CHAPTER ONE
INTRODUCTION

“I wanted to have hope, and I wanted to believe I could live a life in control of my problems” (p.812), writes Lovejoy (1984). She experienced psychotic symptoms consistent with a diagnosis of schizophrenia throughout the 1950s and 1960s. Twenty years after the initial diagnosis, however, the author no longer exhibited the symptoms of the illness. This person had managed the unexpected: recovery from schizophrenia (Lovejoy, 1984).

In 1912, Kraepelin published a taxonomy of mental disorders. He labeled the specific constellation of symptoms that included delusions, hallucinations, disorganized speech and grossly disorganized behavior as Dementia Praecox. He deemed it a debilitating illness with a slow deteriorating course. In 1924, Bleuler renamed this particular constellation of symptoms schizophrenia and reiterated Kraepelin’s original pessimistic prognosis (Kruger, 2000).

Throughout the ensuing decades, mental health care professionals catalogued symptoms, provided theories of etiology and researched medications to quell symptoms, but offered little encouragement to individuals with schizophrenia that recovery was possible. Outside the mental health establishment, though, former patients of psychiatric hospitals (Anonymous, 1989; Beers, 1908) began to speak and write about recovery. In 1987, Harding, Brooks, Ashikaga, Strauss & Breier released the results of a longitudinal study that followed 269 persons with severe symptoms of schizophrenia for 32 years. Rather than prove the pessimistic prognoses of mental health professionals, their results supported the optimistic assertions of mental health care consumers: one half to two thirds of persons diagnosed with schizophrenia in young adulthood recover or notably improve by middle age. In the 1990s, recovery became the buzzword of psychiatric rehabilitation and thoughtfully written reflections about recovery appeared in professional journals. Even so the basic assumptions of recovery from schizophrenia have yet to be empirically examined (Borkin, Steffen, Ensfield, Krzton, Wishnik, Wilder & Yangarger, 2000).
Statement of the Problem

One of the assumptions about recovery from schizophrenia that has not been empirically tested is the assertion that hope is a necessary factor in the recovery process (Deegan, 1988; Jacobson & Greenley, 2001). Consumers of mental health services assert hope is the starting point of recovery (Deegan, 1996; Lovejoy, 1984). In fact, hope is the single most common theme in the narratives of adults who have recovered, or are recovering, from schizophrenia (Smith, 2000; Turner-Crowson & Wallcraft, 2002). Several theorists who have developed models of recovery from serious mental illness assert hope is a fundamental building block of the recovery process (Anthony, 1993; Jacobson & Greenley, 2001; Spaniol, Gagne & Koehler, 1998). Several researchers even assert recovery is not possible if mental health care professionals who interact with consumers do not convey hope (Kanwal, 1997; Landeen, Kirkpatrick, Woodside, Byrne, Bernardo, & Pawlick, 1996).

Consumers, mental health care professionals and researchers agree that hope be incorporated into psychiatric rehabilitation counseling with individuals with schizophrenia, but there is no consistent description of the elements of hope and there is very little quantitative research that empirically describes its relationship to recovery from schizophrenia. The primary purpose of this study was to examine the pattern of hope and the attitude toward recovery from schizophrenia in persons with a diagnosis of schizophrenia who consider themselves recovering from the illness. A secondary aim was to explore the possibility that hope is synonymous with a positive attitude towards recovery by using factor analysis.

Research questions

Four research questions guided this investigation:

(1) What is the pattern of hope in persons with schizophrenia participating in psychiatric rehabilitation programs?

(2) What is the pattern of attitude toward recovery in persons with schizophrenia participating in psychiatric rehabilitation programs?

(3) What is the relationship between hope and attitude toward recovery from schizophrenia in persons with schizophrenia participating in psychiatric rehabilitation programs?
(4) Are hope and a positive attitude towards recovery synonymous?

**Significance of the Study**

The purpose of the study was to examine empirically the relationship of hope to recovery from schizophrenia. Knowledge about the actual relationship between hope and recovery is expected to benefit the field of counseling by verifying, or disproving, the assumption that hope is required for recovery from schizophrenia. Second, the study empirically examined the relationship between hope and positive attitude toward recovery from schizophrenia. Knowledge about this relationship will aid in the development and evaluation of interventions designed to promote recovery from schizophrenia in persons diagnosed with the disorder. Finally, the study empirically examined the proposition that positive attitude is the same as hope. Knowledge about this proposition will further the understanding of how the construct of hope can be defined.

**Limitations**

This study had several limitations.

(1) The use of a convenience sample in a large metropolitan area in the United States means the results of this study reflect upon this sample only. The results cannot be generalized to non-urban settings in different cultures.

(2) One study instrument, the Recovery Attitudes Questionnaire 7 (RAQ-7) was developed in a small mid-western city in the United States (Borkin et al., 2000). Validity and reliability studies of this instrument were primarily conducted in that environment and may actually not be transferable to a larger, more diverse urban population.

(3) The current study was based on a written questionnaire and required that the participants were either able to read the items for themselves or were comfortable enough to request assistance if they were unable to read.

(4) All of the study instruments relied upon self-reports from the participants; hence, the study could have been affected by participants’ desire for social acceptance and willingness to be open with the researcher.

(5) In order to accrue enough completed questionnaires, the researcher visited five different psychosocial day programs. A volunteer sample was sought at each site.
similarities and differences between these locations are identified within this document; however, definition of philosophical or practice differences between sites is considered beyond the scope of this study.

(6) Researcher bias potentially limits generalizations that could be made from the outcomes of this study. The researcher was personally involved in each aspect of the study: (a) as the designer of the research project; (b) as the administrator of the research instrument; (c) as the recorder of the data gathered; (d) as the interpreter of the statistical information; and (e) as the author of this document.

(7) Finally, in chapters three and four, the constructs of hope and attitude toward recovery are discussed as if they are purely intrapersonal in nature. However, throughout the rest of the paper, the researcher’s philosophical bias toward family systems theory is clearly evident. Assumptions were made that hope and attitude are influenced, altered, or maintained, by interpersonal interaction with not only mental health care professionals, but with family members, peers, social support networks, cultural factors, spiritual beliefs and knowledge of scientific research. The impact of these underlying assumptions was not addressed in the data collection or analysis phase of the research study.

**Delimitations**

The researcher delimited the study in several ways described below.

(1) The current study concentrates specifically on recovery from schizophrenia and the closely related disorders. Recovery from other serious mental illnesses, such as major depressive disorder, bipolar disorder, or obsessive-compulsive disorder was not included in this study. Etiology, length of illness, degree of disability, impact of stigma and responsiveness to specific therapies differ between the various categories of serious mental illness. These variables may influence hope in different ways than schizophrenia does, hence they were considered outside the scope of this study.

(2) This study intentionally limited the definitions of schizophrenia and schizoaffective disorder to the criteria described in the Diagnostic and Statistical Manual, Fourth Edition, Text Revision published by the American Psychiatric Association. The DSM in its several revisions
has been the standard used by mental health care professionals in the United States since 1952 (APA, 2000).

(3) This study was intentionally not a comparison between different models of hope. A single conceptualization of hope was empirically examined. The parsimonious, succinct definition of hope in Hope Theory (Snyder, 1995) was chosen simply as a starting point. The cognitive components of hope were easily assessed and compared to recovery attitudes via existing assessment instruments. Hope Theory was also chosen because the extensive research on this theory in other areas appeared to be more readily applicable to the field of psychosocial rehabilitation. Furthermore, the emphasis on cognitive process lent itself to future development of interventions and studies exploring the efficacy of cognitive behavioral interventions.

(4) Hope has a spiritual dimension that the researcher intentionally did not incorporate in this study. Specifically, in the Judeo-Christian traditions of the United States, a Creator endows human beings with the ability to hope and commands them to focus that hope back on the Creator in all circumstances. Though this spiritual belief system was cited in several studies, one even from outside the United States (Fallot, 2001; Murphy, 2000; Torgalsboen, 2001), the researcher opted to focus on the cognitive processes of hope that may be employed by persons who do or do not embrace this particular set of beliefs.

**Definition of Terms**

For the purposes of this study the following terms were defined thus:

(1) **Consumers** were individuals who fulfilled the criteria of a serious mental illness as described in the DSM-IV-TR (APA, 2000) and had participated in mental health care. This term applied to both individuals newly diagnosed and those who identified themselves as recovered.

(2) **Mental health care professionals** were individuals with academic training in the helping fields, such as psychiatry, psychology, nursing, social work, rehabilitation, and counseling.

(3) **Psychiatric rehabilitation** referred to the broad range of services provided by mental health care professionals and para-professionals designed to support an individual with serious mental illness in the community or to assist in the reintegration into the community from a psychiatric facility.
Recovery from schizophrenia was defined as reintegration into normal social functioning with or without symptoms of the brain disorder. Sullivan’s (1994) definition of recovery was used: living in semi-independent or independent housing, participation in paid or unpaid employment at least 15 hours per week, and community tenure of at least two years, that is avoiding re-hospitalization for psychiatric reasons.

Schizophrenia is the term that was used for all brain disorders along the schizophrenia spectrum, including all subtypes of schizophrenia, catatonic, disorganized, paranoid, residual and undifferentiated, as well as schizoaffective disorder. Schizoaffective disorder is diagnosed when an individual meets the criteria for schizophrenia and experiences the symptoms of a mood disorder concurrently. Schizophreniform disorder, brief psychotic disorder, psychotic disorder due to a medical condition, substance-induced psychotic disorder and psychotic disorder not otherwise specified were excluded from this study because etiology of symptoms and prognosis differs markedly from etiology of symptoms and prognosis for schizophrenia and schizoaffective disorder (APA, 2000).

Hope in this study is limited to the definition used by Snyder (1995) in development of the Hope Scale. Hope is a cognitive process used by all people in varying degrees to cope with every day life (Snyder, Michael, & Cheavens, 1999). Three related cognitive components interact to create hope: (1) goals, (2) pathways thought and (3) agency thought (Snyder, Ilardi, Michael, & Cheavens, 2000). Hopeful people believe they are good at generating workable and attainable goals; developing effective means, or pathways, to reach these goals; and maintaining the necessary motivation, or agency, to pursue these goals even when barriers are encountered (Lopez, Floyd, Ulven, & Snyder, 2000).

Overview of Report

This first chapter, Chapter 1, provided the introduction and background information for this study. It identified the research questions to be addressed, the limitations and the delimitations of the research. Key terms were also defined.

Chapter 2 reviews research literature on topics related to the study: schizophrenia, recovery from schizophrenia, and hope.
Chapter 3 describes the research methodology. The population, sample and data collection procedures are detailed. The test instruments, the Hope Scale and the Recovery Attitudes Questionnaire, are described. The research questions, null and alternate hypotheses and statistical procedures for making decisions about these hypotheses are stated.

Chapter 4 presents the statistical data of the study, and provides an analytic assessment of the outcomes of the research questions.

Chapter 5 summarizes the conclusions of the study, suggests how this study contributes to research on hope and recovery from schizophrenia, makes recommendations for future research, and identifies implications for clinical practice.
CHAPTER TWO
REVIEW OF RELEVANT LITERATURE

To answer the four questions that guided this research, it was necessary to choose carefully from the hundreds of articles and dozens of book about schizophrenia, recovery and hope that are published each year. Articles that correct misinformation, refute false assumptions or distinguish schizophrenia from other mental disorders were chosen for review in this document. In addition, those articles that define recovery or describe the experience of recovery for persons with schizophrenia were selected from the many thousands of articles available on recovery in general. As with schizophrenia and recovery, it was necessary to focus the presentation of relevant literature on hope to those references that define hope and those that describe the experience of hope in persons with either physical or emotional disorders. Following is a review of the relevant literature on schizophrenia, recovery from schizophrenia and hope.

Schizophrenia

Schizophrenia is a biologically based brain disorder that affects 1% of the world’s human population; occurrence rates range from 0.7% to 1.4% across diverse international sites (National Institute of Mental Health, 1997). Because the world population is estimated to be 6,314,000,000 (www.prb.org, retrieved 10/16/2003), an estimated 60 million people meet the diagnostic criteria for schizophrenia. This statistic translates into an estimated 3 million people in the United States of America. It is more common than multiple sclerosis, muscular dystrophy or diabetes milletus (Anderson, Reiss, & Hogarty, 1986). The annual financial toll of schizophrenia in the United States exceeds $65 billion in hospital costs, lost productivity of the person with schizophrenia, lost productivity of the family members, and social services and criminal justice resources (American Psychiatric Association, 1996).
Symptoms of Schizophrenia

There is no single definitive symptom that makes diagnosis of schizophrenia easy for
mental health care providers. According to the Diagnostic and Statistical Manual of Mental
Disorders (4th ed.) Text Revision (DSM-IV-TR), schizophrenia is diagnosed when a clinician
recognizes a constellation of symptoms that impair an individual’s ability to function
occupationally or socially (American Psychiatric Association, 2000). With careful attention to
widely held beliefs within ethnic groups, the symptoms of schizophrenia tend to be across
cultures (National Institute of Mental Health, 1997). Burland (1998) conceptualizes
schizophrenia as a double-edged sword with positive and negative symptoms. Positive
symptoms are factors that are added to the person, such as delusions, hallucinations, and thought
disorders. Negative symptoms are personality characteristics that are stolen by the disease, such
as the capacity for intimacy, optimism, and the ability to focus and concentrate.

DSM-IV -TR (APA, 2000) identifies five criteria for a diagnosis of schizophrenia:
delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behavior, and
negative symptoms such as affective flattening, alogia, or avolition. In order for a diagnosis of
schizophrenia to be made, two or more of these criteria symptoms must persist for a significant
portion of one month and they must interfere with occupational or social functioning (APA,
2000).

(1) Delusions are false beliefs that result from a misinterpretation of perceptions and
experiences (APA, 2000). Delusions that involve a loss of body or mind control or those
delusions that are not understandable when viewed through the lens of the life experiences of the
patient are judged bizarre. One must be careful to take cultural belief systems into consideration
when making this judgment. Delusions can be quite stubborn or fixed, and are usually not
changed by medication or psychotherapy.

(2) Hallucinations, the second set of criterion symptoms, can occur in all five senses
(APA, 2000). The most common type of hallucinations is auditory. Often a person with
schizophrenia hears voices that are distinct from his or her own thoughts. Two or more voices
may be active in the brain carrying on a running commentary about the person’s actions. On
occasion these voices can be caustic and cruel, commanding the individual to behave in an
uncharacteristic or violent manner.
(3) Disorganized speech is the third characteristic symptom clinicians use to diagnose schizophrenia (APA, 2000). Since it is impossible to objectively measure another person’s thought process, disorganized speech patterns are considered indicative of formal thought disorder. When an individual with schizophrenia becomes derailed during conversation, this indicates a loosening of associations in the thought process. Direct questions may be answered tangentially, meaning responses may be totally unrelated or only obliquely related to the question. In rare cases, a person may experience complete disruption of speech and become incomprehensible. The term “word salad” refers to this condition.

(4) The fourth criterion identified by DSM-IV-TR, (APA, 2000) is grossly disorganized behavior. This behavior can run the gamut from childlike silliness to unpredictable agitation to catatonic motor behaviors. This symptom may interfere with social and vocational functioning and could constitute a threat to the person’s safety. Accomplishment of the activities of daily living, such as attending to personal hygiene or eating, may be impaired to such an extent that the person requires the intervention of others to maintain his or her health and personal safety. Catatonic motor behaviors include a marked decrease in awareness of the environment, maintaining rigid postures, excessive or purposeless physical activity. A person may begin shouting, pacing, or striking out at others with no stimulus apparent to those around him or her. This unpredictable agitation is most unsettling to friends and family members.

(5) The fifth set of criterion symptoms (APA, 2000), the negative symptoms, represents the other side of Burland’s (1998) double-edged sword of schizophrenia. Negative symptoms are difficult to evaluate. They may be a result of a co-occurring episode of depression, and some negative symptoms may even be iatrogenic, a consequence of the treatment process, such as medication side effects. Affective flattening or blunting refers to the reduction in the experience of a range of emotions. It is characterized by unresponsive or reduced facial expression, poor eye contact and diminished body language. Alogia, poverty of speech, is believed to be indicative of a reduction in thinking activity. This is not an unwillingness to talk, but an inability to do so because an individual has truly not been able to think of anything to say. Avolition is the loss of motivation or the inability to initiate activity. Once encouraged to begin an activity, an individual may need frequent prompts from others to persist in the activity. This is distinct from willfully refusing to perform or a passive-aggressive refusal to participate. Avolition prevents the person from accomplishing desired goals.
The DSM-IV-TR (APA, 2000) identifies several other symptoms that are often associated with schizophrenia. The presence of these symptoms is not sufficient to warrant a diagnosis of the disorder. These include inappropriate affect, anhedonia, autism, disturbances in sleep patterns, repetitive physical activity, difficulties in concentration that range from distractibility to perseveration, confusion, disorientation, loss of some cognitive functioning, memory impairment, depersonalization, derealization, and lack of insight.

The diagnosis schizoaffective disorder also appears to occur along the schizophrenia spectrum. Schizoaffective disorder is diagnosed when an individual not only meets the criteria for a diagnosis of schizophrenia but also meets the criteria for a mood disorder during periods when the psychosis is active. The mood disorder may include evidence of depression, mania or both (APA 2000).

Brief psychotic disorder is diagnosed when an individual meets the criteria for a diagnosis of schizophrenia but symptoms resolve in less than one month, indicating than the reason for the symptoms was not the onset of schizophrenia (APA, 2000). Schizophreniform disorder is diagnosed when an individual meets the criteria for a diagnosis of schizophrenia for more than one month but for less than six months. One third of the individuals who receive this interim diagnosis recover fully and do not experience additional episodes. The remaining two-thirds continue to experience psychotic symptoms and eventually diagnoses are changed to schizophrenia or schizoaffective disorder.

**Course of Schizophrenia**

In earlier times, schizophrenia was assumed to be “an irreversible illness with increasing disability over time” (Spaniol, Gagne & Koehler, 1998); however, recent longitudinal studies have demonstrated that one half to two thirds of the people with schizophrenia achieve recovery over time (Harding et al., 1987). Many individuals begin exhibiting symptoms of the illness in late adolescence or early adulthood coinciding with the stressful stage of family development in which the young adult is expected to establish his or her independence from the family of origin in American culture (Burland, 1998). Typically, the individual exhibits a diminishment of psychosocial functioning such as social withdrawal, loss of interest in school or work, deterioration in grooming and hygiene, and outbursts of anger (APA, 2000). Family members
may excuse these behaviors as a stage or as a consequence of stress as the young person attempts to adjust to first time employment, college, marriage or military service. Though most researchers debunk the notion that stress causes schizophrenia, many family members persist in this belief (Phillips, Li, Stroup & Xin, 2000). The first episode of psychosis is usually followed by a rapid series of relapses; this pattern may persist for years before it begins to level out.

Suicide is always a concern with schizophrenia. Fifty percent of the individuals with schizophrenia attempt suicide; ten percent succeed (APA, 2000). Suicide can be a consequence of obeying command hallucinations, but more commonly it appears to be a choice made in a moment of frustration and hopelessness about the consequences and losses of the illness (Marsh, 1998). Males who are under 30 years of age, have been recently discharged from psychiatric hospitalization, are unemployed and appear depressed are at the greatest risk for completing suicide (APA, 2000).

**Etiology of Schizophrenia**

Schizophrenia has been recognized as an illness for centuries and has elicited varying degrees of sympathy and suspicion from non-affected individuals throughout the ages. There have been a plethora of folk explanations for the symptoms of the illness. Today, schizophrenia is defined as a neurobiological disorder by patients, family members, researchers, medical personnel and mental health service providers. In persons diagnosed with schizophrenia, there is evidence of brain abnormalities on many different levels: (a) genetic, (b) cellular, (c) structural, (d) electrical and (e) chemical. However, all etiological explanations are hypothetical at this point (Andreason, 1986).

Virtually all researchers concur that genetic factors are involved in the development of schizophrenia. Researchers have studied family groups and twins for 70 years and have consistently found that first-degree family biological members have a greater risk of developing the illness than adopted family members or members in families that do not have a relative with schizophrenia (Torrey, Bowler, Taylor, & Gottesman, 1994). DSM-IV-TR (APA, 2000) states the risk for family members developing the illness is 10% greater for first-degree relatives than for the general population. The link is not, however, completely genetic because twin studies
reveal that an identical or monozygotic twin has only a 46% chance of developing the illness if his or her sibling has schizophrenia (Torrey, 1995).

On the neurohystological or cellular level, multiple researchers have discovered changes in cellular structures in various parts of the brain. Some of these changes are analogous to changes that occur from viral infections in the individual such as encephalitis. Other cellular changes are similar to those that occur from rubella and influenza in the mother while the fetus is developing (Andreason, 1986). Torrey has recently posited that a virus carried by cats may be implicated in the triggering of schizophrenia. The assertion is supported by statistical analysis that reveals that the incidence of schizophrenia is not uniform throughout the world, but tends to cluster in cultures where cats are kept as house pets (Carlson, 2001).

Abnormalities in the structure of the brains of individuals with schizophrenia have been noted by researchers including decreased brain weight, diminished neural connections, enlarged ventricles and alterations in blood flow patterns (Andreason, 1986; Burland, 1998; Moller, & Murphy, 1998; Tanouye, 1999). Debate rages as to whether the changes in the brain precede the onset of the illness, whether they are a consequence of the illness itself or whether they are side effects of the powerful anti-psychotic medications used to treat the illness.

Variations in the patterns of electrical activity of the brain between the individuals with schizophrenia and those without schizophrenia have been documented. Discovery of these differences was made possible by the newer technology that enabled researchers to study the brain while individuals are still alive (Moller & Murphy, 1998). Some of the differences discovered include the diminished electrical activity in the frontal cortex of individuals with schizophrenia when compared to non-affected individuals (Andreason, 1986; Burland, 1998) and the excitation of other parts of the brain during active hallucinatory states (Burland, 1998). For instance positron emission tomography, or PET, scans at University of California at Los Angeles reveal that the brain’s motor speech center is most active while individuals with schizophrenia are experiencing auditory hallucinations. There is also elevated activity in the left temporal lobe where the brain processes auditory sensations into words as well as increased activity in the brain’s emotion regulation center, the limbic system. An individual with schizophrenia actually hears and responds emotionally to the voices created by his or her own Broca’s region (Goleman, 1995).
The neurochemical abnormalities are perhaps the most familiar to lay persons. In the United States, people speak easily about mental illnesses being the result of chemical imbalances even if they do not know the facts about these brain chemicals. In fact, most mental health service professionals do link the symptoms of schizophrenia to abnormalities in the neurochemical system of the brain. Medications prescribed to treat schizophrenia are designed to impact production or destruction of brain chemicals called neurotransmitters (Preston & Johnson, 1994). An increase in dopamine produced in the limbic system is implicated in the experience of hallucinations and a decrease in dopamine in the frontal cortex is associated with the negative symptoms of affective flattening, avolition, and anhedonia (Burland, 1998). The dysregulation of the neurotransmitters, glutamate and gamma amino butyric acid, appears to adversely affect the production of dopamine. Serotonin, which is more closely associated by the public with depression, and norepinephrine are found in individuals with schizophrenia at lower levels than found in individuals without schizophrenia (Andreason, 1994).

Nearly 50 years ago, some interesting literature caught the eye of the lay public and despite scientific studies that did not support the speculation of these scientists, schizophrenia was considered a consequence of poor parenting, faulty learning or overactive neurotic defenses (Burland, 1998). The concept of the schizophrenic mother and the theory of the double-bind style of communication were developed by Bateson before he ever studied communication in families in which one member had the illness (Simon, 1992). The current stance among most neurobiological researchers today is that schizophrenia is not caused by stress or dysfunctional interpersonal relationships but that these factors may contribute to an exacerbation of symptoms or relapse (Anderson, 1986).

Due to the genetic, cellular, structural, electrical, neurochemical, and interpersonal implications of the symptoms, a diagnosis of schizophrenia currently carries a prognosis of chronic psychiatric disability. It is a relapsing illness that strikes an individual during the last phase of adolescent identity development, a time that coincides with the family’s launching stage (Carter & McGoldrick, 1999; Rolland, 1994). The positive and negative symptoms of schizophrenia create great potential to hinder the individual’s psychological, social and vocational development. There is also great potential for the family to become derailed in its development as well. Since families are often the primary caregivers, mental health
professionals recognize they have an immediate need for information, support, grief counseling, psychoeducation and in some case psychotherapy as well (Marsh, 1998).

**Recovery from Schizophrenia**

Since Kraepelin first described the unfavorable prognosis for Dementia Praecox, schizophrenia has been considered a disease with a continuous downward course (Kruger, 2000). Recent studies have concluded however that one-half to two-thirds of individuals labeled as chronically disabled by the disease actually experience considerable improvement or full recovery (Harding et al., 1987). Harding et al., (1987) followed the course of schizophrenia for 269 seriously impaired patients from the Vermont State Hospital for 32 years. At the end of the longitudinal study, 45% of the patients were symptom free and 61% percent scored above 60 on the Global Assessment of Functioning. Severity of impairment varies among individuals; 10 to 35% of the clinical psychiatric population consumes 50 to 80% of the total resources (Barton, 1999). The disease is now considered one that has a decades-long, undulating course with periods of exacerbation of symptoms followed by remission of symptoms. As time goes on, the remissions increase in number and length and the exacerbations diminish. The episodes of psychosis tend to cluster in the years following onset, rather than being evenly spaced throughout the course of the illness.

In the 1990s, individuals with schizophrenia and their family members began advocating for mental health care providers to incorporate the construct of recovery into treatment programs (Frese, Stanley, Kress, Vogel-Scibilia, 2001). The concept of recovery is common in the fields of physical illness, disability rehabilitation, and in substance abuse treatment, but until the 1990s, recovery from schizophrenia was not discussed in professional mental health care journals (Anthony, 1993). Consumers, survivors, and clients, though, were publishing and speaking about their personal accounts of recovery (Anonymous, 1989; Deegan, 1988; DuVal, 1989; Lovejoy, 1989; McGrath, 1984). In consumer-written literature, recovery is neither described as a wishful return to the pre-illness state nor as an optimistic mantra extolling the growth one has experienced because of struggles. Rather, recovery is acknowledged as a long process that is undergirded by hope.
Definitions of Recovery from Schizophrenia

A single definition of recovery from mental illness has not been universally accepted. Recovery defined as remission of symptoms and return to normal role functioning is a realistic goal for 60% of the individuals diagnosed with schizophrenia (Barton, 1999). Sullivan (1994) defines recovery as tenure in the community of at least 2 years, semi-independent living arrangements and participation in vocational-type activity; the focus is on the ability to function with or without symptoms. Lefley (1994) includes the subjective experience of the individual when she defines recovery as “the creation of new behavior patterns that make life more satisfying and productive” (p. 20). Recovery is wellness based and involves the development of new ego identity structures based on personal choice, responsibility, self-determination and self-esteem. People with schizophrenia accept their disability, acknowledge the need for continuing treatment, and appreciate their strengths and limitations (Kersker, 1994). Thomas (2000) envisions recovery as a choice not to allow the realities of the disability to prevent one from leading a full and meaningful life; it is a process of growth, renewal, perseverance and resilience. Recovery is a renewal of hope and can be conceptualized as a two-part process: mourning the loss of what might have been and embracing a sense of what is now possible (Landeen, Kirkpatrick, Woodside, Byrne, Bernardo & Pawlick, 1996). Anthony (1993) defines recovery from mental illness as

“…a deeply personal, unique process of changing one’s attitudes, values, feelings, goals, skills, and/or [sic] roles. It is a way of living a satisfying, hopeful, and contributing life even with limitations caused by illness. Recovery involves the development of new meaning and purpose in one’s life as one grows beyond the catastrophic effects of mental illness” (p. 15).

This definition is frequently quoted in journal articles and books about recovery from serious mental illness.

Kruger (2000) suggests a paradigm shift is necessary and that mental health care professionals should begin to describe schizophrenia as one of progressive amelioration of
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symptoms rather than a hopeless, chronic disability. Such a paradigm shift would serve to motivate goal setting in patients and their families: “If you know that you will recover, you also know that you have a future – something positive to build towards” (p.33). To support his argument, Kruger draws upon research among people with schizophrenia in non-industrialized cultures. Persons with psychiatric illnesses remain integrated in the community and are often expected to continue to perform their role functions with support of extended family systems. In industrialized cultures, individuals with psychiatric illnesses lose their social roles, are removed from their natural support systems, and are ministered to by caring, but disempowering, mental health care systems. Kruger contends that a recovery oriented mental health care system would work to maintain persons with mental illness in the community, enable them to perform their social role functions, and come alongside nuclear families to augment their efforts to care for their loved one. The negative symptoms of schizophrenia of apathy, withdrawal, restricted emotions and lack of interest in the world around them are identical to the symptoms exhibited by unemployed persons without psychotic illnesses. Hopelessness is a consequence of loss of daily structure, loss of role identity, and loss of meaning in life rather than a symptom of the illness. Hope is restored for the person with schizophrenia who has a reason to get out of bed in the morning (Kruger, 2000).

Peyser (2001) expresses concern that a focus on psychological recovery minimizes the disease element of schizophrenia. The medical model, he conceded, is patriarchal but it acknowledges that human bodies are sometimes subjected to disease processes over which individuals have no control and for which they are certainly not responsible. Patients do not freely choose their illnesses and yet they do lose their freedom because of these illnesses. Peyser urges consumers, mental health care professionals, family members, and society at large not to lose sight of the fact that at times recovery may mean the unwelcome intervention of a doctor or another mental health care professional to establish control over symptoms and thus restore freedom.

Models of Recovery from Schizophrenia

Several researchers have proposed models of recovery from serious mental illness, notably Anthony; Spaniol, Gagne and Koehler; and Jacobsen and Greenley. The
following models are reviewed in this document: (1) the recovery-oriented service system, (2) the recovery as universal experience paradigm, and (3) the recovery as interaction between internal and external conditions conceptualization.

**The Recovery-Oriented Service System**

Anthony (2000) makes seven assumptions about recovery:

(a) Recovery can occur without professional intervention.

(b) Recovery is a psychosocial phenomenon in that it occurs in the presence of people who believe in and stand by the person in need of recovery.

(c) Recovery is independent of one’s theory about the causes of mental illness.

(d) Recovery can occur even though symptoms reoccur.

(e) Recovery is a unique process for each individual.

(f) Recovery demands that the person has options and that the acknowledgement that one has options is often more important than the particular option one chooses.

(g) Recovery from the consequences of mental illness is more difficult than recovery from the illness itself. These consequences include discrimination, poverty, segregation, stigma and iatrogenic effects.

Anthony (1993) identifies four ways that mental illness impacts a person: (a) impairment, (b) dysfunction, (c) disability, and (d) discrimination. An effective recovery-oriented mental health care system addresses each of these areas, recognizing that persons with serious mental illness want and need more than symptom relief. According to Anthony (2000) there are nine sectors of a recovery-oriented mental health care service system:

(a) treatment, including medication, therapy and consultation;

(b) crisis intervention, including mobile response teams and emergency short term hospitalization options;

(c) case management;

(d) rehabilitation, including day programs, vocational support and education;

(e) enrichment opportunities for social and spiritual development;
(f) rights protection, including legal education, challenging stigma and respecting confidentiality;
(g) basic support, including affordable safe housing, financial assistance, and attention to daily living skills;
(h) self-help, including the modeling of other consumers who are at different points on the recovery journey; and
(i) wellness and prevention programs.

The task of the professional is not to tell a consumer the right path to recovery; rather the task of the professional is to facilitate recovery. The task of the consumer is to recover (Anthony, 1993).

**Recovery as Universal Experience**

Spaniol, Gagne and Koehler (1998) conceptualize recovery from serious mental illness as a process, an outcome and a vision. It is a universal human experience and all humans have recovered or are recovering from something: illness, loss, disappointment or other changes in their life plans. It is a painful process of physical and emotional healing, and of adjusting one’s attitudes, feelings, perceptions, beliefs, roles and goals. The process of recovery is primarily an emotional experience involving self-discovery, self-renewal and transformation. During recovery, one creates a new personal vision for oneself. While recovering from schizophrenia, an individual addresses five types of losses during the recovery process:

- (a) loss of sense of self,
- (b) loss of connectedness,
- (c) loss of power,
- (d) loss of meaning, and
- (e) loss of hope.

The outcome of recovery is the ability to work, to live in housing of one’s choice, to have friends and intimate relationships, and to be a contributing member of one’s community. The vision of recovery is to become more deeply human, to become part of the human
stream, unique and individual (Deegan, 1988). Spaniol, Gagne, and Koehle (1998) argue that utilizing the above definition of recovery and acknowledging its universality enables mental health care providers to consider the whole person in treatment plans and to not focus just on the reduction of symptoms of the illness.

**Recovery as Interaction between Internal and External Conditions**

Jacobson and Greenley (2001) describe a conceptual model of recovery that refers to both internal conditions the person in recovery undergoes and external conditions that support recovery. The internal conditions are the attitudes, experiences and processes of change within the persons who are recovering from serious mental illness. The external conditions are the circumstances, events, public and agency policies, and professional practices that facilitate recovery. These two sets of conditions interact and have an iterative, reciprocal effect that promotes recovery and continues to transform the internal and external conditions.

Four internal conditions of recovery were determined through qualitative analysis of consumer experiences: (a) hope, (b) healing, (c) empowerment and (d) connection. The first internal condition, hope, is described as a belief that recovery is possible, a focus on strengths, a celebration of small victories, and a transcendent experience of grace or giftedness. The second internal condition, healing, has two parts. It is not synonymous with cure. A person with a psychiatric disability loses his or her self in the illness (Estroff, 1989). Hence, the first part of healing is to reframe the illness as separate from the self, not the definition of the self. The second part of healing is to become an active agent in relieving the symptoms of the illness through self-care techniques, medication, or lifestyle changes (Jacobson & Greenley, 2001). Empowerment, the third internal condition of recovery, is the reversal of lack of control, helplessness and dependency. It emerges as the individual begins to act autonomously, courageously and responsibly in working with mental health care professionals, making personal decisions, engaging in self care and taking risks to improve one’s lot in life. The fourth internal condition, connection, recognizes that recovery is a social process. One of the hallmarks of schizophrenia is the impaired ability to initiate, establish and maintain interpersonal relationships. Connection is reentering the social world and finding fulfilling and
meaningful social roles as friend, worker, community member and helper (Jacobson & Greenley, 2001).

The three external conditions identified in Jacobson and Greenley’s (2001) model of recovery are (a) human rights, (b) a positive culture of healing and (c) recovery-oriented services. Human rights include elimination of stigma, access to needed resources, and equal housing, education, treatment and job opportunities. A positive culture of healing is an atmosphere of mutual empowerment, tolerance, listening, empathy, compassion, respect, safety, trust, dignity, diversity and multicultural competence. This positive culture of healing is sustained through true collaborative relationships between consumers and providers of mental health care services. Recovery-oriented services incorporate the belief that recovery is possible and address the four major consequences of mental illness identified by Anthony: impairment, dysfunction, disability and disadvantage.

Consumers’ Experience of Recovery

Persons who actually experience schizophrenia do not have the power to determine how recovery is defined (Clinton & Nelson, 1999). In a literature review, Rudge and Morse (2001) found most discussion focused on neuroscientific explanations and the pharmacological aspects of treatment. Persons with schizophrenia were not studied as often as were their symptoms or the side effects of their medications. Persons with schizophrenia were often referred to as victims and sufferers, and portrayed as passive recipients of care. Persons with schizophrenia and their psychiatrists defined quality of life very differently; patients ignored most of the aspects of quality of life that have to do with the medical consequences of treatment and psychiatrists ignored the aspects of normal human life (Angermeyer, Holzinger, Kilian, & Matschinger, 2001). As recently as 1997, Dickerson, Ringer and Parente found positions were taken in the literature that a mental health care provider’s assessment of an individual’s condition is more reliable than the patient’s self-report. Individuals living with a diagnosis of schizophrenia are silenced and mental health care professionals define recovery as accurate diagnosis, effective treatment, cost-effective care and non-specific progress (Rudge & Morse, 2001).
When psychiatry, psychotherapy and mental health programs operate either to shape, influence or to silence the knowledge of persons with schizophrenia, persons with the illness are forced to express their recovery outside the arena of professional care (Rudge & Morse, 2001). Persons with schizophrenia do not view the illness as an invasive other, but view it as a central part of their identities (Estroff, 1989). Recovery consists of knowledge of both sanity and insanity. The process of recovery diminishes the impact of symptoms rather than eliminating them. It involves learning to live with the illness or in the illness, rather than without it (Rudge & Morse, 2001).

In a qualitative study, Smith (2000) sought to discern the common elements in personal stories of 10 individuals who described themselves as recovered or recovering from serious mental illness. Data from the research identified five themes. First, recovery is a long, individual process of learning to live with the disability while struggling towards the positive goals of regaining a sense of control, a sense of self-respect and an appreciation for life. Second, recovery begins with acceptance of the illness and development of a strong desire for changes in one’s life. Acceptance among the participants of this study occurred between 10 and 15 years after the onset of symptoms. The third theme were the six critical factors involved in recovery:

(a) the right medication,
(b) a group of supportive people,
(c) meaningful activities,
(d) a sense of control and independence,
(e) a strong determination to remain in recovery, and
(f) a positive outlook on the present and future.

The fourth theme addressed the four barriers to recovery: (a) stigma, (b) symptoms, (c) lack of financial resources, and (d) occasional eruptive responses to life’s pressures. The final theme outlined in Smith’s study were ten strategies to maintain recovery:

(a) accept the disability,
(b) believe in recovery,
(c) ensure stabilization,
(d) accept responsibility for recovery,
(e) establish structure in daily life,
(f) seek support,
(g) take care of one’s self,
(h) stay active,
(i) educate one’s self, and
(j) protect recovery.

Mental Health Care Professionals’ Experience of Recovery

Recovery from serious mental illness is not a new concept, as some would have us believe. Abraham Low developed a recovery-oriented approach in 1937 and founded a self-help group, Recovery, Inc., that is almost as old as Alcoholics Anonymous (Lee, 1995). Recovery, Inc. was too far ahead of its time to gain acceptance by the psychoanalytical psychiatrists of the era. Low opposed his colleagues’ conception of schizophrenia as a hopeless, incurable, organic disorder and taught his patients cognitive-behavioral treatment methods to systematically change thoughts in order to change feelings. He wrote booklets for patients and trained group leaders to spot distorted thought patterns and challenge group members to say no to their thoughts and impulses thus gaining better control of their lives. His peers debunked his ideas as too structured, containing spiritual elements, and devaluing feelings. Low believed that structure provided security; that positive thinking and endorsement by self and others enhanced self-esteem; and that communication was more successful when feelings were discussed rather than acted out (Lee, 1995).

In addition to Low, other researchers have explored the impact of psychotherapy on recovery from schizophrenia. The reason individual psychotherapy is not routinely offered to individuals with schizophrenia is that research literature depersonalizes the one with the illness and reduces him or her to a collection of positive and negative symptoms that can be altered through the proper pharmacological intervention (Torgalsboen, 2001). When asked, however, a majority of consumers report that individual psychotherapy initiated positive changes. Torgalsboen (2001) conducted a retrospective study of 50 individuals, 17 who had fully recovered from schizophrenia and 33 who had not. Therapists of the individuals were also interviewed. A fully recovered person was strictly defined as one who (a) had previously had a reliable diagnosis of schizophrenia, (b) did not fulfill the criteria at the time of the study, (c) had been out of the hospital for 5 years, (d) had a Global Assessment of Functioning score above 65
and (e) was either on a minimum dosage of neuroleptic medication or was not using neuroleptic medication at all. Both consumers and their therapists considered psychotherapy a main contributor to recovery. Fifteen of the 17 recovered patients identified the human qualities of the therapist as the most significant factor in their recovery. This was often defined as an attitude of equality, acceptance, understanding, and confidence. Consumers reported feeling empowered and respected. Though, the author did not elaborate on this factor, the second most significant factor was identified as the gender of the therapist. The author’s only speculation about this factor was that somehow gender might be closely linked to the person of the therapist as experienced by the client. One’s own will power was the third most significant factor. Among therapists, not surprisingly, the working alliance was identified as the most significant factor in recovery. All therapists who mentioned the working relationship also stressed that both therapist and client needed to be committed to a belief in recovery. The second most significant factor identified by therapists coincided with the third most significant factor identified by clients: the client’s own determination and will power to recover. The process of psychotherapy described by patients and therapists provided opportunities for the patients to grieve over the disability, to relinquish earlier dreams, and to pursue alternate sources of gratification and self esteem (Torgalsboen, 2001). Kindling and sustaining hope became possible during long-term therapy that was characterized by high levels of respect, endurance, availability, commitment, interest and low expectation of emotional growth in the person with schizophrenia. Torgalboen (2001) speculated that the exposure to intimate socialization and the opportunity to develop an individual identity were the curative factors within the therapeutic relationship.

The timing and pace of recovery from schizophrenia can be influenced by therapist attitudes (Prouty, 2002). Carl Rogers used humanistic psychotherapy techniques in the treatment of persons with schizophrenia in the Wisconsin Project during the 1960s. Though results were mixed, the study found that persons with schizophrenia focus on relationship formation during psychotherapy and persons with non-psychotic mental illnesses focus on self-exploration (Prouty, 2002). In 1970, Truax confirmed another of Rogers hypotheses from the 1967 Wisconsin Project: clients whose therapists demonstrated higher levels of unconditional positive regard, empathy and congruence were discharged from psychiatric hospitals sooner than controls and remained out of the hospital longer (Prouty, 2002). Thirty years later, mental health care professionals are demonstrating that the therapeutic contact can be made with even the most
impaired individuals by the proactive effort on the part of therapists to initiate relationship with
the client and model basic interpersonal communication skills (Prouty, 2002)

Narrative therapists, Lysaker, Lysaker, and Lysaker (2001) examined the personal stories
people with schizophrenia tell themselves and others in order to organize and make sense or
meaning out of the daily events of their lives. In individuals without psychotic illness, an
ongoing dialogue between self-positions makes it possible to connect past to future, and bring
together remembered and felt experiences, thus creating a coherent narrative that places daily
experience into the context of a meaningful life. The researchers found the internal narratives of
persons with schizophrenia are qualitatively different from the narratives of persons without
psychotic illness. The narratives are remarkable for profound disorganization, ambivalence,
anguish and the inability to integrate self-positions (e.g., self as sexual being, self as soldier, self
as angry). In some internal narratives, the multiple self-positions are fused; in others there is a
rigid hierarchy that mechanically repeats itself (Lysaker et al., 2001). Internal dialogue develops
as a consequence of external dialogue; hence individual psychotherapy for persons with
schizophrenia enhances recovery. Narrative therapy facilitates recovery of persons with
schizophrenia by “creating space for older, potentially lost self-positions” (Lysaker et al., 2001, p.
258) or by constructing new self-positions that are able to sustain internal dialogue despite
symptoms. Five tasks occur in the context of narrative therapy. First, the client constructs a
story about what has happened or in the case of illness, what has gone awry. The second task is
the construction of a story about what is not wrong, or the development of a picture of the self
beyond the illness. Third, a vision of the future is created; and fourth, past feelings of
helplessness, hopelessness, anger and embarrassment are reframed and integrated into the
narrative. The final narrative task is enactment, or action based on the revisions that person has
made in the personal narrative.

In a qualitative study that examined first person accounts of recovery from schizophrenia
Ridgway (2001) also found evidence of movement from problem-saturated personal narratives to
personal narratives that accentuate personal strengths. A common core narrative was identified:
the story of recovery was told as a quest journey supported by eight critical themes. The
common core narrative was a long, ongoing process from a stagnant life situation to more
complex and dynamic life story. The critical themes expressed by individuals in recovery from
schizophrenia are:
(a) Recovery is reawakening of hope after despair;
(b) Recovery is breaking through denial and achieving understanding and acceptance;
(c) Recovery is moving from withdrawal to engagement and active participation in life;
(d) Recovery is active coping rather than passive adjustment;
(e) Recovery means no longer viewing oneself primarily as a person with a psychiatric disorder, thus reclaiming a positive sense of self;
(f) Recovery is moving from alienation to a sense of meaning and purpose;
(g) Recovery is a complex and nonlinear journey and
(h) Recovery is not accomplished alone, the journey involves support and partnership.

Just as all theories about the etiology of schizophrenia are speculative, so are the theories of recovery. Harding, the researcher who first verified consumers’ experience of recovery, expresses belief in the biological healing of the brain itself. Of all the organs in the body the brain is the most plastic, the most adaptable, to environmental influences. Rather than being a psychological process, recovery may actually be the brain itself repairing damage from the illness very slowly over time (McGuire, 2000).

Families’ Experience of Recovery

Recovery does not occur in isolation. Families serve as primary caregivers, informal case managers, crisis intervention specialists, medication monitors, and mediators with service delivery systems (Marsh, 1998). Seventy five percent of the individuals discharged from psychiatric institutions are released to family members (Lehman & Steinwachs, 1998). Forty eight percent of those receiving services through the public sector live with family members (National Alliance for the Mentally Ill of Virginia, 2001). Ninety percent of the individuals with severe mental illness are in frequent contact with their families (Lehman & Steinwachs, 1998). As a consequence, the family goes through a process of recovery as well. Hall and Purdy (2000) identify the needs of the family in recovery as (1) recognizing the symptoms as an illness; (2) securing appropriate primary care and mental health treatment for the family member with schizophrenia; (3) acknowledging the pain, loss and anger; (4) participating in educational and supportive groups; and, (5) shifting emotionally to acceptance and hope.
The family confronting schizophrenia in one of its members goes through a predictable cycle of adjustment or recovery (Burland, 1998; Marsh, 1998; Spaniol, Zipple, Marsh & Finley, 2000). The toll on the family during the recovery process is similar to the process families go through as they encounter other traumatic events or crises: shock, denial, depression, anger, acceptance, coping and affirmation of experience (Spaniol, Zipple, Marsh, & Finley, 2000). At the point of initial diagnosis, the individual and the family experience shock and denial as they deal with the catastrophic news. When they encounter the reality of the illness, the family experiences anger, resentment and guilt. The family mourns the inevitable losses accompanying the onset of the illness and must learn how to cope with these losses. During the resolution phase, the family re-establishes its equilibrium, relinquishes the intense feelings of earlier stages, and re-invests its limited energy and resources in new activities and relationships. As the family begins to understand and accept the reality of schizophrenia, they become empowered to seek the best services and options for the member with schizophrenia and themselves. They become advocates for change. The adjustment process is full of potential disaster and reward. Different members of the family may be at different points in the recovery process at the same time (Burland, 1998). The family can experience posttraumatic stress symptoms and the family can experience its own resilience (Marsh, 1998). Mental health care professionals can offer assistance to families adapting to the experience of schizophrenia in one of the members. They can also work with individual family members who experience the sequelae of the illness at later points in their lives.

Models of recovery stress the resumption of meaningful and productive social roles. Research has concentrated on the burden that persons with mental illness represent for their family members. In an effort to counter negative images and stigma, Greenberg, Greenley and Benedict (1994) explored the contributions persons with mental illness actually make to their families. They discovered that consumers make substantial and diverse contributions to families, including preparing meals, shopping, interpersonal support or companionship, and financial support particularly when they share living space. Unfortunately, these positive contributions receive little attention from family members or mental health care professionals. Such invisibility may weaken a consumer’s self esteem and reinforce a one-size-fits-all picture of recovery.
Hope

Hope is referred to as the starting point of recovery from schizophrenia (Deegan, 1996; Lovejoy, 1984). Jacobson (2001) performed a dimensional analysis of 30 recovery narratives written by individuals with schizophrenia. Within these narratives, the beginning of recovery was identified as the moment when hope sparked within the individual and the environment fanned the spark into flame. Additionally, Turner-Crowson and Wallcraft (2002) determined that hope is the single most powerful recurrent theme throughout the literature written by consumers of mental health care services and by professionals. The construct of hope has only recently been explored in the field of psychiatric rehabilitation; however definitions, models, measures and experiences of hope from the fields of pastoral counseling, nursing and psychology have been developed. Following is a review of literature from these fields about the construct of hope.

Definitions of Hope

The definitions and models within philosophy and religion tend to be esoteric in nature and are not as easily adapted for psychiatric rehabilitation research purposes as are the definitions and models in nursing and psychology. Within the philosophical and religious writings, hope is a construct that hovers on the horizon of physical reality. It is an intangible quality that links human beings to the transcendent. Trying to make the concept more accessible to novice philosophers, pastoral counseling researcher Lester (1995) focuses on the temporal quality of hope. Human beings are conscious of time in three dimensions: past, present and future. Hope is future oriented but it is not necessarily oriented to a future located along a strictly chronological timeline. This future orientation incorporates experiential time and encompasses philosophical, social, and cultural constructs about the world and the personal interpretation of time. The future is fluid and hope involves an awareness of a future that is not already determined. Anticipation of a future that holds the possibility of being different from the past is the core of hope. In Beyond Cynicism, Woodyard states, “Hope is not the calculation of a new future based on extrapolations from present data; it is confidence that the unpredictable will happen” (as cited in Lester, 1995, p. 62).
Within the fields of nursing and psychology, the outcome or object of hope is more describable. Hope is primarily a cognitive process. It is the belief that change is possible (Corey and Corey, 1997). It is alternatively defined as “a state of being, characterized by an anticipation of a continued good state, an improved state or a release from perceived entrapment” (Miller and Powers, 1988, p. 6). Many definitions of hope include temporality, desirability, and expectancy (Nunn, 1996). Staats (1991) conceives of hope as a future-referenced, affective cognition based on a desired outcome, with some expectation that the event will occur. Hope is a positive, goal-oriented, emotional response to the future and is often “experienced as a wanting, striving, longing, yearning or even craving” (Nunn, 1996, p. 228).

Hospice researcher Centers (2001) contends that American society has a limited definition of hope in that hope is equated with physical survival. In chronic and in deteriorating illnesses, family and health care providers often witness unexpected dimensions of hope. In the early stages of any illness, denial serves the purpose of maintaining hope because it prevents the patient from being overwhelmed by the facts. Denial diminishes as the process of acceptance unfolds. As acceptance becomes stronger, patients are able to reach a level of authentic hope unattainable at early points in time. Centers states authentic hope is a result of enormous emotional and spiritual work, and is essentially linked to the discovery of meaning in one’s life. Patients with amyotrophic lateral sclerosis, known as ALS or Lou Gehrig’s Disease, express hope for meaningful loving relationships, hope for connection with “something larger than ourselves and more important than our egos or God” (p. 261), hope not to be abandoned, and hope to die peacefully at home. The author stated as patients in her care became aware of their impending deaths, hope took on a transcendent quality. Patients expressed hope as the desires “to conclude one’s life in a way that provides an offering of love: to be an example to others, to mend any broken relationships, to say what needs to be said, [and] to treasure every remaining moment” (p. 261).

**Models of hope**

Models of hope that appear adaptable to psychiatric rehabilitation research have been developed within the fields in nursing and psychology.
Nursing

Nursing researchers, Farran, Herth and Popovich (1995) conceive of hope as a process with four central dimensions: (a) an experiential process, (b) a spiritual or transcendent process, (c) a rational thought process, and (d) a relational process. As an experiential process, hope embraces all possibilities by acknowledging the unknown and the unpredictable. When one is hopeful, one expects to emerge from an experience and one expects to be permanently changed by the experience. As a spiritual or transcendent process, hope is inseparable from faith. One is not overwhelmed by the absoluteness of present circumstances; rather one is able to transcend the status quo and transform it into larger, more vital vision. As a rational process, hope is a future oriented, realistic process that is associated with goals, the resources to achieve the goals, the motivation to actively pursue the goals, the control of one’s destiny to choose the goals, and the time to work towards them. As a relational process, hope is a developmental process based on earlier experiences with loving trustworthy caregivers and continuing into the present time with attentive, interactive family, peers, and care providers.

Psychology

Stotland, Nunn and Snyder are among the leaders in the study of hope in the field of psychology. Stotland (1969) asserts that hope is an expectation greater than zero of achieving a goal in the future and presents a theory of hope built on a series of propositions. These propositions state that hope is a response to the interaction of motivation to pursue a goal, importance of the goal to the individual, and anxiety about not achieving the goal. Repeated incidents in the individual’s experience that result in goal attainment produce cognitive schema that predispose an individual to expect that they will get what they want; this cognitive schema is labeled hope.

Nunn (1996) conceives of hope as a sense of mastery of the future. Mastery is comprised of four elements: (a) personal agency; (b) personal adequacy; (c) environmental responsiveness, and (d) illness responsiveness. Personal agency is the individual’s belief that he or she is responsible for his or her own future. This belief is reinforced with the corollary, personal adequacy, that one has the means, efficacy, and ability to cope with current circumstances while striving for the desired future. Coupled with the sense of personal agency and personal adequacy is the cooperation of the environment, the malleability of the environment as it adjusts to the
impact of the individual busy creating his or her future. Also important for the generation and maintenance of hope in a person with an illness is the responsiveness of the illness to the efforts of the person and his or her health professionals to affect the course of the illness.

In Hope Theory as developed by Snyder, hope is defined as a cognitive process used in varying degrees by all people to cope with every day life (Snyder, Michael, & Cheavens, 1999). Three related cognitive components interact to create hope: (a) goals, (b) pathways thought and (c) agency thought (Snyder, Ilardi, Michael & Cheavens, 2000). Hopeful people believe they are good at generating workable and attainable goals; developing effective means, or pathways, to reach these goals; and maintaining the necessary motivation, or agency thought, to pursue these goals even when barriers are encountered (Lopez, Floyd, Ulven, & Snyder, 2000). Hope can be visualized metaphorically as a journey with a destination (goal), alternative routes to reach the destination (pathways thought) and a means of transportation (agency thought) (Snyder, 1995).

Scheier and Carver (2001) concur that goals are central to life. “People live by identifying goals for themselves and working and behaving in ways to attain these goals” (Scheier & Carver, 2001, p16). Goals provide structure and they imbue life with meaning. The person setting the goal must view it as both valuable and as potentially attainable. Hope is the force that enables one to hold onto valued goals in the face of adversity, remain engaged in the process of reaching goals, and stay committed to making progress towards the goal. Illness cannot be viewed as simply an obstacle in the process of goal attainment, because serious illness not only threatens the body’s ability to stay alive, it also directly interferes with ongoing goal oriented pursuits. In the face of powerful barriers, a person is better served by developing alternate means to achieve a valued goal, by reprioritizing aspects of life to reach more readily achievable goals, or by disengaging from a valued goal and allowing another goal to emerge as a primary pursuit. According to Scheier and Carver (2001), the ability to shift from one pathway towards a goal to another pathway or to replace a desired goal with another is fundamental to remaining goal-engaged. Distress results from continued commitment to an unattainable goal and emptiness results when commitment disappears.

The relational dimensional of hope identified by nursing researchers Farran, Herth and Popovich (1995) is acknowledged in psychology. Though Stotland proposed a purely behavioral model of hope, he acknowledged a social-relational aspect to the construct as well. Hope can be enhanced and even created in some people who trust in others (Stotland, 1985, as cited in Nunn,
The perception that others will be available, adequate and responsive in the future can be a more powerful influence on hope than the current state of affairs (Nunn, 1996; Vaillot, 1970). Also significant in terms of nurturing hope is the belief that at some point the individual will be wanted by others (Nunn, 1996).

**Measures of Hope**

Thirteen instruments are available for measuring hope. Seven are multidimensional and six are unidimensional. The multidimensional measures incorporate two or more of the following processes of hope: rational, relational, experiential, and spiritual or transcendent. The unidimensional measures are all based on Stotland’s assumption that hope is future goal oriented and concentrate on the rational process of hope.

The Miller Hope Scale (MHS) is the most frequently cited multidimensional measure of hope, and the few published research projects exploring hope and schizophrenia have all used it. The MHS is a 40-item scale using a 5-point Likert scale. It measures the multidimensional aspects of hope in adults within ten critical elements: mutuality-affiliation, sense of the possible, avoidance of absolutizing, anticipation, achieving goals, psychological well-being and coping, purpose and meaning in life, freedom, reality surveillance-optimism, and mental and physical activation (Miller & Powers, 1988).

Descriptions of the other six multidimensional scales follow. (a) The Hope Index Scale, developed by Obayuwana, Collings, Carter, Rao, Mathura, & Wilson (1982) is a 60 item dichotomous questionnaire to assess future expectations of five central themes related to hope: ego strength, religion, perceived family support, education and economic assets. (b) The Hopefulness Scale is also based on future expectations and is positive restatement of the items on the Beck Hopelessness Scale (Farran, Herth, & Popovich, 1995). (c) The Nowotny Hope Scale is a 29-item scale that measures attributes of hope on six dimensions: confidence in outcomes, relates to others, future is possible, spiritual beliefs, active involvement, and inner readiness (Nowotny, 1989). (d) The Herth Hope Scale is a 30-item instrument with a 4-point rating scale. It assesses global and specific aspects of hope on three dimensions: the perception that a desired outcome is probable in the near future; a feeling of confidence such that plans are initiated; and the recognition of interrelatedness and interconnectedness between self and others and self and
spirit. (e) The Herth Hope Index is also a 30-item instrument with a 4-point rating scale assessing global and specific aspects of hope on the same three dimensions of the Herth Hope Scale. The Index was developed for a more seriously ill population (Farran, Herth, & Popovich, 1995). (f) The State-Trait Hope Scale is the only instrument that seeks to measure both the dynamic, interactive nature of hope within a respondent and the stable individual differences between respondents. It too measures future expectations but also includes items that refer to God and so may have limited usefulness with individuals who do not believe in God (Raleigh & Boehm, 1994).

Descriptions of the six unidimensional measures of hope based on the Stotland’s behavioral propositions follow. (a) The Gottshalk Hope Scale is a verbal content analysis scale that quantifies expressions of hope in short, recorded segments of speech. References to self or others; seeking or receiving help, advice, support, sustenance; and confidence or esteem are considered evidence of the existence of hope which is defined as the assurance that a favorable outcome is possible (Farran, Herth, & Popovich, 1995). (b) The Hope Scale by Erickson measures the rational process of hope within respondents who indicate the relative importance of 30 future goals on a 7-point Lickert scale (Farran, Herth, & Popovich, 1995). (c) The Stoner Hope Scale is a revision of the Hope Scale by Erickson that reduces the number of items from 30 to 20. (d) The Hope Index is a 16-item instrument that measures the difference between wanting and expecting particular outcomes. (e) The Hopefulness Scale for Adolescents is a 24-item, visual analogue scale of future goal expectation developed specifically for young people. (f) The Hope Scale by Snyder is the shortest scale available and was developed to measure the cognitive process of hope specifically (Snyder, 2000).

The Hope Scale by Snyder has been used widely in quantitative research. It consists of 12 statements to which respondents mark their degree of agreement on a 4-point Likert scale. Exploratory factor analysis was used in the development of the tool and items loaded on two factors (Snyder, Harris, Anderson, Holleran, Irving, Sigmon, Yoshinobu, Gibb, Langelle, & Harvey, 1991). Two years after initial development a confirmatory factor analysis demonstrated that the model of hope developed by Snyder is more consistent with the observed data than any other models proposed (Babyak, Snyder, & Yoshinobu, 1993).
Studies of Hope

Hope, as noted by Yalom (1995), is crucial in any and every psychotherapy. Hope begins before the therapy even starts. Clients express their own hope in therapy with the first phone call, implying that they have not given up yet, that they are willing to try yet again at changing whatever needs changing. Therapists capitalize on hope by believing in themselves as instruments of change and by believing in their particular approach to therapy. Self help groups capitalize on the installation of hope. “Members [of the therapy group] are inspired and expectations raised by contact with those who have trod the same path and found the way back” (Yalom, 1995, p.5).

In Yalom’s research on the therapeutic factors in group therapy, results indicate that the installation of hope was the factor most valued by the lower-functioning, or more symptomatic, patients in psychiatric hospital settings. As patients improved, their focus shifted to other factors: universality, vicarious learning and interpersonal learning (Yalom, 1995).

Lending credence to the thesis that goals are fundamental to hope, Benzein, Norberg and Saveman (2001) found that even terminally ill people moved through their day by setting goals. The goals changed in a similar way for all 11 patients who participated in the study. The first goals were narrow and personal, such as “to make it through the day.” As physical symptoms increased, goals were focused beyond the patient, “wanting the best for my two young sons.” Finally when death was imminent, goals reflected hope for inner peace and rest. The participants in this study revealed that hope was maintained through three dimensions: (a) personal spirit, defined as finding personal meaning in the experience; (b) acknowledging risk, addressing the issues of unpredictability and uncertainty in the course of the illness; and (c) authentic caring, the experience of affirming, valuing human relationships. Structural analysis of the data revealed four themes: (a) the ever-present hope for a cure; (b) a hope of living as normally as possible, without stigma; (c) a hope for confirmative relationships with self, others, pets and transcendent being or beings; and (d) the hope of reconciliation between life and death. The metaphor of a mobile was used to described how these four themes were related to each other; as hope in one dimension changed, the other three were impacted as well.

McKinnon (1977), in a study with a sample size of one, explored the intertwining of hope with meaning in life. Using a series of letters written to the researcher by a young adult male
with post-psychotic depression, the researcher showed how the potential for self-realization co-
exists with the struggle for security and trust, and the cacophony of feelings of guilt and
confusion. As delusions of grandeur and hallucinations of communication with God diminished,
so did hope. The therapist assisted the client in nurturing a fragile hope, a wish that he could
find a new goal, a new purpose, or a new meaning in his life, another reason to live.

Several studies have provided information about how hope cannot be defined. Magaletta
and Oliver (1999) demonstrated that hope, as defined in Hope Theory, is distinct from optimism
and self-efficacy. A maximum-likelihood factor analysis of data gathered in a study of 200
university students revealed that pathways thought, agency thought, self-efficacy and optimism
are separate constructs. Furthermore, results of multiple regression show the variable hope as
measured by the Hope Scale (Snyder et al., 1991) accounts for unique variance over and above
what is accounted for by self-efficacy and optimism.

Hope is distinct from self-actualization (Summerlin, 1997). Though scores on the Brief
Index of Self-Actualization and scores on the Hope Scale were highly correlated in 149
university students, factor analysis did not support the supposition that the two assessment
instruments were measuring the same construct. In the discussion section, Summerlin speculates
that self-actualization, encompassing present and future time orientation, is a broader concept
than the construct of hope as a measure of the process of future goal achievement.

Hope is not correlated with an internal locus of control, even though hopelessness is
correlated with a lack of personal control and with being controlled by powerful others
(Brackney & Westman, 1992). In this same study, however, hope was positively correlated with
psychological maturity as defined by Erickson’s sixth stage of human development, Intimacy vs.
Isolation. Since this is a correlation study, it is impossible to tell whether hope is necessary for
maturity or whether maturity enables one to imagine more options and thus fosters hope.

Hope does not correlate with severity of schizophrenic symptoms, length of illness,
financial factors, number of social contacts, or living situation (Landeen, Pawlick, Woodside,
Kirkpatrick & Byrne, 2000). Rather the subjective measures of quality of life, particularly those
related to finding meaning in life, were associated with high levels of hope as measured by the
Miller Hope Scale.

Horton and Wallander (2001) found that objective measures of disability-related stress
did not predict levels of hope in a study of 111 maternal caregivers of physically disabled
children. Rather high levels of hope as measured by the Hope Scale predicted low reports of perceived stress from the mothers regardless of the level of disability-related stress indicated by objective measures.

Kwon (2000) demonstrated in two studies with samples of 144 and 159 participants that persons with low hope are generally more distressed, are less motivated to pursue their goals and choose fewer and less difficult goals than persons with high hope. Persons with high hope demonstrate a tendency to make use of the mature defense mechanisms of intellectualization, identification, and humor; whereas persons with low hope tend to make use of the immature defense mechanisms of turning against self, turning against other, projection and reversal. Persons with high hope experience low levels of dysphoria and persons with low hope experience higher levels of dysphoria. An unexpected finding in this study was that persons with low hope who tend to make use of the mature defense mechanisms do not experience dysphoria and are motivated to pursue their goals.

Hope is not a static quality. In a qualitative study of art therapy conducted with severely burned adolescents, Appleton (2001) demonstrated that hope waxes and wanes throughout the stages of a recovery process. During Stage I: Impact, the developmental issue is the effort to create continuity between pre-injury life and post-injury life. Hope is depicted in patients’ art as a quality that enters them from without and reduces the impact of the injury. During Stage II: Retreat, the developmental issues revolve around building a therapeutic alliance with the therapist. During this phase of recovery, patients’ art often reflects fantasy themes and symbols of hope may or may not appear in the art. In Stage III: Acknowledgement, the developmental task is to overcome social stigma and isolation caused by the injury. Artwork created during this period of recovery depicts feelings of anger, outcry, depression and grief. If hope symbols are present, they may again exist outside the body of the patient. During Stage IV: Reconstruction, the developmental issue is fostering meaning. This is an intensely personal stage and is not easily described sequentially. Toward the end of this stage of recovery, individual artwork is less chaotic and more organized. Hope symbols are once again located within the person symbols in the drawings; often, the symbol of hope extends out of the body of the person.

According to Farran, Herth, & Popovich (1995) hope is more easily studied when it is absent than when it is present. Disorders of hope are implicated in suicide, depression, schizophrenia and institutionalization (Barton, 1999; Nunn, 1996). Loss of hope is probably
most evident in the phenomenon of institutionalization. It is characterized by “apathy, lack of initiative, loss of interest, submissiveness, lack of expression of feelings of resentment at harsh or unfair orders, lack of interest in the future and inability to make plans for it, deterioration in personal habits, loss of individuality, and a resigned acceptance that things will not change” (Nunn, 1996, p. 239).

**Experience of Hope**

Schizophrenia has been defined as a trauma to self (Estroff, 1989). Hope waxes and wanes as consumers adjust to the impact of the illness, retreat from the trauma, acknowledge their profound losses and reconstruct meaning in their lives, integrating the facts of the serious mental illness into their new lived reality. It is the job of the counselor to create a therapeutic alliance by getting across to the consumer that one is “there to help, that [the consumer has] a helpable condition, and that it is only going to take hard work. [The counselor] must create hope” (Karon, 2001, p. 17). “With unusual life experiences as well as unusual symptoms, the patients do their best to make sense out of their lives. That is why a non-frightened, non-humiliating therapist can helpfully offer alternative meanings which will be accepted when they work better or make more sense to the patient than the delusions” (Karon, 2001, p. 18).

Carver and Scheier (2001) assert that a review of literature consistently shows that a sense of purpose and meaning in life is positively associated with measures of life satisfaction, positive mood, and happiness. Purpose in life is negatively associated with depression. Hope and optimism predict lower levels of distress of people anticipating surgery and more resilience to distress during the year following surgery. Hope is maintained when a person believes the desired outcomes will occur and that some degree of progress is being made towards the desired goal. Psychosocial training programs may increase hope by (a) increasing a person’s confidence in being able to manage the symptoms of the illness, (b) providing problem-solving skills or active interventions to do to challenge the symptoms, (c) providing relaxation training and stress management techniques to cope with symptoms that interfere with everyday life. Scheier and Carver (2000) further assert that psychosocial interventions also serve the function of providing and maintaining purpose in one’s life.
Acceptance is an important adjunct to hope. Hope is diminished by adherence to unattainable goals. There are situations, and serious physical and mental illnesses often fall into this category, where valued goals are no longer valid. Acceptance is the process of working through the experience, integrating it into one’s worldview, and restructuring one’s experience in order to come to grips with the reality of the situation. Acceptance involves the willingness to admit that an event has irrevocably changed the fabric of one’s life (Scheier and Carver, 2001). Resignation to the diagnosis and acceptance of the diagnosis are fundamentally different. Acceptance makes room for reprioritization of values, revision of life goals, and creative use of the time, energy and skills not affected by the illness in constructive and self-expressive ways (Scheier and Carver, 2001).

Shabad (2001) proposes that hope begins to return to an individual through the context of belonging in a relationship with another human being. The power of psychotherapy is not in techniques and post-session homework, but rather in authentic human interaction. Unlike most theorists, Shabad suggests that healing is not perpetrated upon the client by the therapist. Rather healing occurs in the client’s act of giving himself or herself fully to the therapist as a gift. If the therapist is able to embrace the change that will occur within his or her own psyche as a consequence of integrating this gift, the client will experience the safety necessary to move towards self-acceptance and self-understanding. Within this safe, intimate relationship, the client can begin to explore life beyond the defensive walls and experiment with becoming who he or she was destined to become. This extraordinarily risky process can be short-circuited if the psychotherapist does not understand his or her personal disillusionments. If the therapist remains defensively behind the mask of professional anonymity, he or she confirms the client’s belief that an authentic, accepting relationship with an all-powerful other is an unrealistic wish (Shabad, 2001).

One of the original tenets of the Fountain House model of psychiatric rehabilitation was to establish a place where the individual with schizophrenia is wanted, needed, and missed (Beard, Propst, & Malamud, 1982). A recurrent theme in consumer literature is the desire to serve others with the illness and thus give back to life. This worldview is not only prevalent among people with psychiatric illness, but has been observed in cancer support groups: “Being of help to others, even at the very end of life, helped to imbue members with a vital sense of meaningfulness” (Spiegel, Bloom and Yalom, 1981, p 532).
Williams and Collins (2002) reiterate the importance of social relationships on the experience of hope and recovery in a secondary analysis of data gathered in a study on the subjective experience of schizophrenia. Four reference groups were identified as having influence on the identity development of persons with schizophrenia: (a) family, (b) other persons who have experience with mental illness, (c) mental health professionals, and (d) society. Each group could be a potential promoter of a disabled identity or of a recovered, or recovering, identity depending upon the nature of the support and interventions offered to the individual with schizophrenia.

The communication of clinicians to seriously ill patients is a careful mixture of hope and reality. “Staff must role model hope and continue to offer options and choices even if they are rejected over and over again” (Deegan, 1996, p. 96). Time is required to integrate unfavorable details about prognosis into a patient’s vision of recovery and the process cannot be rushed. “Hope is a fragile commodity, easily crushed by the careless provision of facts” (Stein, 2000, p. 306). Clinicians are aware of the fine line between withholding truth and being vague about prognosis in order to maintain hope (Stein, 2000).

Furthermore, before staff can nurture hope in persons with schizophrenia, they must first have hope themselves. In a qualitative study of 15 staff members, Woodside, Landeen, Kirkpatrick, Byrne, Bernardo, & Pawlick (1994) determined that staff members’ personal hope was an iterative, interactive process. Factors that contributed to staff member hopefulness fell into three categories: (a) relationships with clients, (b) the work environment, and (c) the non-work environment. Actively participating with clients to set and attain goals, keeping expectations realistic, working with clients with an optimistic outlook, and finding the person underneath the illness were elements of relationships that nurtured hope in staff members. Work environment factors that nurtured hope were attitudes of hope and optimism in fellow staff, pervasive respect for clients, specific helpful clinical suggestions and sharing responsibility for particularly difficult clients. Factors in the non-work environment that influence hope were personal religious beliefs, contact with hopeful people and a general positive outlook on life.
Summary

In Chapter 2, relevant literature about schizophrenia, the concept of recovery from schizophrenia, and the construct of hope were reviewed. The terms were defined, the models used to conceptualize schizophrenia, recovery and hope were described, measures of hope were reviewed and the experiences of schizophrenia, recovery and hope were explored.
CHAPTER THREE
METHOD

To investigate the patterns of hope and attitude towards recovery from schizophrenia as they occur in persons with schizophrenia participating in psychiatric rehabilitation programs, a correlational study using survey methods was designed. The study was primarily descriptive in nature. No manipulations of independent variables or measures of control group data were conducted. Relationships among the demographic variables, hope, and attitude toward recovery were identified after use of the appropriate statistical procedures; no causal inferences were made.

Chapter 3 describes the intended population and the participants of the study, the instrumentation, the data collection procedures, the data analyses and the research questions that guided this investigation.

Population and Participants

Voluntary participants were recruited from five psychiatric rehabilitation day programs in the suburban regions of a large city on the east coast of United States of America. A non-profit agency operated three sites under contract to one very populous county; county mental health agencies operated the other two of the sites. The sites managed by the non-profit agency were in demographically and economically distinct regions of the same geographically large county between five and thirteen miles from the metropolitan center. One of the remaining sites was located in a somewhat less populated county twenty miles outside the city limits and the last site was located in a geographically small, but densely populated county within a mile of the city limits. Enrollment at the sites ranged from 80 to 110 people and average daily attendance ranged from 35 to 50 persons. Each site subscribed to the clubhouse philosophy of psychiatric rehabilitation created by Fountain House in New York City and provided meaningful tasks during a work-ordered day for all participants. A small number of educational or support groups
were available daily, but psychotherapy and medication management were conducted away from
the sites. Each site had a full range of vocational rehabilitation services, including job
placement, job coaching and career counseling.

Participants determined if they met the research protocol themselves. No information
was gathered from those meeting attendees who did not participate. The people who opted out
could have done so for a variety of reasons: they did not meet the research protocol, they did not
believe they had a diagnosis of schizophrenia or schizoaffective disorder, they were not
interested, they were not able to read, they were grumpy that day or any number of other valid
reasons. No distinction was made between participants who had co-morbid disorders, i.e.,
substance abuse, obsessive-compulsive disorders, trauma, and those who did not have co-morbid
disorders.

Data Collection Procedures

Permission to conduct the study was secured from the Investigation Review Board of
Virginia Polytechnic Institute and State University and from the agencies who directed the
psychiatric rehabilitation programs. Dr. J.R. Borkin granted permission for use of the Recovery
Attitudes Questionnaire-7 and the American Psychological Association granted permission for
use of the Hope Scale.

Directors of the five centers informed the members of each center that I would be
conducting a research project at the centers about two weeks prior to the day set aside to conduct
the survey. Reminders were given at each daily meeting until that time. The days to conduct the
survey were suggested by the directors of the centers as the days when attendance was highest
during the week. I then attended these regularly scheduled informational, support group and
general membership meetings at the day programs to recruit participants for the study. After
requesting voluntary participation and explaining the risks and benefits of participation, written
informed consent was secured from each participant. In order to protect participants’ privacy,
qualified program personnel screened clients to determine if they were capable of understanding
the informed consent document. Explanations for completing the questionnaires were given in a
large group setting. Assistance was available upon request for those participants who had
difficulty reading the questionnaires from me and from staff members at the sites. Because
psychoactive medications often interfere with vision, all questionnaires were produced in large print format. Questionnaires were completed during the abovementioned meetings. The procedure actually took between 20 and 30 minutes to complete and not the projected 10 and 15 minutes. Completed questionnaires and signed informed consent forms were collected at the close of the meetings in separate envelopes. The researcher provided the questionnaires, pencils and envelopes to the participants. Statistics were kept as to how many people attended the meetings and how many volunteered to participate and complete questionnaires. Because of privacy concerns, no demographic data were collected from meeting attendees who chose not to participate. No incentives for completing the questionnaires were awarded to individuals, however a monetary donation was made to each agency’s recreational fund. Each agency was also offered a presentation of study findings at a general membership meeting or at staff training.

Completed questionnaires and signed informed consent documents were stored in a locked file cabinet. No attempt was made to connect the signed consent forms with the data supplied on the questionnaires. Coded data were entered into a secure personal computer. When data had been entered and saved in the appropriate computerized statistical program, questionnaires were shredded. The signed consent forms will be securely stored for seven years.

**Instrumentation**

Participants who voluntarily agreed to participate were asked to complete three instruments: the Recovery Attitudes Questionnaire-7 (RAQ-7), the Hope Scale (HS), and a demographic questionnaire.

**Recovery Attitudes Questionnaire-7**

The RAQ-7 was published in 2000 to test assumptions about recovery models (Borkin, et al., 2000). Data for the development process were collected in 1995 and 1996. It is a brief, easily understood and easily used 7-item questionnaire designed to measure the belief that people can recover from serious mental illness. Respondents indicate degrees of agreement with the seven items on a 5-point Likert scale ranging from strongly disagree to strongly agree. Higher scores indicate a more positive attitude towards recovery.
Mental health professionals and members of an Internet listserv group interested in serious mental illness culled items used in the development process from published first person accounts of recovery (Borkin, et al., 2000). A 21-item version was administered to a heterogeneous population that included persons with serious mental illness, family members of persons with serious mental illness, mental health professionals and members of the general public. A total of 844 surveys contained the required demographic data and answers to survey questions used in a factor analysis. Initial principal components extraction with subsequent varimax rotation produced two factors with eigenvalues greater than 1. Two consecutive analyses eliminated items loading less than .60 on one factor and .40 or greater on two factors, thus producing seven items that loaded on two factors. The two factors explained 54% of the total variance in data set. Factor 1: “Recovery is possible and needs faith,” explained 36.2% of the variance; Factor 2: “Recovery is difficult and differs among people,” explained 17.5% of the variance. The seven items of the two factors are presented in Table 3.1.

<table>
<thead>
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<th>Table 3.1</th>
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<td>Recovery Attitudes Questionnaire-7: Factors and Items</td>
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</tbody>
</table>

**Factor 1: Recovery is possible and requires faith.**

- To recover requires faith. *(Item 2)*
- Recovery can occur even if symptoms of mental illness are present. *(Item 4)*
- Recovering from mental illness is possible no matter what you think may cause it. *(Item 5)*
- All people with serious mental illness can strive for recovery. *(Item 6)*

**Factor 2: Recovery is difficult and differs among people.**

- People in recovery sometimes have setbacks. *(Item 1)*
- Stigma associated with mental illness can slow down the recovery process. *(Item 3)*
- People differ in the way they recover from mental illness. *(Item 7)*

Reliability of the RAQ-7 was demonstrated by test-retest reliability coefficients above 0.60 (Borkin, et al., 2000). A recovery initiative research team consisting of mental health service consumers, mental health service providers, and graduate students determined construct validity. Concurrent and discriminant validity have yet to be demonstrated.
Hope Scale

The Hope Scale was developed to measure hope as defined by Hope Theory. In Hope Theory, hope is conceptualized as a goal-directed cognitive process. The Hope Scale measures two components of the cognitive process: (1) agency thought or determination and (2) pathways thought or planning (Snyder, Feldman, Shorey, & Rand, 2002). The Hope Scale presents 12 statements to which the respondent indicates the degree of agreement on a 4-point Likert scale. Higher scores indicate higher levels of hope. Four items on the instrument load on the factor labeled Agency Thought, four load on the factor labeled Pathways Thought and the other four are distractor items which are not used to determine a final score.

Snyder selected the original set of items from a pool of 45 items contained in unpublished doctoral dissertations that attempted to define hope. Four items that fit the idea of pathways thought and four items that seemed to represent agency thought were selected. These eight items were combined with four distracter items and administered to eight different samples in and around the University of Kansas, including one sample from an outpatient psychological treatment facility and one sample from an inpatient unit at a state psychiatric facility. Snyder and his associates then conducted a principle-components exploratory factor analysis with the data from these eight samples. The statistical procedure revealed that the data did indeed load on the two factors that corresponded to Snyder’s two types of thought (Snyder, Harris, Anderson, Holleran, Irving, Sigmaon, Yoshinobu, Gibb, Lagelle, & Harney, 1991).

Reliability of the Snyder Hope Scale was determined by calculating internal consistency that exceeded the minimum Cronbach alpha score suggested by Klein and through test-retest procedures that achieved reliability correlations above 0.80. Construct validity was supported through a series of experiments with undergraduate students. Convergent validity was demonstrated by achieving positive correlations between the Snyder Hope Scale and several other instruments, including Life Orientation Scale, Burger-Cooper Life Experiences Survey, Problem Solving Inventory, Rosenberg Self-Esteem Scale, Minnesota Multiphasic Personality Indicator, Rotter Incomplete Sentence Blank and the Marlowe-Crowne Social Desirability Scale. The Snyder Hope Scale has a negative correlation with the Beck Hopelessness Scale. Finally,
discriminant validity was demonstrated by a lack of positive or negative correlation with the Self-Consciousness Scale (Snyder, et al., 1991).

Cronbach’s alpha was used to assess internal consistency or reliability of the 7 items of the Recovery Attitudes Questionnaire and the 8 items of the Hope Scale that were used in the data analysis. Cronbach’s alpha for the total score of the RAQ-7 was .84 (N = 95), for Factor 1 was .70 (N = 98), and for Factor 2 was .73 (N = 97). These values were greater than the values calculated for the instrument development sample. At that time, alpha for the total score of the RAQ-7 was .70 (N = 844), for Factor 1 was .66 (N = 844), and for Factor 2 was .64 (N = 844) (Borkin, et al., 2000).

Cronbach’s alpha for the total score of the Hope Scale was .81 (N =96), for Pathways Thought was .72 (N = 97), and for Agency Thought was .69 (N = 99). The alpha values for the development samples ranged from .74 to .84 for the total score of the Hope Scale, for the Pathways subscale ranged from .63 to .80, and for the Agency subscale ranged from .71 to .76 (Snyder, Harris, Anderson, Holleran, Irving, Sigmon, Yoshinobu, Gibb, Langelle, & Harney, 1991). The alpha values for the total score of the Hope Scale and for the Pathways Thought subscale fall within these ranges; the Agency Thought subscale, however, falls below this range.

**Demographic Data**

Demographic data collected included age, sex, ethnic or racial identity, diagnosis, length of community tenure, living arrangement and amount of participation in vocational type activity.

**Age**

Age was considered an important variable when assessing the pattern of recovery from schizophrenia. Symptoms of schizophrenia are most notable during late adolescence and earlier adulthood. Frequent exacerbations of symptoms cluster in the first ten years after onset of the illness. Periods of time between episodes of exacerbation tend to lengthen as the individual ages. Most individuals are relatively stable by middle age (Harding, et al., 1987).
Gender

Gender was considered a relevant variable as well. Though there appears to be little difference in the percentages of males and females who eventually develop schizophrenia, males tend to exhibit the symptoms at an earlier point in their lives than females (DSM-IV-TR, 2001).

Ethnic or racial identity

Ethnic or racial identity is considered an important variable because differences exist between cultures as to how individuals are treated within their ethnic communities. One percent of the international population meets the criteria for schizophrenia (NAMI, 1997). This statistic holds true across racial or ethnic lines world-wide. In the United States, however, African Americans are over-represented in community mental health programs, while Asian Americans and Latino Americans are often under-represented. A higher percentage of White Americans are covered by health insurance and may receive care from private facilities, while African Americans with severe mental illnesses turn to community facilities for services. Asian American and Latino American communities often have different beliefs about the etiology of schizophrenia and tend to manage the person with schizophrenia within the family unit (Carter & Golant, 1998; Sue & Sue, 2003).

Diagnosis

Diagnosis was included as a variable on the demographic questionnaire as an additional check in order to ensure only persons who acknowledged personally that they had a diagnosis of schizophrenia or schizoaffective were included in the research study.

Community Tenure

Community tenure was included as a variable because, by convention, it is believed to be a measure of reintegration into normal social and vocational functioning (Harding, et al., 1987; Sullivan, 1994). The individual is able to manage the symptoms of schizophrenia through medication, support groups, and coping skills and avoid the disruption that hospitalization can cause to one’s self, family and job. The variable of community tenure was measured in the number of months since an individual with schizophrenia had been hospitalized for psychiatric reasons.
Level of independence of living arrangement

The variable of living arrangement was used to gauge progress toward recovery from schizophrenia (Harding, 1987; Sullivan, 1994). As individuals recover from schizophrenia, they usually advocate for more independent housing arrangements. Some living arrangements offer independence; some are therapeutic in nature, thus somewhat restrictive; and others are highly structured by mental health care professionals. The hospital is considered to offer the least amount of independence to the consumer. Group homes, transitional apartment programs and shelter situations are also considered highly structured with requirements for participation in therapeutic services. Living in supervised apartments, where mental health care professionals come in only on a weekly basis, and living with family members are considered semi-independent housing, as neither has 24-hour professional supervision. The least restricted housing arrangements are low-income Section 8 housing and independent housing.

Amount of participation in vocational-type activity

Amount of participation in vocational-type activity was the final variable included in the demographic questionnaire. This variable is defined as the total number of hours a study participant dedicated to paid employment and regular commitment to specific volunteer positions. Vocational-type activities are important in recovery. Work for pay, or a volunteer commitment if a person chooses not to work for pay, often provides social interaction, reinforcement for self-esteem and role definition (Sullivan, 1994). A major tenet of psychiatric rehabilitation is to encourage re-integration into the job market as soon as the consumer feels he or she is ready, and not to wait for a professional to declare the individual recovered enough to work. Psychiatric rehabilitation counselors often suggest 15 hours of work per week in order to protect government entitlements, because Social Security Disability Insurance payments, general relief funds and Medicaid health care benefits are affected by how much money an individual earns.

Progress toward recovery from schizophrenia

For the purpose of this study, recovery from schizophrenia was conceptualized as reintegration into normal social functioning with or without symptoms of the brain disorder. Sullivan’s (1994)
definition of recovery was used: avoiding psychiatric hospitalization for at least two years, living in semi-independent or independent housing, and participation in paid or unpaid vocational activity at least 15 hours per week. Table 3.3 summarizes how the three study variables were combined to estimate progress toward recovery from schizophrenia. Progress toward recovery was measured by self-report of the participants on three questions. (a) Avoiding hospitalization for at least two years was determined by the answer to the question, “When was the last time you were in the hospital for mental health reasons?” This answer was converted to months. Values greater than 24 months indicate recovery and were coded 3; and values between 1 and 23 months were coded 2, and values of 0 months were coded 1. (b) Level of independence in living arrangement was determined by the answer to the question, “Where do you live?” The participant circled one of the following choices: hospital, group home, transitional apartment, supervised apartment, section 8 housing, independent housing, shelter and other. In-patient hospitalization provides a strict structured environment, hence the answer “hospital” was considered not be independent or semi-independent housing and was coded 1. Though higher levels of freedom then the hospital are possible, the answers “group home,” “transitional apartment” and “shelter” were not considered semi-independent housing or greater thus were coded 2. All other choices were considered semi-independent or independent and were coded 3. (c) Participation in paid or unpaid vocational type activity was determined by the two questions “How many hours do you work each week?” and “How many hours do you volunteer each week?” Totals of 0 were coded 1, totals between 1 and 14 were coded 2 and totals 15 or greater were coded 3. Four levels of recovery were determined by adding the three recoded variables just described. A total of 3 indicated recovery had yet to begin and was coded 1, no recovery. A total between 4 and 5 indicated initial steps towards recovery had been taken and were coded 2, beginning recovery. A total between 6 and 8 indicated sustained progress had been made towards recovery and were coded 3, in recovery. A total of 9 indicated the individual had maintained reintegration into normal functioning for 2 or more years and was coded 4, recovered. The final result was a categorization of participants into four groups indicating progress toward or level of recovery.
Table 3.2

Variables combined to determine progress toward recovery

<table>
<thead>
<tr>
<th>Community tenure</th>
<th>Recoded value</th>
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<tbody>
<tr>
<td>• 0 months</td>
<td>1</td>
</tr>
<tr>
<td>• 1-23 months</td>
<td>2</td>
</tr>
<tr>
<td>• 24 – 780 months</td>
<td>3</td>
</tr>
</tbody>
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Level of independence in housing

| In hospital                                  | 1             |
| Group home, transitional apartment and shelter | 2             |
| Supervised apartment, with family members, section 8 housing, or independent housing | 3             |

Vocational type activity total

| 0 hours per week                            | 1             |
| 1-14 hours per week                         | 2             |
| 15 - 40 hours per week                      | 3             |

Level of recovery = Community tenure + housing + vocational type activity

| 3                                          | No recovery yet          |
| 4 – 5                                      | Beginning recovery       |
| 6 – 8                                      | Recovering              |
| 9                                          | Recovered               |

Data Analysis

Data were analyzed utilizing the Statistical Program for the Social Sciences for Windows 9.0 (SPSS). Descriptive statistics including raw scores, percentages, means and standard deviations of the Recovery Attitudes Questionnaire, the Hope Scale and the demographic responses were calculated and presented to the reader in table form in Chapter 4. The demographic statistics were compared with census data to determine how closely the sample in this study resembled the population served by the agencies. The demographic data were also compared to the published demographic data about the samples used in development of the instruments.
**Research Questions**

Four research questions guided this investigation. The analyses associated with each one of the research questions are discussed below. The variables are described and the hypothesis presented.

*Research question I: Pattern of hope*

What is the pattern of hope in persons with schizophrenia participating in psychiatric rehabilitation programs? The research hypothesis was that individuals at different points in their recovery from schizophrenia would score differently on the Hope Scale. The null hypothesis was that no significant pattern of hope would emerge in persons with schizophrenia participating in psychiatric rehabilitation programs. Pearson product-moment correlation coefficients were calculated for the continuous variables of age, length of community tenure, and amount of vocational-type activity. One-way analyses of variance were used to compare the mean scores of the Hope Scale and its subscales, Agency Thought and Pathways Thought for the categorical variables of gender, ethnic or racial identity, diagnosis and level of independence in housing arrangement. One-way ANOVA was also used to compare the means scores on the Hope Scale and its subscales among the four levels of the combined variable, progress toward recovery. Significance was set at the .05 level, an acceptable standard for psychological research for each statistical procedure.

*Research question II: Pattern of attitude toward recovery*

What is the pattern of attitude toward recovery in persons with schizophrenia participating in psychiatric rehabilitation programs? Again, the research hypothesis was that individuals at different points in their recovery from schizophrenia would score differently on the Recovery Attitudes Questionnaire-7. The null hypothesis was that no significant pattern of attitude toward recovery would emerge in persons with schizophrenia participating in psychiatric rehabilitation programs. Pearson product-moment correlation coefficients were calculated for the continuous variables of age, length of community tenure, and amount of vocational-type activity. One-way analyses of variance were used to compare the mean scores of the RAQ-7 and its subscales, Factor 1: “Recovery is possible and requires faith” and Factor 2: “Recovery is
difficult and differs among people” for the categorical variables of gender, ethnic or racial identity, diagnosis and level of independence in housing arrangement. One-way ANOVA was also used to compare the means scores on the RAQ-7 and its subscales among the four levels of the combined variable, progress toward recovery. Significance was set at the .05 level, an acceptable standard for psychological research for each statistical procedure.

**Research question III: Relationship between hope and attitude toward recovery**

What is the relationship between hope and attitude toward recovery from schizophrenia? The research hypothesis was that hope would correlate positively with positive attitude towards recovery. The null hypothesis was that no significant correlation existed between the scores on the Hope Scale, the RAQ-7, and their respective subscales. Pearson product-moment correlation coefficients were calculated to determine if a direct, positive relationship existed between hope and attitude towards recovery. Score on the Hope Scale was the independent variable and score on the RAQ-7 was the dependent variable. Significance was set at the .05 level and was computed with a one-tailed test of significance since a directional correlation was expected. Correlation coefficients were also calculated for individual items from the instruments as well.

**Research Question IV: Are hope and positive attitude synonymous?**

Are hope and attitude towards recovery synonymous? If hope and attitude toward recovery from schizophrenia had a statistically significant direct, positive correlation, could it be possible that they measure the same construct? In other words, did the two factors on the Hope Scale, Agency Thought and Pathways Thought, measure the same underlying constructs identified by the two factors of the Recovery Attitudes Questionnaire, Factor 1: “Recovery is possible and needs faith” and Factor 2: “Recovery is difficult and differs among people”? It was hypothesized that when using the statistical procedure factor analysis, the items of the Agency Thought and Factor 1, which correspond to items 2, 4, 5, 6, 9, 16, 17, and 19 on the research questionnaire, would load on the same factor. In addition, the items of Pathways Thought and Factor 2, which correspond to items 1, 3, 7, 8, 11, 13, and 15, would load on a separate and unique factor. The null hypothesis was that items from the two instruments would not load on two factors as described above. If a statistically significant direct, positive correlation between hope and attitude toward recovery was discovered, it was planned to conduct a principle
components factor with the 15 items on the Recovery Attitudes Questionnaire and the Hope Scale. Using SPSS, a correlation matrix of all variables was to be calculated and rotated to see if factors would be extracted that created an understandable factor structure. If no correlation existed, this step would be mute.

**Summary**

In this chapter, the sample population of the study, the instrumentation, the data collection procedures and the data analyses were described. The four research questions were described in detail; research hypotheses and null hypotheses were clarified.
CHAPTER FOUR
RESULTS OF STUDY

Chapter Four contains the results of the data collection and analyses for the research study. The demographic profile of the participants is presented. Patterns of hope and attitude toward recovery from schizophrenia in persons participating in psychosocial rehabilitation programs are examined. The relationship between hope and attitude toward recovery is explored. Statistically significant and non-significant results are identified.

Demographic Profile of the Participants

A total of 100 questionnaires were used in the data analysis. Table 4.1 summarizes the number of persons who attended the regularly scheduled daily meetings on the days that the study was conducted and the number of valid questionnaires that were gathered from each site during the data collection sessions. Not all individuals enrolled at the five programs were present at the meetings; however, the data collection days were selected as typically having the greatest attendance according to the program directors. This is characteristic of psychiatric rehabilitation programs as people are out working or volunteering in the community, at appointments elsewhere in the community, or not present for reasons that have nothing to do with the diagnosis of serious mental illness.

Attendees at the meetings in which data were collected determined for themselves if they met the research protocol. No data was gathered from those attendees who did not participate. Eight individuals completed questionnaires who did not meet the research protocol; consequently their questionnaires were not included in the data analysis. Between one half to two thirds of the people present at the meetings decided to participate in the study, except for one site at which only one third participated. Several factors may account for this difference. I had worked at this site three years prior to the data collection and several members remembered me. I had also worked at another site and had been active in advocacy issues and was known by a few members
at all sites, so this may or may not have influenced the members who chose to not participate. Informal queries of individuals who were declining participation were most frequently answered with statements that individuals had diagnoses other than schizophrenia or schizoaffective disorder. Another factor that may have influenced participation could be socio-economic. This site was located in the northwestern part of the county and this part of the county has the highest property values for both commercial and residential real estate. Perhaps persons from higher socio-economic groups are more reluctant to participate in research studies or are more reticent about acknowledging a diagnosis of schizophrenia or schizoaffective disorder.

Demographically the samples from the five sites were similar and could thus be considered as a single sample for the purposes of this research study. The data for demographic variables of gender, ethnicity, diagnosis, and housing arrangements are summarized in Table 4.2; the data for the variables of age, community tenure, and vocational-type activity are summarized in Table 4.3. The variables are discussed individually in the following paragraphs.

**Gender**

No statistically significant variation across sites existed for the variable of sex ($\chi^2(1, N=100) = .040, p = .841$). The male to female ratio of 51/49 in the current study is closer to a 50/50 ratio than the two samples used to develop the test instruments. The male to female ratio of the samples used in the development of the Hope Scale was 43.6/56.4 (Snyder, Harris, Anderson, Holleran, Irving, Sigmon, Yoshinobu, Gibb, Langelle, & Harvey, 1991); and for the RAQ-7, the male to female ratio was 41.4/46.4 with a 2.1% no response rate (Borkin, Steffen, Ensfield, Krzton, Wishnik, Wilder, & Yangarber, 2000).
### Table 4.2

Demographic variables of ethnicity, diagnosis and living arrangement

<table>
<thead>
<tr>
<th></th>
<th>Male N = 51</th>
<th>Female N = 49</th>
<th>Total N = 100</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>9</td>
<td>17.6</td>
<td>11</td>
</tr>
<tr>
<td>Asian</td>
<td>2</td>
<td>3.9</td>
<td>6</td>
</tr>
<tr>
<td>European</td>
<td>35</td>
<td>68.6</td>
<td>27</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
<td>3.9</td>
<td>1</td>
</tr>
<tr>
<td>Native American</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>5.9</td>
<td>3</td>
</tr>
<tr>
<td>Diagnoses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>37</td>
<td>72.5</td>
<td>22</td>
</tr>
<tr>
<td>Schizoaffective</td>
<td>14</td>
<td>27.5</td>
<td>27</td>
</tr>
<tr>
<td>Living Arrangement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Therapeutic</td>
<td>20</td>
<td>39.2</td>
<td>20</td>
</tr>
<tr>
<td>Semi-independent/</td>
<td>29</td>
<td>56.8</td>
<td>29</td>
</tr>
</tbody>
</table>

**Ethnic or racial identity**

The numbers of participants at each site were too small to use ANOVA procedures sensibly. Figure 4.1 depicts the percentages of the six ethnic or racial identity categories at each of the five sites. Roughly 60% of participants at all sites were European or white Americans.

At sites A and B, more individuals identified themselves as “Asian American” than did so at the other sites. At site A, Chinese and Vietnamese speaking staff may account for the larger number of Asian Americans at these sites. At all sites, a greater number of African American completed questionnaires than would have been expected from census data from the counties. The percentage of people who identified themselves as African American in the 2000 census in the three counties covered by the current research study were 8.6%, 18.8% and 9.3%. This was not unexpected, however, as this population is considered to be over-represented in public programs for person with serious mental illness (Sue & Sue, 2003). Overall, a fewer number of persons
identifying themselves as “Asian American” and “Hispanic” completed the survey questionnaires than would have been predicted from census data. Census data for the counties reported percentages of Asian Americans at 13.0%, 3.9% and 8.6%; for Hispanics, the percentages were 5.5%, 9.7% and 18.6%. Again, this was not surprising because these communities tend to gather more closely around their members with serious mental illness rather than rely upon extra-familial mental health programs (Sue & Sue, 2003).

![Ethnic and racial identity of study participants across sites](image)

**Figure 4.1**
*Ethnic and racial identity of study participants across sites*

Data about ethnic or racial identity of study participants was available for the RAQ-7. The participants in the current study represent a more diverse group than the participants in the original RAQ-7 study. Ratios of the ethnic statistics of this study to the ethnic statistics of the RAQ-7 are: (a) African American, 20% to 16.5%; (b) Asian American, 8% to 4.13%; (c)
European American, 62% to 68%; (d) Hispanic, 3% to 1.7%; (e) Native Americans, 1% to 2.4%; and (f) other, 6.0% to 6.1% (Borkin et al., 2000). The differences most likely reflect the difference in population composition between the regions of the country of the rather than any programmatic or research bias. Data about ethnicity of the samples used in the development of the Hope Scale were unavailable.

**Diagnosis**

Participants in the study were asked to identify the mental illness that they believed they had. Individuals were informed that the study was directed at specifically learning about recovery from disorders along the schizophrenia spectrum. As mentioned in chapter three, data from questionnaires on which the participant circled a diagnosis other than schizophrenia or schizoaffective disorder were not used in the data analysis. Overall, 59% of the study participants circled a diagnosis of schizophrenia, and 41% a diagnosis of schizoaffective disorder. No statistically significant difference across sites existed on the variable of diagnosis ($\chi^2 (4, N=100) = 1.74, p = .78$).

**Level of independence in living arrangement**

The variable of living arrangement was also used to measure recovery. As individuals recover from schizophrenia, they tend to advocate for more independent housing arrangements (Sullivan, 1994). One person (1%) was living at the hospital; 40% were living in therapeutic housing where professional mental health personnel were available 24 hours per day. Finally, 59% of the participants in the sample were living in semi-independent or independent housing arrangements. Individuals at two sites had a smaller range of options circled than individuals at the other three sites. This reflected the more limited availability of housing options in their local areas than bias in data collection.

**Age**

The mean age of participants in this research study was 41.70 (SD = 10.55) years. No statistically significant difference across sites emerged on this variable ($F (4, 95) = .89, p = .47$).
Community tenure

Table 4.3 presents the means of community tenure in years for male and female participants. There was no statistically significant difference across sites on the variable of community tenure, $F(4, 90) = .16, p = .96$.

Amount of participation in vocational-type activity

One way ANOVAs were also performed on the variables of number of hours worked per week, number of hours volunteered per week, and combined work and volunteer hours per week. No statistically significant differences were discovered across the sites on work or volunteer hours separately. When the variables of number of hours worked and number of hours volunteered were combined however, a significant difference in the means was detected ($F(4, 97) = 3.17, p = .02$). Thus, post hoc tests were conducted and revealed (Tukey HSD ($11.7, p = .017$)) that the mean number of hours persons at Site A were involved in vocational type activity ($18.7, SD = 16.6$) differed significantly from the mean number of hours persons at Site C were involved in vocational type activity ($7.00, SD = 10.9$). On all other variables, Site A and Site C did not vary significantly. The different location at these two sites may have accounted for this difference. More opportunities to work and volunteer may have been available to persons enrolled at Site A. Site A was located almost in the center of a community of small businesses, churches and non-profit organizations. Site C was located in the less desirable section of the county just a block off a busy highway several blocks away from shops and businesses.
Table 4.3  
Demographic variables of age, community tenure and vocational-type activity

<table>
<thead>
<tr>
<th></th>
<th>Male N = 51</th>
<th>Female N = 49</th>
<th>Total N = 100</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Age (in years)</td>
<td>40.55</td>
<td>10.39</td>
<td>42.90</td>
</tr>
<tr>
<td>Community Tenure (in years)</td>
<td>6.55</td>
<td>6.09</td>
<td>5.34</td>
</tr>
<tr>
<td>Vocational-type Activity (in hours per week)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work for pay</td>
<td>3.80</td>
<td>8.56</td>
<td>4.77</td>
</tr>
<tr>
<td>Volunteer</td>
<td>4.90</td>
<td>8.04</td>
<td>6.65</td>
</tr>
</tbody>
</table>

Progress toward recovery

For the purpose of this study, an artificial progress toward recovery from schizophrenia variable was calculated using the three demographic variables of length of community tenure, level of independence in housing arrangement and amount of vocational-type activity. These variables were selected because they coincide with Sullivan’s (1994) definition of recovery: avoiding hospitalization for psychiatric reasons for 2 years, living in housing of one’s choice and having a meaningful role in one’s community. Harding et al. (1987), used a similar definition in their study. The only difference was the inclusion of a score of 60 or better on the Global Assessment of Functioning or GAF. The GAF score was not used in this study because it is assigned by a mental health care professional. It is a judgment by others, or perhaps several others, who may all be using different criteria to assign the score. An individual’s attitude towards recovery from schizophrenia and level of hope are personal cognitions. Community tenure, housing arrangement, and participation in vocational type activity are easily reported and readily observable facts about one’s own life. Because the focus of this study was on cognition
of the individuals recovering from schizophrenia, rather than assessment of others, the decision was made not to seek the GAF score from clinical records. Also, it was deemed that offering anonymity would encourage participation, especially for those that had serious questions about the confidentiality of their medical records. Table 4.4 presents the number of study participants in each subgroup. The description of how this variable was calculated appears in Table 3.3 in Chapter Three. Below, the numbers of individuals who fell into each category of progress toward recovery are summarized in Table 4.5.

<table>
<thead>
<tr>
<th>Housing arrangement</th>
<th>Vocational Activity (hours per week)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 months</td>
</tr>
<tr>
<td>Hospital</td>
<td></td>
</tr>
<tr>
<td>15+ hours</td>
<td>1</td>
</tr>
<tr>
<td>Therapeutic Housing (i.e., group home, transitional apartment, supervised apt., shelter)</td>
<td></td>
</tr>
<tr>
<td>0 hours</td>
<td>1</td>
</tr>
<tr>
<td>1-14 hours</td>
<td>0</td>
</tr>
<tr>
<td>15+ hours</td>
<td>0</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
</tr>
<tr>
<td>Semi-independent or independent housing (i.e., alone, with family, low-income housing)</td>
<td></td>
</tr>
<tr>
<td>0 hours</td>
<td>0</td>
</tr>
<tr>
<td>1-14 hours</td>
<td>1</td>
</tr>
<tr>
<td>15+ hours</td>
<td>0</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 4.5 summarizes the numbers and percentages of participants in each level of recovery. A full two thirds of the participants (67%) were in one of the four levels of recovery, the “in recovery” group. No participants had yet to start the journey, 9% were in the very earliest
stages and 15% had reached a level of functioning that qualified them as “recovered.” Nine study participants could not be categorized because due to missing data.

<table>
<thead>
<tr>
<th>Level of recovery</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No recovery (0)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Beginning recovery (4-5)</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>In recovery (6-8)</td>
<td>67</td>
<td>67</td>
</tr>
<tr>
<td>Recovered (9)</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Missing</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

**Attitudes toward Recovery**

What is the pattern of attitude toward recovery in persons with schizophrenia participating in psychiatric rehabilitation programs? The Recovery Attitudes Questionnaire (RAQ-7), which measures belief in the basic assumptions of recovery from schizophrenia and other serious mental illnesses (Borkin et al. 2000), was used to explore this research question. The RAQ-7 was the first instrument that participants in the study completed. Of the 100 questionnaires that were used in the data analysis, 95 had responses for all seven items of the instrument. Table 4.6 displays the percentages of the responses. Participants had overwhelmingly positive attitudes toward recovery. Over 60% of the participants agreed or strongly agreed with each item of the RAQ-7. Over 83% agreed or strongly agreed with the item: people differ in the ways they recover from serious mental illness.
Table 4.6

Recovery Attitudes Questionnaire-7: Percentage of responses (N=95)

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Recovery is possible and requires faith</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) To recover requires faith.</td>
<td>7.4</td>
<td>6.3</td>
<td>16.8</td>
<td>31.6</td>
<td>37.9</td>
</tr>
<tr>
<td>(4) Recovery can occur even if symptoms of mental illness are present.</td>
<td>10.5</td>
<td>6.3</td>
<td>20.0</td>
<td>37.9</td>
<td>25.3</td>
</tr>
<tr>
<td>(5) Recovering from mental illness is possible no matter what you think may cause it.</td>
<td>9.5</td>
<td>10.5</td>
<td>18.9</td>
<td>34.7</td>
<td>26.3</td>
</tr>
<tr>
<td>(6) All people with serious mental illness can strive for recovery.</td>
<td>4.2</td>
<td>7.4</td>
<td>14.7</td>
<td>34.7</td>
<td>38.9</td>
</tr>
<tr>
<td><strong>Factor 2: Recovery is difficult and differs among people.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) People in recovery sometimes have setbacks.</td>
<td>8.4</td>
<td>4.2</td>
<td>9.5</td>
<td>41.1</td>
<td>36.8</td>
</tr>
<tr>
<td>(3) Stigma associated with mental illness can slow down the recovery process.</td>
<td>6.3</td>
<td>6.3</td>
<td>23.2</td>
<td>30.5</td>
<td>33.7</td>
</tr>
<tr>
<td>(7) People differ in the way they recover from mental illness.</td>
<td>6.3</td>
<td>3.2</td>
<td>7.4</td>
<td>45.3</td>
<td>37.9</td>
</tr>
</tbody>
</table>

The means of overall score for the RAQ-7 and its two factors are displayed in Table 4.7. These figures differ from the means of the samples used in development of the RAQ-7 (Borkin et al., 2000). The means for the current sample are all higher; speculations about the reason for these differences will be discussed in Chapter 5.
Table 4.7
Recovery Attitudes Questionnaire – 7: Comparison of total score and subscale score means for current sample and development samples

<table>
<thead>
<tr>
<th></th>
<th>RAQ-7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total score</td>
</tr>
<tr>
<td>Current sample</td>
<td>26.80</td>
</tr>
<tr>
<td></td>
<td>(SD = 5.85)</td>
</tr>
<tr>
<td>Consumer sample</td>
<td>21.59</td>
</tr>
<tr>
<td></td>
<td>(SD = 3.89)</td>
</tr>
<tr>
<td>Professional sample</td>
<td>23.04</td>
</tr>
<tr>
<td></td>
<td>(SD = 3.28)</td>
</tr>
<tr>
<td>Family member sample</td>
<td>21.17</td>
</tr>
<tr>
<td></td>
<td>(SD = 3.37)</td>
</tr>
<tr>
<td>Student sample</td>
<td>19.92</td>
</tr>
<tr>
<td></td>
<td>(SD = 3.21)</td>
</tr>
</tbody>
</table>

No statistically significant relationships were discovered in the data between the RAQ-7 total score or its subscales, Factor 1 and Factor 2, and the demographic variables of age, length of community tenure or amount of vocational-type activity. Furthermore, no statistically significant differences were discovered between the mean scores of the RAQ-7 total score or its subscales, Factor 1 and Factor 2, and the study variables of gender or ethnic group. However, on the variable of housing arrangements, statistically significant positive correlations were discovered in the data between the RAQ-7 total score, its subscales and the level of independence in the living situation. Persons in more independent housing tended to have higher scores on both subscales and on the total score as well, to profess greater belief in the potential for recovery from serious mental illness. These figures do need to be treated with caution however, because there are quite large differences between the numbers of participants that live in the different types of housing, and because the correlations were relatively low (.20 to .25).
Table 4.8

**RAQ-7 and level of independence in housing arrangements**

<table>
<thead>
<tr>
<th></th>
<th>Factor 1: Recovery is possible and requires faith.</th>
<th>Factor 2: Recovery is difficult and differs among people.</th>
<th>RAQ-7 total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spearman’s</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td>.20</td>
<td>.25</td>
<td>.23</td>
</tr>
<tr>
<td>Significance</td>
<td>$p = .05$</td>
<td>$p = .02$</td>
<td>$p = .03$</td>
</tr>
<tr>
<td>N</td>
<td>97</td>
<td>96</td>
<td>94</td>
</tr>
</tbody>
</table>

Means for each level of independence in housing arrangements

<table>
<thead>
<tr>
<th></th>
<th>Hospital</th>
<th>Therapeutic</th>
<th>Semi- and independent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>1</td>
<td>40</td>
<td>56</td>
<td>97</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>n/a</td>
<td>4.13</td>
<td>2.69</td>
<td>3.43</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>37</td>
<td>58</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>n/a</td>
<td>3.16</td>
<td>2.31</td>
<td>2.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>94</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.80</td>
</tr>
</tbody>
</table>

Patterns of Hope

What is the pattern of hope in persons with schizophrenia participating in psychiatric rehabilitation programs? The Hope Scale, the second instrument participants encountered on the research questionnaire, was used to explore this research question. It measures hope and its two cognitive components: agency thought and pathways thought. Of the 100 questionnaires that
were used in the data analysis, 96 had responses for all 12 items of the instrument. Table 4.9 displays the percentages of the responses.

<table>
<thead>
<tr>
<th>Item</th>
<th>False</th>
<th>Mostly false</th>
<th>Mostly true</th>
<th>True</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) I energetically pursue my goals.</td>
<td>8.2</td>
<td>17.7</td>
<td>46.9</td>
<td>27.1</td>
</tr>
<tr>
<td>(9) My past experiences have prepared me well for my future.</td>
<td>9.4</td>
<td>19.8</td>
<td>38.5</td>
<td>32.3</td>
</tr>
<tr>
<td>(10) I’ve been pretty successful in my life.</td>
<td>12.5</td>
<td>19.8</td>
<td>43.8</td>
<td>24</td>
</tr>
<tr>
<td>(12) I meet the goals I set for myself.</td>
<td>11.5</td>
<td>16.7</td>
<td>40.6</td>
<td>31.3</td>
</tr>
</tbody>
</table>

The means of the overall Hope Score and its two subscales are presented in Table 4.10. These figures differ from part of the sample used in the development of the Hope Scale, but not from a second more similar part. The Hope Scale was developed on college students, individuals in outpatient psychological treatment and individuals in inpatient treatment (Snyder et al, 1991). As can be seen in Table 4.10, the means of the current sample correspond to the means of the parts of the original development sample that were receiving psychological treatment. As with the original sample, this sample has a lower score on the instrument than people who are not receiving psychological treatment.
Table 4.10

Hope Scale total and subscale scores: Comparison of means for current sample and 3 sections of the development sample

<table>
<thead>
<tr>
<th></th>
<th>Hope Scale</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total score</td>
<td>Agency Thought</td>
<td>Pathways Thought</td>
</tr>
<tr>
<td>Current sample</td>
<td>23.00</td>
<td>11.54</td>
<td>11.42</td>
</tr>
<tr>
<td>(SD = 4.73)</td>
<td>(SD = 2.71)</td>
<td>(SD = 2.52)</td>
<td></td>
</tr>
<tr>
<td>College sample</td>
<td>25.31</td>
<td>12.68</td>
<td>12.64</td>
</tr>
<tr>
<td>(SD = 2.97)</td>
<td>(SD = 1.75)</td>
<td>(SD = 1.77)</td>
<td></td>
</tr>
<tr>
<td>Outpatient sample</td>
<td>22.60</td>
<td>11.27</td>
<td>11.33</td>
</tr>
<tr>
<td>(SD = 4.35)</td>
<td>(SD = 2.56)</td>
<td>(SD = 2.36)</td>
<td></td>
</tr>
<tr>
<td>Inpatient sample</td>
<td>23.11</td>
<td>11.25</td>
<td>11.25</td>
</tr>
<tr>
<td>(SD = 4.45)</td>
<td>(SD = 2.86)</td>
<td>(SD = 2.35)</td>
<td></td>
</tr>
</tbody>
</table>

Overall, the participants in this study had scores on the Hope Scale that indicate they are more hopeful than not hopeful. As can be seen in Table 4.9, between 66.7% and 74.1% of the participants marked the items on the scale as “True” or “Mostly true.” This characteristic of hopefulness was consistent across all the variables of the study. No statistically significant relationships were discovered in the data between the Hope Scale total score or its subscales, Agency Thought and Pathways Thought, and the demographic variables of age, length of community tenure or amount of vocational-type activity. Furthermore, no statistically significant differences were discovered among the Hope Scale total score or its subscales, Agency Thought and Pathways Thought, and the study variables of gender, ethnic group, or housing arrangements. For each of the demographic variables, scores on the Hope Scale and its two subscales hovered around the means displayed in Table 4.10. For the combined variables of tenure, level of independence in housing arrangements, vocational-type activity total, and level of recovery, Spearman’s Rho correlation coefficients also failed to reach statistical significance.
Hope and Attitude toward Recovery

What is the relationship between hope and attitude towards recovery in persons with schizophrenia participating in psychiatric rehabilitation programs? The measure of hope is the total score on the Hope Scale, and the measure of attitude toward recovery is total score on the RAQ-7. The correlation coefficient between the total scores of the Hope Scale and the RAQ-7 and the correlation coefficients among the subscales are presented in Table 4.11. There is no statistically significant relationship between total scores on the Hope Scale and scores on the RAQ-7; however there are statistically significant correlations among the Factor 1: Recovery is possible and requires faith and the Hope Scale total score, Agency Thought and Pathways Thoughts. There is also a statistically significant correlation between RAQ-7 total score and Agency Thought. One definition of hope is the anticipation of a future that holds the possibility of being different from the past. In Beyond Cynicism, Woodyard states, “Hope is not the calculation of a new future based on extrapolations from present data; it is confidence that the unpredictable will happen” (as cited in Lester, 1995, p. 62). Factor 1 captures this same idea of possibility and willingness to believe in the unseen, perhaps counter-intuitive, future. Agency Thought measures motivation and goals, Pathways Thought measures ingenuity and possibility in reaching those goals. The correlations are weak; this may indicate that while positive attitude toward recovery and hope have some qualities in common, they are not consistent across participants.


**Table 4.11**

*Pearson Product Moment Correlations between total scores and the subscales on the Hope Scale and the RAQ-7*

<table>
<thead>
<tr>
<th></th>
<th>Hope Scale Total</th>
<th>Agency Thought</th>
<th>Pathways Thought</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAQ-7 Total</td>
<td>.16</td>
<td>.19</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td><em>(p = .06)</em></td>
<td><em>(p = .03)</em></td>
<td><em>(p = .16)</em></td>
</tr>
<tr>
<td>Factor 1: Recovery is possible and requires faith.</td>
<td>.24</td>
<td>.24</td>
<td>.18</td>
</tr>
<tr>
<td></td>
<td><em>(p = .01)</em></td>
<td><em>(p = .01)</em></td>
<td><em>(p = .04)</em></td>
</tr>
<tr>
<td>Factor 2: Recovery is difficult and differs among people.</td>
<td>.05</td>
<td>.10</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td><em>(p = .30)</em></td>
<td><em>(p = .18)</em></td>
<td><em>(p = .50)</em></td>
</tr>
</tbody>
</table>

**Factor Analysis of Items from Hope Scale and RAQ-7**

The last research question asked if hope and positive attitude towards recovery were synonymous? It is logical to assume that since there was not a strong positive relationship between scores on the Hope Scale and scores of the RAQ-7, the instruments measure different constructs. In fact, principal components factor analysis supports this assumption. During factor analysis, designated items from the Hope Scale and items from the RAQ-7 did not load on the same two factors. Principal components factor extraction with varimax rotation produced three distinct components. Table 4.12 displays how the various items loaded on these factors. Together these rotated factors explain 56.07% of the total variance in the data. The first component consists entirely of items from the RAQ-7 and explains 22.77% of the total variance. It seems to capture the attitude towards recovery. The second component consists entirely of items from the Hope Scale and explains an additional 21.30% of the total variance. It appears to capture the cognitive processes of planning and motivation that make up hope. The third component consists of two items: Item 4 from the Hope Scale, “There are lots of ways around
any problem,” and Item 5 from the RAQ-7, “Recovering from mental illness is possible no matter what you think may cause it.” This component explains another 12.00% of the total variance. This third component seems to capture a spirit of determination or persistence, a belief there is a resolution if only a person will hang in there and try hard enough to find it.

| Table 4.12  
Results of PCA factor analysis of items from the Hope Scale and RAQ-7 |
| Rotated Component Matrix |
| Eigenvalues | 1 | 2 | 3 |
| % of variance explained | 3.42 | 3.19 | 1.80 |
| 22.77 | 21.30 | 12.00 |
| (RAQ-7) 3 | .79 | .00 | -.27 |
| (RAQ-7) 1 | .75 | -.21 | .20 |
| (RAQ-7) 4 | .74 | .14 | .00 |
| (RAQ-7) 2 | .72 | .16 | .00 |
| (RAQ-7) 7 | .67 | .00 | .29 |
| (RAQ-7) 6 | .65 | .00 | .32 |
| (Hope Scale) 10 | .11 | .78 | .00 |
| (Hope Scale) 2 | .00 | .73 | .00 |
| (Hope Scale) 6 | .00 | .68 | .34 |
| (Hope Scale) 12 | .14 | .66 | -.18 |
| (Hope Scale) 1 | .00 | .58 | .32 |
| (Hope Scale) 8 | .00 | .58 | .47 |
| (Hope Scale) 9 | .13 | .54 | .40 |
| (Hope Scale) 4 | .00 | .27 | .70 |
| (RAQ-7) 5 | .46 | .00 | .59 |

Extraction Method: Principal Components Analysis  
Rotation Method: Varimax Rotation with Kaiser Normalization

Summary

The results of the data analysis have been described in this chapter. Examination of the demographic data demonstrated that there were no statistically significant differences between
the five sites where the data was gathered so the data was treated as one sample. The responses on the Hope Scale and the RAQ-7 were analyzed. The research questions were examined and the data were analyzed according to the plan set forth in Chapter Three.

(a) There were no statistically significant relationships or differences in means between hope, as measured by the Hope Scale, and the variables of sex, age, gender, diagnosis, ethnic identity, length of community tenure, level of independence in housing arrangements or amount of vocational-type activity.

(b) There were no statistically significant relationships or differences between means between attitude towards recovery from schizophrenia, as measured by the RAQ-7, and the variables of sex, age, gender, diagnosis, ethnic identity, length of community tenure, level of independence in housing arrangements or amount of vocational-type activity.

(c) There was no statistically significant relationship between hope and positive attitude toward recovery from schizophrenia, but the subscale Factor 1: Recovery is possible and requires faith did correlate with the Hope Scale and its two subscales, though it was weak.

(d) Items on the Hope Scale and items from the RAQ-7 did not load on the same factors during principal components factor analysis; hence, the Hope Scale and the Recovery Attitudes Questionnaire 7 do not measure the same underlying construct. However a third factor was extracted that appears to capture a spirit of determination.
CHAPTER FIVE
DISCUSSION

Since the 1950s, authors who have written about their personal recoveries from schizophrenia have considered hope to be fundamental to the recovery process (Anonymous, 1989; Deegan, 1996; Lovejoy, 1984). During the 1990s, mental health care professionals and researchers began to write about recovery and they, too, assumed hope drove the recovery process (Anthony, 1993; Jacobson & Greenley, 2001; Spaniol, Gagne & Koehler, 1998). Very little quantitative research, however, has been published about the relationship of hope and recovery from schizophrenia (Landeen, Kirkpatrick, Woodside, Byrne, Bernardo, & Pawlick, 1996; Landeen, J., Pawlick, J., Woodside, H., Kirkpatrick, H., Byrne, C. 2000). This study sought to add to that body of research by quantitatively exploring the patterns of hope and attitude toward recovery from schizophrenia in persons with schizophrenia participating in psychiatric rehabilitation programs. A secondary aim was to discern if hope was synonymous with a positive attitude toward recovery.

Synopsis of Research Study

Using two existing instruments, the Hope Scale (Snyder et al., 1991) and the Recovery Attitudes Questionnaire (Borkin et al., 2000), along with an 8-item demographic questionnaire, the researcher gathered data from 100 individuals with schizophrenia and schizoaffective disorder at 5 psychiatric rehabilitation day programs in the suburban area of a large metropolitan area. One-way ANOVAs, Pearson product-moment correlations and principle components factor analysis (PCA) were performed on the data. The outcomes were unexpected. Those persons with schizophrenia or schizoaffective disorder who were living in semi-independent or independent housing, as a group, had a higher mean on the total score of the RAQ-7 and one of its subscales, Factor 2: Recovery is difficult and differs among people. Otherwise, no statistically significant relationships or differences in the means were found among the variables
of hope, attitude toward recovery from schizophrenia, the demographic variables, and combinations of the demographic variables.

**Discussion of Outcomes of Research Questions**

The four original hypotheses of this investigation did not stand up under statistical analysis. The first research question pondered the relationship between hope and recovery from schizophrenia. No statistically significant difference existed in the patterns of hope across any of the demographic variables. Ninety percent of the participants marked answers on the Hope Scale that indicated they had a generally hopeful attitude, but persons with schizophrenia who were further along in their recovery did not possess higher levels of hope than persons who were at the beginning stages of the process. The second research question considered the relationship between attitude toward recovery from serious mental illness and recovery from schizophrenia. As with the first research question, no difference in the patterns of attitude toward recovery across any of the demographic variables existed. Attitude toward recovery was generally optimistic in 87% of the study participants; and like hope, it held almost constant throughout all levels of recovery. The third research question explored the relationship between hope and attitude toward recovery. A direct, positive correlation between the two variables did not exist in the data for this study \( r = .164, p = .059 \). Hope and attitude toward recovery are different constructs that operate independently of each other in persons recovering from schizophrenia. Finally, rather than supporting the fourth hypothesis of the research study that hope and attitude toward recovery were synonymous, factor analysis established that they were not the same construct. During PCA factor analysis with varimax rotation, all but one item from the RAQ-7 loaded on the first factor; all but one item from Hope Scale loaded on a second factor; and the remaining item from the RAQ-7 and the remaining item from the Hope Scale loaded on a third factor. The first two factors explained almost the same amount of total variance, 22.77% and 21.30%, respectively. The third factor incorporated the items “Recovering from mental illness is possible no matter what you think caused it” and “There are lots of ways around any problem.” It explained an additional 12.00% of the total variance of the data. Together these two items seem to capture a spirit of determination, persistence or doggedness. Recovery from schizophrenia involves many factors; one of them is good, old-fashioned stubbornness (Deegan,
1996; Lovejoy, 1984; Spaniol, Gagne, & Koehler, 1998). A conviction that recovery is possible and that there are many pathways toward it encourages perseverance, the ability to reassess and reorganize one’s recovery strategies when barriers are encountered rather than to surrender to circumstances and stagnate (Scheier & Carver, 2001).

### Contributions to the Literature

Though the data in this research study did not support the original hypotheses, the information garnered contributed favorably to the literature nevertheless. Further examination of the data revealed information about persons recovering from schizophrenia, hope, attitude toward recovery, the Hope Scale, the RAQ-7, the relationship between faith and hope, the relationship between level of independence in housing arrangements and attitude toward recovery and the relationship between volunteer work and recovery from schizophrenia.

The persons who are in recovery from schizophrenia in the current study revealed are generally hopeful and that they have positive attitudes toward recovery from serious mental illness. Furthermore, it is clear that hope and positive attitude operate independently of each other in persons recovering from schizophrenia. Neither is predictive of the other and neither is predictive of level of recovery.

Rather than being a continuous variable, it appears hope is a dichotomous variable, either present or not. This finding confirms the assertion of authors who have recovered from schizophrenia that hope exists before recovery even begins (Deegan, 1996; Lovejoy, 1984). Recovery is the reawakening of hope after despair (Ridgway, 2001). High levels of hope are not necessary, however, individuals with schizophrenia can actively participate in recovery-oriented activities when even the tiniest spark of hope is present (Deegan, 1996; Stein, 2000).

As other researchers have discovered, hope is a nebulous construct. It is not related to self-efficacy, intelligence, optimism, severity of symptoms, level of perceived stress, or life expectancy (Brackney & Westman, 1992; Horton & Wallander, 2001; Kwon 2000; Landeen et al., 2000; Magaletta, & Oliver, 1999; Summerlin, 1997). This study provided no additional information as to what hope actually is, PCA factor analysis of the data uncovered information to add to the long list of what hope is not. Hope is not simply a positive attitude about reaching a particular goal, in this case recovery from schizophrenia. Hope is a different phenomenon from
attitude. Also, this study demonstrated that hope does not correlate with positive attitude toward recovery from schizophrenia, gender, age, ethnic identity, diagnoses, length of community tenure, housing arrangement, or amount of participation in vocational type activity.

Just as hope is not related to the study variables, neither is attitude toward recovery from schizophrenia related to them. This study demonstrated that attitude toward recovery does not correlate with level of hope, gender, age, ethnic identity, diagnosis, length of community tenure, housing arrangement, or amount of participation in vocational type activity.

This study relied upon existing instruments, thus added to the knowledge about both the Hope Scale and the Recovery Attitudes Questionnaire (RAQ-7). Data from the current study confirmed the reliability of the Hope Scale with persons with schizophrenia. Fifteen years after development of the Hope Scale, virtually the same scores were attained for a similar population. During the development process of the Hope Scale, persons involved in psychological treatment for serious and persistent mental illnesses achieved mean scores on the instrument of 22.60, \(SD = 4.35\) and 23.11, \(SD = 4.45\) (Snyder et al., 1991). The overall mean score for the Hope Scale in this study 23.00, \(SD = 4.73\), is consistent with the overall mean scores of the original mental health consumer samples. Future researchers can use the Hope Scale confidently with individuals who are in recovery from schizophrenia.

The study also provided information about the validity of the RAQ-7. The RAQ-7 was originally developed to measure changes in attitude toward recovery from serious mental illness, and it proved to do exactly that. The RAQ-7 discerned a more than 5 point change in a positive direction following a decade of increased funding for research on brain disorders, increased public awareness of serious mental illness, and concerted effort to integrate concepts of recovery into community mental health care programs. The difference between the mean of the RAQ-7 overall scores of the current sample and the mean of the sample used in developing the instrument was statistically significant \(t = 8.675, df = 94, p = .000\). The means for the RAQ-7 total, Factor 1 and 2 were higher than the means of the sample used in developing the instrument. In the current study, the mean scores were 26.80, 15.03, and 11.76, \(SDs = 5.85, 3.45,\) and 2.77, respectively; for the mental health consumer sample in the development of the instrument, the mean scores were 21.59, 11.97, and 9.62, \(SDs = 3.89, 2.79, 1.88\), respectively (Borkin et al., 2000). Data for the RAQ-7 were gathered in 1995 and 1996. These years occurred in the middle of the decade that President George H.W. Bush had declared the Decade of the Brain (Lehman &
Steinwachs, 1998). During this decade, public awareness education about mental illness was provided, money was dedicated to research on brain disorders and recovery became the buzzword in professional literature. The increase in RAQ-7 mean scores may reflect a paradigm shift throughout the mental health care consumers, providers, and the general public at the end of the 20th century: Recovery is the expected outcome for everyone with schizophrenia. This assumption may be too grandiose, however; the shift in scores may simply reflect the attitude of individuals with schizophrenia who are benefiting from a tightly-knit, interactive mental health system that is currently in a position to pay for adherence to best practice standards and provision of state of the art medications. This study demonstrated that the RAQ-7 can be used to measure the efficacy of programmatic interventions to alter attitude of individuals toward recovery from serious mental illness.

Relationships between Factor 1 of the RAQ-7, “To recover is possible and requires faith,” and several elements of hope were identified when Pearson product-moment correlations were calculated among the individual items of the Hope Scale and the RAQ-7. The word “faith” is not defined in the questionnaire or by the authors of the RAQ-7. In this context, though, faith may be equivalent to hope. In Hope Theory, hope is defined as a cognitive process in which three related cognitive components interact to create hope: (a) goals, (b) pathways thought and (c) agency thought (Snyder, Michael, & Cheavens, 1999). Hopeful people believe they are good at generating workable and attainable goals; developing effective means, or pathways, to reach these goals; and maintaining the necessary motivation, or agency thought, to pursue these goals even when barriers are encountered (Snyder, 2000). Correlations among Factor 1 on the RAQ-7, “Recovery is possible and requires faith,” and five items from the Hope Scale reached statistical significance: (a) “My past experiences have prepared me well for my future,” \( r = .204, p = .022 \); (b) “I’ve been pretty successful in my life,” \( r = .173, p = .045 \); (c) “I meet the goals I set for myself,” \( r = .185, p = .034 \); (d) “There are lots of ways around any problem,” \( r = .208, p = .020 \); and (e) Agency Thought, the motivation to pursue goals, \( r = .240, p = .004 \). These items from the Hope Scale measure beliefs about past, present and future goals of the individuals. Participants in this study marked responses on the questionnaire that indicated a belief that more options and opportunities were not only possible, they were probable, and that they had the necessary motivation to pursue these options and opportunities.
Two differences in mean scores of the RAQ-7 and its subscales among the demographic variables attained statistically significance: the RAQ-7 total, $F(2, 93) = 2.93, p = .03$, and Factor 2: Recovery is difficult and differs among people, $F(2, 95) = 3.50, p = .03$. Persons living in housing with higher levels of independence appeared to have more positive attitudes toward recovery overall and to believe that recovery had many different faces.

**Suggestions for Future Research**

In the current study, a weak but statistically significant relationship existed between hope and Factor 1 of the RAQ-7 that mentions “faith.” Faith in this context could be related to beliefs about goal attainment; however, this is not entirely clear. Replicating the study, and replacing the Hope Scale with either the Herth Hope Scale or the Miller Hope Scale, both of which contain items related to faith and transcendent experience, would provide more information about the relationships between hope, faith, and recovery from schizophrenia. Because researchers are generally skittish about associating faith and schizophrenia, an important adjunct to recovery may not be considered as fully as it could be. Incorporating interventions designed to reinforce faith and hope in an individual with schizophrenia might improve recovery outcomes.

Participants in this study positively assessed their abilities to accomplish their goals. No attempt was made to verify the participants’ impressions of their own abilities. This is a clear limitation as to how the findings of this study can be interpreted. Adding an objective assessment of the individual’s attainment of goals could determine whether the participants’ impressions are wishful thinking or indicative of valid hope.

An assessment of the participants’ desire to please the researcher or even the program directors at each of the sites was not a part of the current study. Adding the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) to the battery of instruments would determine whether the negative skew of the current study was an accurate measurement of participants’ hopefulness and attitude toward recovery from serious mental illness or a desire to present themselves in a favorable light or to please others.

All participants in this study were actively involved in outpatient psychiatric rehabilitation day programs. Expanding the sample to inpatient populations, inactive program members and persons in the community who are not involved in day programs would provide
information about levels of hope in persons in these situations. It would also provide information about levels of recovery for persons not involved in day programs. It is common sense to assume persons in the community who are not involved in a day program are further along in their recoveries, but as this study proved, common sense is not always a reliable predictor of true relationship.

This study involved participants in established psychiatric rehabilitation programs in an affluent, culturally diverse, suburban area surrounding a large city on the east coast of the United States of America. Similar studies in less affluent areas, in less diverse areas, in urban areas, and in rural areas would increase knowledge about the variables of hope and attitude toward recovery from schizophrenia deeper inside and further outside the metropolitan setting.

This study was a snapshot of hope and attitude toward recovery at a single point in time. This study did not seek to measure how these constructs vary over time in the same individual; however, consumer-written literature and research in nursing, pastoral counseling and psychology indicate these qualities do indeed wax and wane (Appleton, 2001; Centers, 2001; Jacobson, 2001; Lester, 1995). Replicating the study with the same sample two or three times over period of time long enough to detect the fluctuations may be useful in determining what spurs waxing and what causes waning.

Finally, the only demographic variable to reach some level of statistical significance was the level of independence of housing arrangement appeared to influence positive attitude toward recovery. In the current study, no distinction was made as to whether participants in the more independent levels of housing were living alone, with family members or with roommates of their choice. Replicating the study and adding a variable that explored family support system would provide information and further insight as to how interpersonal relationships influence hope and positive attitude.

**Implications for Clinical Practice**

Recovery from schizophrenia does not depend upon a high level of hope or even a particularly positive attitude toward recovery. These factors are present in individuals who are in the process of recovering from schizophrenia, but recovery appears to be independent of them. Rehabilitative progress can be made even with an individual who professes to have very little
hope and to believe that recovery is unlikely. Though it is tempting to want to spend time in therapy exploring the issues of hope and attitude, it may be more productive for an individual with schizophrenia to focus the earlier months and years of recovery accomplishing behavioral goals, such as working toward independence, developing strategies to remain out of the hospital, and assuming a functional role in the community either as a paid employee or as a volunteer.

The scores on the Hope Scale and the RAQ-7 were both negatively skewed, meaning that most study participants were generally hopeful and possessed a positive attitude toward recovery. Therapists can reinforce these perceptions or destroy them (Landeen et al., 1996; Littrell, Herth & Hinte, 1996; Nunn, 1996; Stotland, 1969). Empowering clients to make decisions about their personal recovery goals, enabling them to meet these goals and assisting with the procurement of resources may nurture hope in more effective ways than relying solely on psychotherapy to change attitudes and thoughts about recovery.

The intrapersonal qualities of hopefulness and positive attitude toward recovery did not predict level of recovery from schizophrenia for the participants of this study. The factor that was predictive of level of recovery was number of hours of volunteer service per week, the interpersonal quality of contributing freely to the community, involvement in unpaid service to others. Serving other people is positively correlated with recovery. Encouraging individuals to experiment with volunteer service and to commit regular amounts of time each week to such service may enhance recovery and increase hope. Searching for such contributions and recognizing them both publicly and privately may also augment progress toward recovery because contributions of persons with schizophrenia to their communities and to their families are often overlooked (Greenberg, Greenley, & Benedict, 1994).

Volunteering may be important because social connection is a desire of people with schizophrenia (Estroff, 1998; DuVal, 1979). Loss of connection with other people is a consequence of the symptoms of schizophrenia (Burland, 1998; APA, 2000). All models of recovery from schizophrenia reiterate the point that recovery from the social consequences of schizophrenia, discrimination, segregation and stigma, are more devastating than the illness itself (Anthony, 2000; Spaniol, Gagne & Koehler, 1998; Jacobson & Greenley, 2001). Kruger (2000) draws upon research among people with schizophrenia in non-industrialized cultures to demonstrate that the loss of social role function and inability to give back to the community are more debilitating to an individual with schizophrenia than the actual symptoms of the illness. In
Hope, Attitude, and Recovery from Schizophrenia

Qualitative studies this desire for reconnection in meaningful ways to others within the community was repeated in the following ways. Two of the six critical factors in recovery from schizophrenia identified by Smith (2000) were a group of supportive people and meaningful activities. Participants in Ridgway’s qualitative study (2001) also claimed that moving from withdrawal into engagement with others and active participation in the community was essential to their recoveries. Shabad (2001) stated that hope returns in the context of a belonging relationship with another person. Authentic caring, the experience of affirming human relationship, helps people with schizophrenia establish new purposes and new meaning for their lives (McKinnon, 1977). Benzein, Norberg, and Saveman (2001), Prouty (2000) and Torgalsboen (2001), in separate articles, also focused on the experience of relationship and intimate association as fundamental to recovery from schizophrenia. In the context of relationship, the individual with schizophrenia is able to pursue alternate sources of gratification. Being of help to others imbues people with a vital sense of meaningfulness (Speigel, Bloom, & Yalom, 1981), and significant, in terms of nurturing hope, is the belief that at some point in the future, the individual will actually be wanted by others (Nunn, 1996). In fact the blueprint of 21st century psychiatric rehabilitation programs is Fountain House, a place where a person with schizophrenia is wanted, needed and missed when absent (Beard, Propst, & Malamud, 1982).

**Implications for Counselor Education**

As a counselor educator, these results are actually far more optimistic than one may think. Bearing in mind that a counselor should never practice outside of his or her area of expertise (ACA, 1997), a professional counselor could work effectively with persons with recovering from schizophrenia with additional training, support and supervision. Instilling high levels of hope or creating positive attitudes in clients seems a daunting task, and it probably is a daunting task. The results of this study seem to make that task superfluous. High levels of hope and positive attitudes towards recovery are not predictive of an individual’s level of recovery. Recovery from schizophrenia is not the responsibility of the counselor, but the privilege of the individual who is experiencing the disorder (Anthony, 1990). Maintaining an individual in the community, helping him or her learn how to manage the symptoms of the disorder and overcome the associated fallout, advocating for housing that offers the person more independence, and
Hope, Attitude, and Recovery from Schizophrenia

connecting him or her with members of the community in a meaningful way are the activities that appear to affect recovery more directly than hope or positive attitude. With these thoughts in mind, three shifts in focus are suggested for counselor education programs.

A priority in training master’s level counselors would be to teach the facts about schizophrenia: that it is a decades-long brain disorder with periods of exacerbation of symptoms followed by remission of symptoms; and that as time goes on, the remissions increase in number and length and the exacerbations diminish (Kruger, 2000). Knowing the facts about recovery that are based on longitudinal research (Harding et al., 1987) enables the counselor to adopt a long-term perspective rather than to focus on distinct episodes or events throughout the course of the disorder.

A second priority in training counselors would be to teach a “yes, and” attitude rather than a “yes, but” approach. With this attitude, the counselor trainee accepts the individual with schizophrenia as an individual who knows both sanity and insanity (Estroff, 1989). The counselor trainee learns to fear the symptoms of schizophrenia less; thus, the goal of his or her recovery-oriented interventions becomes diminishing the impact of symptoms rather than eliminating them (Anthony, 2000; Kersker, 1994; Kruger, 2000). The participants in this study responded positively to the item “Recovery can occur even if symptoms of the mental illness are present” indicating that they are interested in learning how to live with the illness or in the illness, rather than without it (Rudge & Morse, 2001).

A third implication in counselor training involves the role of advocacy in the practice of the profession. Results of this study indicate that living arrangements and the opportunity to participate in community life in meaningful ways have an impact on an individual’s level of recovery. Ignorance, stigma, fear and discriminatory educational, legal and social practices prevent individuals with schizophrenia and other serious mental illnesses from attaining the most satisfying quality of life and highest level of recovery of which they are capable (Anthony, 2000; Jacobson & Greenley, 2001). Political and community activism on the part of professional counselors is not directly addressed in the Code of Ethics of the American Counseling Association, but it can be indirectly inferred in Section A.1.c.: “Counselors and their clients work jointly in devising integrated, individual counseling plans that offer reasonable promise of success and are consistent with the abilities and circumstances of clients” (American Counseling Association, 1997). Recovery from schizophrenia is the expected outcome for more than half of
the adults who are diagnosed with this brain disorder (Harding et al., 1987). Rather than being hindered by the “abilities” of clients, recovery from schizophrenia is hindered by “circumstances.” Incorporating an advocacy stance in counselor education programs may enhance the likelihood that graduates will become active agents in their communities to change the “circumstances” that limit the “reasonable promise of success” for their clients with schizophrenia.

Summary

Chapter 5 provided a synopsis of the research study, discussion of the outcomes of the four research questions, contributions to the literature, suggestions for future research, implications for clinical practice and implications for counselor education.
REFERENCES


APPENDICES

Appendix A: Recovery Attitudes Questionnaire – 7

Recovery Attitudes Questionnaire
Directions: Read each item carefully. Using the scale shown below, please circle the answer that best describes YOU.

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. People in recovery sometimes have setbacks.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. To recover requires faith.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Stigma associated with mental illness can slow down the recovery process.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Recovery can occur even if symptoms of mental illness are present.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Recovering from mental illness is possible no matter what you think may cause it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. All people with serious mental illness can strive for recovery.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. People differ in the way they recover from mental illness.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix B: Hope Scale

**Hope Scale**

Directions: Read each item carefully. Using the scale shown below, please circle the answer that best describes YOU.

<table>
<thead>
<tr>
<th></th>
<th>Definitely False</th>
<th>Mostly False</th>
<th>Mostly True</th>
<th>Definitely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. copyrighted material</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix C: Demographic Information

Demographic Information
Directions: Please provide the following information about yourself by circling the answers that apply to you or filling in the blanks.

<table>
<thead>
<tr>
<th>Question</th>
<th>Options or Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. How old are you?</td>
<td></td>
</tr>
<tr>
<td>21. What sex are you</td>
<td>1. Male 2. Female</td>
</tr>
<tr>
<td>24. When was the last time you were hospitalized for psychiatric reasons?</td>
<td>Month: Year:</td>
</tr>
<tr>
<td>26. How many hours do you work each week?</td>
<td></td>
</tr>
<tr>
<td>27. How many hours do you volunteer each week?</td>
<td></td>
</tr>
</tbody>
</table>
Appendix D: Informed consent for participation in study

Informed Consent for Participation in a Research Study

Title of Project: Hope, Attitude and Recovery from Schizophrenia: Comparison of the Hope Scale and the Recovery Attitudes Questionnaire

Researcher: Terry Lynn Tuttle, M.A., LPC, CPRP

I. What is the purpose of this study?

The purpose of the study is to explore the patterns of hope and attitude towards recovery in adults at different points in their recovery from schizophrenia.

II. How will the research be conducted?

Approximately 150 adults with diagnoses of schizophrenia, schizoaffective disorder or schizophreniform disorder will be asked to participate in this survey during regularly scheduled community meetings at psychosocial day programs in the Washington, D.C., and northern Virginia metropolitan area.

If you agree to participate, you will be asked to complete three written instruments:
1. the Recovery Attitudes Questionnaire
2. the Hope Scale, and
3. a set of questions about age, sex, illness, living arrangements, and paid or volunteer work.

There are 24 questions in all and it should take you no longer than 30 minutes to complete all three instruments.

III. What are the risks if I decide to participate?

There is no physical risk or discomfort expected during this research.

However, reading and answering the questions on the Recovery Attitudes Questionnaire and the Hope Scale may cause you to think about issues you have not thought about for a while or have feelings you have not experienced recently. These issues or feelings may cause you some emotional discomfort. If this happens, I will be available to speak with you when you complete the survey. If necessary, I will provide you with referrals for additional counseling.

IV. What are the benefits if I decide to participate?

The personal benefit of participating in this study is that you may become aware of your own level of hope and your own attitudes towards recovery from mental illness. However, I cannot guarantee that you will in fact benefit in this way.

The overall benefit of participation in the research study is that psychosocial rehabilitation counselors, mental health counselors, counseling instructors and supervisors may learn more about how hope and personal attitudes towards recovery affect the process of recovery from schizophrenia.

You may contact me in the summer of 2003 for a summary of the research results. I may be reached at the following address:

Terry Lynn Tuttle, MA, LPC, CPRP
Department of Education, Virginia Tech
V. Who’s going to know I participated?

I am bound by the ethical standards of the American Counseling Association to maintain your confidentiality. All information gathered during this research study will remain confidential. Please notice that names will not be taken when completing the questionnaires.

I will be the only one with access to the original questionnaires. The data collected during the study will be stored in a locked filing cabinet in a locked office until the completion of the research project and the final defense of the dissertation. At that point, I will shred and properly dispose of the original questionnaires.

VI. Is there any reward for participating in this research study?

No compensation or incentive is offered for participation in this research study.

VII. Can I quit?

Participation is voluntary; you are free to withdraw from this study at any time.

VIII. Who approved this research study?

This research project has been approved, as required, by the Institutional Review Board (IRB) for Research Involving Human Subjects at Virginia Polytechnic Institute and State University, by the Department of Education.

14 April 2003  14 April 2004  
IRB Approval Date  Expiration Date

IX. If I choose to participate, what are my responsibilities?

If I voluntarily agree to participate in this study, I have the following responsibilities:

1. To complete the questionnaires and return them to the researcher.
2. To withdraw from this study if I feel it is necessary.
3. To alert the researcher in the event that the questionnaires cause me any degree of emotional discomfort.

X. Subject’s Permission

I have read and understand the Informed Consent and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent:

___________________________________ ________________________
Participant’s signature      Date

If I have any questions, I may contact the following individuals:

Researcher:
Terry Lynn Tuttle  703-538-8483  ttuttle@starpower.net

Faculty Advisor and Committee Chair:
Dr. Gerard Lawson  540-231-9703  glawson@vt.edu

Chair, Institutional Review Board:
Dr. David Moore  540-231-4991  moored@vt.edu
APPENDIX E: Article submitted to Psychiatric Rehabilitation Journal

Hope, Attitude and Recovery from Schizophrenia

Terry Lynn Tuttle

Gerard Lawson

Virginia Polytechnic Institute and State University
The Hope Scale and the Recovery Attitudes Questionnaire-7 were used to explore the patterns of hope and attitude toward recovery from schizophrenia in a sample of 100 adults diagnosed with schizophrenia or schizoaffective disorder participating in five psychiatric rehabilitation programs in an affluent suburban setting. Using the Hope Scale, which is based on a definition of hope as a future-goal oriented cognitive process, and the Recovery Attitudes Questionnaire-7, this study concluded that the construct of hope is not synonymous with a positive attitude about attaining the goal of recovery.
In the 1990s, recovery became the buzzword of psychiatric rehabilitation; however, the basic assumptions of recovery from schizophrenia have yet to be empirically examined (Borkin, Steffen, Ensfield, Krzton, Wishnik, Wilder & Yangarger, 2000). One of the assumptions about recovery from schizophrenia that has not been empirically tested is the assertion that hope is a necessary factor in the recovery process (Deegan, 1988; Jacobson & Greenley, 2001). Hope is the single most recurrent theme in the narratives of adults who have recovered, or are recovering, from schizophrenia (Smith, 2000; Turner-Crowson & Wallcraft, 2002). Consumers of mental health services assert hope is the starting point of recovery (Deegan, 1996; Lovejoy, 1984). A dimensional analysis of 30 recovery narratives written by individuals with schizophrenia identified the beginning of recovery as the moment when hope sparked within the individual and the environment fanned the spark into flame (Jacobson, 2001). Several theorists who have developed models of recovery from serious mental illness assert hope is a fundamental building block of the recovery process (Anthony, 1993; Jacobson & Greenley, 2001; Spaniol, Gagne & Koehler, 1998). This study examined the patterns of hope and the attitude toward recovery from schizophrenia in persons with a diagnosis of schizophrenia who considered themselves to be recovering from the illness.

Recovery and Hope

Recovery

Recovery from schizophrenia is the reintegration into normal social functioning with or without symptoms of the brain disorder (Spaniol, Gagne, and Koehler, 1998). Anthony (1993) defined recovery from mental illness as “…a deeply personal, unique process of changing one’s attitudes, values, feelings, goals, skills, and/or [sic] roles…a way of living a satisfying, hopeful,
and contributing life even with limitations caused by illness” (p. 15). For the purposes of this study recovery was defined as living in semi-independent or independent housing, participating in paid or unpaid employment at least 15 hours per week, and avoiding re-hospitalization for psychiatric reasons for two or more years, because it coincides with Sullivan’s (1994) description of recovery and it is similar to the definitions used by Harding, Brooks, and Ashikaga (1987). Because this study focused on cognitions of the individuals recovering from schizophrenia rather than assessment of others, the decision was made not to seek the GAF score from clinical records as was done by Harding and her associates (1987).

Hope

Definitions of hope have been developed in the fields of pastoral counseling, nursing and psychology. Within the philosophical and religious writings, hope is a construct that hovers on the horizon of physical reality. It is an intangible quality that links human beings to the transcendent. Hope is future oriented but it is not necessarily oriented to a future located along a strictly chronological timeline (Lester, 1995). The future is fluid and hope involves an awareness of a future that is not already determined. Anticipation of a future that holds the possibility of being different from the past is the core of hope.

Within the fields of nursing and psychology, hope is primarily a cognitive process. It is the belief that change is possible (Corey and Corey, 1997). It is “a state of being, characterized by an anticipation of a continued good state, an improved state or a release from perceived entrapment” (Miller and Powers, 1988, p. 6). Staats (1991) conceived of hope as a future-referenced, affective cognition based on a desired outcome, with some expectation that the event will occur. Hope is a positive, goal-oriented, emotional response to the future and is often “experienced as a wanting, striving, longing, yearning or even craving” (Nunn, 1996, p. 228).
For the purposes of this study, the parsimonious, succinct definition of hope in Hope Theory (Snyder, 1995) was chosen. Hope is defined as a cognitive process used in varying degrees by all people to cope with every day life (Snyder, Michael, & Cheavens, 1999). Three related cognitive components interact to create hope: (a) goals, (b) pathways thought and (c) agency thought (Snyder, Ilardi, Michael & Cheavens, 2000). Hopeful people believe they are good at generating workable and attainable goals; developing effective means, or pathways, to reach these goals; and maintaining the necessary motivation, or agency thought, to pursue these goals even when barriers are encountered (Snyder, 2000). Hope can be visualized metaphorically as a journey with a destination or goal, alternative routes to reach the destination or pathways, and a means of transportation or agency (Snyder, 1995).

Research questions

The research questions that guided this investigation were: (1) What is the pattern of attitude toward recovery in persons with schizophrenia participating in psychiatric rehabilitation programs? (2) What is the pattern of hope in these same persons? (3) What is the relationship between hope and attitude toward recovery?

Methods

Participants

Data was gathered at regularly scheduled general membership meetings at five psychiatric rehabilitation day programs in the suburban regions of a large city on the east coast of United States of America from 100 adults diagnosed with schizophrenia and schizoaffective disorder. Enrollment at these sites ranged from 80 to 110 people and average daily attendance ranged from 35 to 50 persons. Each site subscribed to the philosophy of psychiatric
Hope, Attitude, and Recovery from Schizophrenia

rehabilitation developed at Fountain House in New York City, providing meaningful tasks during a work-ordered day for all participants (Beard, Propst, & Malamud, 1982). In order to protect participants’ privacy, qualified program personnel screened clients to determine if they were capable of understanding the informed consent document. Demographically the samples from the five sites were similar, thus, were considered as a single sample for the purposes of this research study. The male to female ratio of the study participants was 51% to 49%. Participants ranged in age from 21 to 69 and the average age in years was 41.70 years. The majority of the participants were White Americans of non-Hispanic descent (62%); 20% were African American and 18% were from other ethnic backgrounds. More individuals were diagnosed with schizophrenia (59%) than were diagnosed with schizoaffective disorder (41%). Forty one percent lived in therapeutic housing or hospital settings with 24 hour mental health care support and 59% lived in semi-independent or independent arrangements. Community tenure ranged from 0 months to more than 50 years; 42.9% had avoided hospitalization between 0 and 2 years, 36.2% between 3 and 10 years, and 20.9% for more than 10 years.

Measures

An 8 item demographic questionnaire and two existing instruments, the Recovery Attitudes Questionnaire (Borkin, et al., 2000) and the Hope Scale (Snyder, Harris, Anderson, Holleran, Irving, Sigmon, Yoshinobu, Gibb, Langelle, & Harvey, 1991) were completed by all study participants. The 8 item demographic questionnaire collected data about age, sex, ethnic or racial identity, diagnosis, length of community tenure, living arrangement and amount of participation in vocational type activity.

*Recovery Attitudes Questionnaire* - 7
The Recovery Attitudes Questionnaire (RAQ-7) measures belief in the basic assumptions of recovery from schizophrenia and other serious mental illnesses (Borkin, et al., 2000). It is a brief, easily understood, easily used 7-item questionnaire on which respondents indicate degrees of agreement with the items on a 5-point Likert scale ranging from strongly disagree to strongly agree. Higher scores indicate a more positive attitude towards recovery. The two subscales of the instrument are Factor 1: “Recovery is possible and needs faith,” and Factor 2: “Recovery is difficult and differs among people.”

Reliability of the RAQ-7 during its development was demonstrated by test-retest reliability coefficients above 0.60 (Borkin, et al., 2000). A recovery initiative research team consisting of mental health service consumers, mental health service providers, and graduate students determined construct validity. In the current study, Cronbach’s alpha for the total score of the RAQ-7 was .84 (N = 95), for Factor 1 was .70 (N = 98), and for Factor 2 was .73 (N = 97).

Hope Scale

The Hope Scale measures the two components of the cognitive process: (1) agency thought or determination and (2) pathways thought or planning with 12 statements to which respondent indicate the degree of agreement on a 4-point Likert scale (Snyder, Feldman, Shorey, & Rand, 2002). Higher scores indicate higher levels of hope. Four items on the instrument load on the factor labeled Agency Thought, four load on the factor labeled Pathways Thought and the other four are distractor items which are not used to determine a final score.

Reliability of the Hope Scale was determined by calculating internal consistency that exceeded the minimum Cronbach alpha scores and through test-retest procedures that achieved reliability correlations above 0.80 (Snyder, et al., 1991). Construct validity was supported through a series of experiments with undergraduate students. Convergent validity was
demonstrated by achieving positive correlations between the Hope Scale and several other instruments, including Life Orientation Scale, Minnesota Multiphasic Personality Indicator, and the Marlowe-Crowne Social Desirability Scale. The Hope Scale has a negative correlation with the Beck Hopelessness Scale. In the current study, Cronbach’s alpha for the total score of the Hope Scale was .81 (N = 96), for Pathways Thought was .72 (N = 97), and for Agency Thought was .69 (N = 99).

Results

What is the pattern of attitude toward recovery in persons with schizophrenia participating in psychiatric rehabilitation programs?

The RAQ-7 was the first instrument that participants in the study completed. Of the 100 questionnaires that were used in the data analysis, 95 had responses for all seven items of the instrument. Table 1 displays the percentages of the responses. Participants had overwhelmingly positive attitudes toward recovery. Over 60% of the participants agreed or strongly agreed with each item of the RAQ-7. Over 83% agreed or strongly agreed with the item: people differ in the ways they recover from serious mental illness.

No statistically significant relationships were discovered in the data between the RAQ-7 total score or its subscales, Factor 1 and Factor 2, and the demographic variables of age, length of community tenure, amount of vocational-type activity, gender or ethnic group. However, on the variable of housing arrangements, statistically significant positive correlations were discovered in the data between the level of independence in the living situation and the RAQ-7 total score ($r = .23, p = .03$), Factor 1 ($r = .20, p = .05$) and Factor 2 ($r = .25, p = .02$). Persons in more independent housing tended to have higher scores on both subscales and on the total score as well, to profess greater belief in the potential for recovery from serious mental illness.
These figures do need to be treated with caution however, because there are quite large differences between the numbers of participants that live in the different types of housing, and because the correlations were very low (.20 to .25).

### Table 1

*Recovery Attitudes Questionnaire-7: Percentage of responses (N=95)*

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Recovery is possible and requires faith</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) To recover requires faith.</td>
<td>7.4</td>
<td>6.3</td>
<td>16.8</td>
<td>31.6</td>
<td>37.9</td>
</tr>
<tr>
<td>(4) Recovery can occur even if symptoms of mental illness are present.</td>
<td>10.5</td>
<td>6.3</td>
<td>20.0</td>
<td>37.9</td>
<td>25.3</td>
</tr>
<tr>
<td>(5) Recovering from mental illness is possible no matter what you think may cause it.</td>
<td>9.5</td>
<td>10.5</td>
<td>18.9</td>
<td>34.7</td>
<td>26.3</td>
</tr>
<tr>
<td>(6) All people with serious mental illness can strive for recovery.</td>
<td>4.2</td>
<td>7.4</td>
<td>14.7</td>
<td>34.7</td>
<td>38.9</td>
</tr>
<tr>
<td><strong>Factor 2: Recovery is difficult and differs among people.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) People in recovery sometimes have setbacks.</td>
<td>8.4</td>
<td>4.2</td>
<td>9.5</td>
<td>41.1</td>
<td>36.8</td>
</tr>
<tr>
<td>(3) Stigma associated with mental illness can slow down the recovery process.</td>
<td>6.3</td>
<td>6.3</td>
<td>23.2</td>
<td>30.5</td>
<td>33.7</td>
</tr>
<tr>
<td>(7) People differ in the way they recover from mental illness.</td>
<td>6.3</td>
<td>3.2</td>
<td>7.4</td>
<td>45.3</td>
<td>37.9</td>
</tr>
</tbody>
</table>

The means of overall score for the RAQ-7 and its two factors for the sample in the current study differ from the means of the sample used in development of the RAQ-7 (Borkin, et al., 2000). The means of the overall RAQ-7 total score, Factor 1 and Factor 2 for the current study are compared to the means of the development sample in Table 2.
Table 2: RAQ-7 total and subscale scores: Comparison of means

<table>
<thead>
<tr>
<th></th>
<th>Total score</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current sample</td>
<td>26.8 (SD = 5.85)</td>
<td>15.03 (SD = 3.45)</td>
<td>11.76 (SD = 2.77)</td>
</tr>
<tr>
<td>Development sample</td>
<td>21.59 (SD = 3.89)</td>
<td>11.97 (SD = 2.79)</td>
<td>9.62 (SD = 1.88)</td>
</tr>
</tbody>
</table>

Quite a large effect size was calculated for the overall mean score of the current study and that of the development sample, Cohen’s $d = 1.049$, $r = 0.464$. The distribution of scores overlap less than 45% between the two samples and 22% of the variance in scores can be accounted for by membership in the two different samples.

*What is the pattern of hope in persons with schizophrenia participating in psychiatric rehabilitation programs?*

The Hope Scale was the second instrument participants encountered on the research questionnaire. Of the 100 questionnaires that were used, 96 had responses for all twelve items of the instrument. As with the RAQ-7, every item had a negative skew; most participants selected “mostly true” or “definitely true” responses. None of the measures for skewness however were beyond the range considered ideal (George & Mallery, 2001).

**Table 3**

*Hope Scale: Percentages of responses (N=96)*

<table>
<thead>
<tr>
<th>Item</th>
<th>False</th>
<th>Mostly false</th>
<th>Mostly true</th>
<th>True</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agency Thought</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) I energetically pursue my goals.</td>
<td>8.2</td>
<td>17.7</td>
<td>46.9</td>
<td>27.1</td>
</tr>
<tr>
<td>(9) My past experiences have prepared me well for my future.</td>
<td>9.4</td>
<td>19.8</td>
<td>38.5</td>
<td>32.3</td>
</tr>
<tr>
<td>(10) I’ve been pretty successful in my life.</td>
<td>12.5</td>
<td>19.8</td>
<td>43.8</td>
<td>24</td>
</tr>
<tr>
<td>(12) I meet the goals I set for myself.</td>
<td>11.5</td>
<td>16.7</td>
<td>40.6</td>
<td>31.3</td>
</tr>
<tr>
<td><strong>Pathways Thought</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Overall, the participants in this study had scores on the Hope Scale that indicate they are more hopeful than not hopeful. As can be seen in Table 3, between 66.7% and 74.1% of the participants marked the items on the scale as “True” or “Mostly true.” This characteristic of hopefulness was consistent across all the variables of the study. No statistically significant relationships were discovered in the data between the Hope Scale total score or its subscales, Agency Thought and Pathways Thought, and any of the demographic variables.

The Hope Scale was developed on college students, individuals in outpatient psychological treatment and individuals in inpatient treatment (Snyder, et al., 1991). The means of the current sample correspond to the means of the parts of the original development sample that were receiving psychological treatment. As with the original sample, this sample has a
lower score on the instrument than people who are not receiving psychological treatment. Effect size calculations confirmed this lack of difference, Cohen’s d = 0.08, r = 0.04.

What is the relationship between hope and attitude towards recovery?

Simple linear regression was performed with the Hope Scale and the RAQ-7 total scores. Since a direct, positive correlation was expected, a one-tailed test of significance was applied.

No statistically significant relationship between total scores on the Hope Scale and scores on the RAQ-7 ($r = .16, p = .06$) existed. Even though, there were statistically significant relationships among the Factor 1: Recovery is possible and requires faith and the Hope Scale total score ($r = .24, p = .01$), and its subscales, Agency Thought ($r = .24, p = .00$) and Pathways Thought ($r = .18, p = .04$), the correlation coefficients were extremely low. There was also a statistically significant relationship between RAQ-7 total score and Agency Thought ($r = .19, p = .03$), but again, the correlation was very low.

Contributions to the Literature

Though the data in this research study did not support the original hypotheses, the information garnered contributed favorably to the literature nevertheless. The persons who were in recovery from schizophrenia in the current study were generally hopeful and that they had positive attitudes toward recovery from serious mental illness. Furthermore, hope and positive attitude operated independently of each other in this study.

Rather than being a continuous variable, it appeared hope was a dichotomous variable, either present or not. This finding confirmed the assertion of authors who have recovered from schizophrenia that hope existed before recovery even began (Deegan, 1996; Lovejoy, 1984). Recovery was the reawakening of hope after despair (Ridgway, 2001). High levels of hope were
not necessary, however; individuals with schizophrenia were participating in recovery-oriented activities when even the tiniest spark of hope was present (Deegan, 1996; Stein, 2000).

As other researchers have discovered, hope is a nebulous construct. It is not related to self-efficacy, intelligence, optimism, severity of symptoms, level of perceived stress, or life expectancy (Brackney & Westman, 1992; Horton & Wallander, 2001; Kwon 2000; Landeen, Pawlick, Woodside, Kirkpatrick, Byrne, 2000; Magaletta, & Oliver, 1999; Summerlin, 1997). Even though, this study provided no additional information as to what hope actually is, PCA factor analysis of the data uncovered information to add to the long list of what hope is not: hope was not simply a positive attitude about reaching a particular goal, in this case recovery from schizophrenia. Also, this study demonstrated that hope does not correlate with positive attitude toward recovery from schizophrenia, gender, age, ethnic identity, diagnoses, length of community tenure, housing arrangement, or amount of participation in vocational type activity. Just as hope was not related to the study variables, neither was attitude toward recovery from schizophrenia related to them.

This study relied upon existing instruments, thus added to the knowledge about both the Hope Scale and the Recovery Attitudes Questionnaire (RAQ-7). Data from the current study confirmed the reliability of the Hope Scale with persons with schizophrenia. Fifteen years after development of the Hope Scale, comparable scores were attained for a similar population. The study also provided information about the validity of the RAQ-7. The RAQ-7 was originally developed to measure changes in attitude toward recovery from serious mental illness. The RAQ-7 discerned a more than 5 point change in a positive direction following a decade of increased funding for research on brain disorders, increased public awareness of serious mental illness, and concerted effort to integrate concepts of recovery into community mental health care.
programs (Lehman & Steinwachs, 1998). Data for the development RAQ-7 were gathered in 1995 and 1996 (Borkin, et al., 2000); data for this study was collected in 2003. The increase in RAQ-7 mean scores may reflect a paradigm shift in the mental health care consumers at the end of the 20th century.

Suggestions for Future Research

Participants in this study positively assessed their abilities to accomplish their goals. No attempt was made to verify the participants’ impressions of their own abilities. Adding an objective assessment of the individual’s attainment of goals could determine whether the participants’ impressions are wishful thinking or indicative of valid hope.

Adding the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) to the battery of instruments would determine whether the negative skew of the current study was an accurate measurement of participants’ hopefulness and attitude toward recovery from serious mental illness or a desire to present themselves in a favorable light or to please others.

This study involved participants in established psychiatric rehabilitation programs in an affluent, culturally diverse, suburban area surrounding a large city on the east coast of the United States of America. Similar studies in less affluent areas, in less diverse areas, in urban areas, and in rural areas would increase knowledge about the variables of hope and attitude toward recovery from schizophrenia deeper inside and further outside the metropolitan setting.

This study was a snapshot of hope and attitude toward recovery at a single point in time. This study did not seek to measure how these constructs vary over time in the same individual; however, consumer-written literature and research in nursing, pastoral counseling and psychology indicate these qualities do indeed wax and wane (Appleton, 2001; Centers, 2001; Jacobson, 2001; Lester, 1995). Replicating the study with the same sample two or three times
over period of time long enough to detect the fluctuations may be useful in determining what spurs waxing and what causes waning.

Finally, the only demographic variable to reach some level of statistical significance was the level of independence of housing arrangement appeared to influence positive attitude toward recovery. In the current study, no distinction was made as to whether participants in the more independent levels of housing were living alone, with family members or with roommates of their choice. Replicating the study and adding a variable that explored interpersonal support system would provide information and further insight as to how interpersonal relationships influence hope and positive attitude.
References


*Innovations and Research, 3(3), 19-27.*


APPENDIX F: Vita

Terry Lynn Tuttle
8526 Willow Bend Court, #32
Springfield, Virginia 22152
703-644-9055
E-mail: tltuttle@starpower.net

Education
PhD Candidate – Counselor Education Virginia Tech, Falls Church, VA
MA – Counseling Ball State University, Frankfurt, Germany
BA – Sociology University of North Carolina, Chapel Hill
Computer Software Training Applied Learning Systems, Pennsylvania

Professional Experience

Therapist The Women’s Center, Vienna, VA
September 2000 to present
Conduct psychotherapy for individuals, couples, families and groups as licensed professional
counselor in private practice setting. Provide ongoing talk therapy for depression, bipolar
disorder, schizophrenia, anxiety, infertility and trauma according to standards of practice.
Liaison with other treatment professionals on regular basis. Maintain confidential records.
Conduct support groups in response to community need. Participate on several medical/mental
health care insurance panels.

Internship Coordinator Virginia Tech, Falls Church, VA
September 2003 to May 2004
Supervise graduate students in counseling internships in community or school settings and
graduate students in counseling practicum class.

Graduate Assistant Virginia Tech, Falls Church, VA
September 2001 to May 2003
September 1999 – May 2000
Assist with supervision internship course. Assist with academic research. Prepare presentations
with variety of media. Perform office functions for department

Rehabilitation Coordinator Psychiatric Rehabilitation Services, FC, VA
June 1998 – May 2000
October 1995 – March 1997
Coordinated psychosocial rehabilitation treatment plans for adults with serious and persistent
mental illness in a vocational setting. Performed Needs Assessments and Skills Analyses and
liaisoned with family members and mental health care treatment professionals to develop and
implement individualized treatment plans. Assisted individuals with long-term hospitalization
integrate into day program in preparation for discharge into community. Provided education one
on one and in group settings about understanding mental illness, symptom management, anger
and stress management, basic adult math, reading and English as a Second Language speaking skills. Coordinated Member Services Unit training individuals with serious mental illness in leadership and advocacy skills. Coordinated Food Unit engaging members of clubhouse in preparation of balanced, nutritious, safely prepared meals for an average of 50 people per day. Served a first agency-wide Quality Assurance Team and first process action team. With agency support, developed a multi-month cultural sensitivity training program for clubhouse and presented multicultural training workshop at the state International Association of Psychosocial Rehabilitation Services conference.

**Administrative Assistant**
J.M. Waller Associates, Inc, Burke, VA
Participated in authoring, editing and production of responses to requests for proposals. Wrote job descriptions for members of support staff of small corporation. Researched legal and ethical requirements for medical surveillance of workers in Hazardous Materials/Hazardous Waste clean-up environments, proposed company policy to board of directors and designed tracking forms. Operated, troubleshooted, maintained service contracts for office machinery (computers, copiers, GBC binders, laminator, faxes, multi-user phone system). Liaisoned with vendors for shipping contract, design and production of outdoor sign, printing of new corporate letterhead. Served as receptionist and performed secretarial functions for CEO and Vice President of firm.

**Reminiscence Program Coordinator**
Sunrise Assisted Living, Springfield, VA
March 1997 – December 1997
Hired, trained, supervised, and scheduled staff to perform daily personal care and social activity for elderly individuals with Alzheimer’s Disease and other forms of dementia. Performed Needs Assessments with family members and primary care providers living with confused elders. Composed Individual Service Plans with residents, psychiatrists, medical doctors, nurses and family members. Liaisoned with professional mental health care providers and significant others to facilitate accomplishment of ISP objectives. Provided supportive counseling and grief support for staff members and family members as needed. Maintained confidential records that met state licensure requirements. Managed Life Skills and Reminiscence Activity programs on daily basis, engaging residents in meaningful daily activity. Conducted training workshops for staff on initial orientation, Alzheimer’s disease and dementia care, Validation Therapy techniques, multicultural awareness, life skills, communication. Initiated ongoing contact with family members and responsible parties through newsletters, notes and phone calls. Accompanied marketing and sales personnel on introductory calls and educational events with local referral sources.

**Basic Skills Education Instructor**
Temple University and Big Bend College
Frankfurt, Germany
1980 – 1983
Created individual learning plans and provided instruction support for adults identified by US Army as needing remedial education or skills review. Participated in in-service training conferences.

**English Teacher**
John F. Kennedy High School, Guam
1978 – 1979
Taught five classes of eleventh grade English and reading to Guamanian, Filipino and stateside youth. Wrote lessons plans for youth whose primary language was not English. Taught two classes of basic skills to youth with low English reading scores.

**Resident Advisor**  
**University of North Carolina, Chapel Hill, NC**  
1976 – 1978

Performed peer counseling for 50 dormitory residents. Responsibilities included pro-active and crisis counseling, referral, educational programming, social planning and paperwork.

**University Teaching Experience**

**Multicultural Counseling**  
**George Mason University**  
Summer Semester 2004

Assistant to professor supervising 10 masters students participating in their school counseling internships. Conduct weekly group and/or individual supervision. Maintain confidential records. Evaluate student competence and acquisition of counseling skills.

**Counseling Internship**  
**Virginia Tech**  
Spring Semester 2004

Supervised 15 masters students participating in their school counseling internships. Conducted weekly group and/or individual supervision. Maintained confidential records. Evaluated student competence and acquisition of counseling skills.

**Counseling Practicum**  
**Virginia Tech**  
Spring Semester 2004

Directly responsible for individual and group supervision of 8 counseling masters students. Conduct weekly group and/or individual supervision. Maintain confidential records. Evaluate student competence and acquisition of counseling skills.

**Counseling Internship**  
**Virginia Tech**  
Fall Semester 2003

Supervised 15 masters students participating in their school counseling internships. Conducted weekly group and/or individual supervision. Maintained confidential records. Evaluated student competence and acquisition of counseling skills.

**Counseling Practicum**  
**Virginia Tech**  
Spring Semester 2003

Directly responsible for individual and group supervision of 8 counseling masters students. Conducted weekly group and/or individual supervision. Maintained confidential records. Evaluated student competence and acquisition of counseling skills.

**Counseling Internship**  
**Virginia Tech**  
Fall Semester 2002
Assistant to professor supervising 10 masters students participating in their school counseling internships. Conduct weekly group and/or individual supervision. Maintain confidential records. Evaluate student competence and acquisition of counseling skills.

**Orientation to Professional Counseling**  
**Virginia Tech**  
Summer Semester 2002  
Taught 20 entering counseling masters students as part of a teaching team with and assistant professor. Participated in design of syllabus, selection of textbook and other materials taught and supervised group activity. Participated in evaluation and grading of students at end of class.

**Counseling Practicum**  
**Virginia Tech**  
Spring Semester 2002  
Work as part of supervision team during my own supervision internship. Directly responsible for individual and group supervision of four counseling masters students. Participated in construction of syllabus, determined how my own group should be conducted and assigned final grades at end of the semester.

**Orientation to Professional Counseling**  
**Virginia Tech**  
Summer Semester 2001  
Taught initial counseling course to 17 entering masters level students as part of my doctoral teaching internship. Created syllabus, selected textbook, designed classroom activities using a variety of teaching media, developed grading rubrics and assigned final grades.

**Professional and Academic Association Memberships**

- American Association of Christian Counselors
- American Counseling Association
- Association for Counselor Education and Supervision
- Northern Virginia Licensed Professional Counselors
- Virginia Counselors Association

**Current Professional Assignments and Activities**

At the current time, I work full time as a therapist at The Women’s Center in Vienna, Virginia with a caseload of approximately 35 individuals, couples and families. In addition to providing therapeutic support for persons with schizoaffective disorder, I see people with depression, anxiety and eating disorders, as well as families dealing with members who have substance abuse issues, attention deficit disorders and relationship difficulties.

**Presentations**

Tuttle, T.L. (2000, November). Basic Brain Anatomy. International Association of Psychosocial Rehabilitation Services, Virginia Chapter, Roanoke, VA.

Tuttle, T.L. (2000, November). But I was only doing what I thought was right… International Association of Psychosocial Rehabilitation Services, Virginia Chapter, Roanoke, VA.

