study.

Table 2 - Descriptive Statistics for SKAP-K, SKAP -A, MICA-4, RKI

Descriptive Statistics for Primary Variables

	N	Minimum	Maximum	Mean	Std. Deviation
SKAPS Knowledge	319	1.00	9.00	4.8589	1.40826
SKAPS Attitude	319	22.00	46.00	36.7116	3.83277
MICA4	319	16.00	51.00	32.0784	6.52693
RKI	319	40.00	78.00	59.8934	6.47598
Valid N (listwise)	319				

Table 3 - Gender

Summary Statistics- Gender

Gender		SKAPS Knowledge	SKAPS Attitude	MICA4	RKI
Female	Mean	4.7333	36.7333	32.5697	60.0364
	N	165	165	165	165
	Std. Deviation	1.39744	4.03360	6.87628	6.38395
Male	Mean	4.9935	36.6883	31.5519	59.7403
	N	154	154	154	154
	Std. Deviation	1.41189	3.61825	6.10908	6.59055
Total	Mean	4.8589	36.7116	32.0784	59.8934
	N	319	319	319	319
	Std. Deviation	1.40826	3.83277	6.52693	6.47598

Note: Summary statistics for participants (n=319) by gender for SKAPS-K, SKAPS-A, MICA-4, and RKI are shown in the able above.

ANOVA- Gender

			F	Sig.
SKAPS Knowledge * Gender	Between Groups	(Combined)	2.734	.099
	Within Groups			
	Total			
SKAPS Attitude * Gender	Between Groups	(Combined)	.011	.917
	Within Groups			
	Total			
MICA4 * Gender	Between Groups	(Combined)	1.943	.164
	Within Groups			
	Total			
RKI * Gender	Between Groups	(Combined)	.166	.684
	Within Groups			
	Total			

Note: Analysis of Variance for participants (n=319) is shown in the table above.

Table 4 – Age Group

Summary Statistics- Age Group

Age		SKAPS Knowledge	SKAPS Attitude	MICA4	RKI
20-29	Mean	4.2857	35.7143	32.7857	62.0000
	N	14	14	14	14
	Std. Deviation	1.20439	3.04905	6.58879	7.13604
30-39	Mean	4.7581	36.4194	32.8871	59.3065
	N	62	62	62	62
	Std. Deviation	1.35120	3.71770	5.81435	7.22153
40-49	Mean	4.5833	36.1944	32.1389	60.5694
	N	72	72	72	72
	Std. Deviation	1.46075	4.09960	7.41773	6.40384
50-59	Mean	4.9681	36.6383	31.6064	58.8191
	N	94	94	94	94
	Std. Deviation	1.46978	3.85169	6.49105	5.95857
60-69	Mean	5.1803	37.3934	32.4918	60.6557
	N	61	61	61	61
	Std. Deviation	1.33552	3.78717	6.23331	6.50355
70 or older	Mean	5.1250	38.8750	29.2500	60.6875
	N	16	16	16	16
	Std. Deviation	1.20416	2.96367	6.09371	5.60617
Total	Mean	4.8589	36.7116	32.0784	59.8934
	N	319	319	319	319
	Std. Deviation	1.40826	3.83277	6.52693	6.47598

Note: Summary statistics for participants (n=319) by age group for SKAPS-K, SKAPS-A, MICA-4, and RKI are shown in the table above.

Table 4 – Age Group (continued)

ANOVA – Age Group

			F	Sig.
SKAPS Knowledge * Age	Between Groups	(Combined)	1.971	.083
	Within Groups			
	Total			
SKAPS Attitude * Age	Between Groups	(Combined)	1.966	.083
	Within Groups			
	Total			
MICA4 * Age	Between Groups	(Combined)	.972	.435
	Within Groups			
	Total			
RKI * Age	Between Groups	(Combined)	1.296	.266
	Within Groups			
	Total			

Note: Analysis of Variance for participants (n=319) is shown in the table above.

Table 5 – Clinical Theoretical Orientation

Summary Statistics - Clinical Theoretical Orientation

Clinical Theoretical Orientation		SKAPS Knowledge	SKAPS Attitude	MICA4	RKI
Behavioral	Mean	4.7143	35.2857	32.6429	60.2857
	N	14	14	14	14
	Std. Deviation	1.38278	3.36106	6.28315	5.73020
Humanistic	Mean	4.9032	36.3226	33.2581	59.1613
	N	31	31	31	31
	Std. Deviation	1.32551	3.62755	7.94971	6.36185
Psychodynamic	Mean	5.0526	36.7763	32.4605	59.0526
	N	76	76	76	76
	Std. Deviation	1.34556	4.30379	5.86843	6.28627
Family systems	Mean	4.7308	36.6538	32.1538	60.6154
	N	26	26	26	26
	Std. Deviation	1.45761	3.97937	6.63742	7.57404
Biopsychosocial Model	Mean	4.6170	37.5319	32.0000	60.4894
	N	47	47	47	47
	Std. Deviation	1.43789	3.78700	7.27712	6.46688
Cognitive Behavioral Therapy	Mean	4.5909	36.4432	31.7045	60.5227
	N	88	88	88	88
	Std. Deviation	1.43548	3.70107	6.41865	6.57228
Other	Mean	5.5135	37.0811	31.0270	59.3243
	N	37	37	37	37
	Std. Deviation	1.30430	3.40244	6.05753	6.38163
Total	Mean	4.8589	36.7116	32.0784	59.8934
	N	319	319	319	319
	Std. Deviation	1.40826	3.83277	6.52693	6.47598

Note: Summary statistics for participants (n=319) by clinical theoretical orientation for SKAPS-K, SKAPS-A, MICA-4, and RKI are presented in the table above.

Table 5 - Clinical Theoretical Orientation (continued)

ANOVA - Clinical Theoretical Orientation

			F	Sig.
SKAPS Knowledge * Clinical Theoretical Orientation	Between Groups	(Combined)	2.466	.024
	Within Groups			
	Total			
SKAPS Attitude * Clinical Theoretical Orientation	Between Groups	(Combined)	.867	.520
	Within Groups			
	Total			
MICA4 * Clinical Theoretical Orientation	Between Groups	(Combined)	.435	.855
	Within Groups			
	Total			
RKI * Clinical Theoretical Orientation	Between Groups	(Combined)	.590	.738
	Within Groups			
	Total			

Table 6 – Treatment Experience

Summary Statistics - With experience or no experience providing treatment to patients with severe mental illness.

Treat severe mental illness		SKAPS Knowledge	SKAPS Attitude	MICA4	RKI
Yes	Mean	4.8462	36.7773	31.7004	59.5466
	N	247	247	247	247
	Std. Deviation	1.41156	3.76481	6.37125	6.62749
No	Mean	4.9028	36.4861	33.3750	61.0833
	N	72	72	72	72
	Std. Deviation	1.40582	4.07670	6.92503	5.81341
Total	Mean	4.8589	36.7116	32.0784	59.8934
	N	319	319	319	319
	Std. Deviation	1.40826	3.83277	6.52693	6.47598

ANOVA Table - With experience or no experience providing treatment to patients with severe mental illness

			F	Sig.
SKAPS Knowledge * Treat severe mental illness	Between Groups	(Combined)	.090	.765
	Within Groups			
	Total			
SKAPS Attitude * Treat severe mental illness	Between Groups	(Combined)	.321	.571
	Within Groups			
	Total			
MICA4 * Treat severe mental illness	Between Groups	(Combined)	3.701	.055
	Within Groups			
	Total			
RKI * Treat severe mental illness	Between Groups	(Combined)	3.161	.076
	Within Groups			
	Total			

Note: Analysis of Variance for participants (n=319) is presented above.

Table 7 – Job Title

Summary Statistics – Job Title

Job Title		SKAPS Knowledge	SKAPS Attitude	MICA4	RKI
Psychologist	Mean	4.9116	36.8122	31.4917	58.9227
	N	181	181	181	181
	Std. Deviation	1.36338	3.63594	6.14963	5.94928
Psychiatrist	Mean	5.1111	36.5926	32.0185	62.7222
	N	54	54	54	54
	Std. Deviation	1.46231	4.00245	5.92879	6.43814
Professional Counselor	Mean	4.8947	36.5789	32.7368	58.1053
	N	19	19	19	19
	Std. Deviation	1.66315	3.61041	6.62354	6.19045
Masters-level Therapist	Mean	4.7037	35.2593	34.6667	61.2963
	N	27	27	27	27
	Std. Deviation	1.65981	4.14722	7.72110	7.22610
Master-level Social Worker	Mean	4.3421	37.5000	32.7895	60.3947
	N	38	38	38	38
	Std. Deviation	1.12169	4.27911	7.82635	7.34310
Total	Mean	4.8589	36.7116	32.0784	59.8934
	N	319	319	319	319
	Std. Deviation	1.40826	3.83277	6.52693	6.47598

Note: Summary statistics for participants (n=319) by job title for SKAPS-K, SKAPS-A, MICA-4, and RKI are shown in the table above.

Table 7 – Job Title (continued)

ANOVA – Job Title

			F	Sig.
SKAPS Knowledge * Job Title	Between Groups	(Combined)	1.881	.113
	Within Groups			
	Total			
SKAPS Attitude * Job Title	Between Groups	(Combined)	1.429	.224
	Within Groups			
	Total			
MICA4 * Job Title	Between Groups	(Combined)	1.601	.174
	Within Groups			
	Total			
RKI * Job Title	Between Groups	(Combined)	4.520	.001
	Within Groups			
	Total			

Note: Analysis of Variance for participants (n=319) is shown in the table above.

Table 8 - Years of Experience

Summary Statistics - Years of Experience as a Mental Health Professional

Yrs Experience		SKAPS Knowledge	SKAPS Attitude	MICA4	RKI
1-5	Mean	4.7222	36.2778	33.1296	60.2963
	N	54	54	54	54
	Std. Deviation	1.43299	4.09978	6.76296	7.42416
6-10	Mean	4.4314	36.8235	31.0784	58.5882
	N	51	51	51	51
	Std. Deviation	1.37484	3.31485	6.84644	7.24756
11-15	Mean	4.6735	36.3061	32.4082	60.8980
	N	49	49	49	49
	Std. Deviation	1.63793	3.91687	6.47405	5.87454
16-20	Mean	4.4815	36.1481	32.0000	60.4074
	N	27	27	27	27
	Std. Deviation	1.36918	3.25463	6.95591	5.83266
21-25	Mean	5.1458	36.3542	32.3125	59.3125
	N	48	48	48	48
	Std. Deviation	1.14835	4.43146	6.27103	5.83152
26-30	Mean	5.3429	37.5143	33.2571	60.1429
	N	35	35	35	35
	Std. Deviation	1.10992	3.39871	6.83565	6.33915
31-35	Mean	4.8824	36.7647	32.0588	60.0000
	N	34	34	34	34
	Std. Deviation	1.38749	4.34887	6.20821	6.25227
36-40	Mean	5.3846	39.0000	30.2308	59.6154
	N	13	13	13	13
	Std. Deviation	1.50214	2.41523	3.67772	7.07741
40 or more	Mean	6.1250	38.0000	26.1250	60.0000
	N	8	8	8	8
	Std. Deviation	1.24642	3.20713	4.51782	5.60612
Total	Mean	4.8589	36.7116	32.0784	59.8934
	N	319	319	319	319
	Std. Deviation	1.40826	3.83277	6.52693	6.47598

Note: Summary statistics for participants (n=319) by years of experience working as mental health professional for SKAPS-K, SKAPS-A, MICA-4, and RKI are presented above.

Table 8 - Years of Experience (Continued)

ANOVA Table - Years of Experience as a Mental Health Prof

			F	Sig.
SKAPS Knowledge * Yrs Experience	Between Groups	(Combined)	2.938	.004
	Within Groups			
	Total			
SKAPS Attitude * Yrs Experience	Between Groups	(Combined)	1.176	.313
	Within Groups			
	Total			
MICA4 * Yrs Experience	Between Groups	(Combined)	1.471	.167
	Within Groups			
	Total			
RKI * Yrs Experience	Between Groups	(Combined)	.507	.851
	Within Groups			
	Total			

Note: Analysis of Variance for participants (n=319) is presented above.

Appendices

Appendix A: Survey Invitation Letter

Dear Mental Health Professional,

My name is Michele R. Miele, I am a doctoral candidate at the Philadelphia College of Osteopathic Medicine in clinical psychology and I would greatly appreciate your participation in my dissertation research survey study. The purpose of my research study is to explore the understanding of schizophrenia, mental illness, and the processes of recovery.

If you are a licensed psychologist, licensed psychiatrist, licensed master level therapist, or a licensed social worker you are eligible to participate in this study. It is not necessary for you to have any prior experience working with patients with schizophrenia to participate in this study. The survey takes approximately 15-20 minutes to complete. Your voluntary participation is kept anonymous, confidential, and is immensely valued. I would kindly request that you complete the survey without delay upon receiving this invitation, thank you.

Also, before using the survey link provided, would you please take a moment to forward this invitation letter and survey link to other licensed mental health professionals within your contact list that you believe would be interested in participating in my study. Your assistance in helping me to reach a greater number of professionals is deeply appreciated.

To complete the survey, please click the link below:
https://www.surveymonkey.com/s/Michele_R_Miele

The Philadelphia College of Osteopathic Medicine Institutional Review Board approves this study. If you have any questions or concerns, please contact via e-mail either myself, Michele Miele at michelemi@pcom.edu or my dissertation chair, Dr. Beverly White at beverlywh@pcom.edu. After the data is analyzed and formatted, aggregated results of the overall study will be available to you upon request.

Thank you in advance for your willingness to participate in my study. Your valued time is a direct contribution to the continual advancement of scientific psychology.

Sincerely,

Michele R. Miele, M.A., M.S.
Philadelphia College of Osteopathic Medicine