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# Recovery Knowledge, Skills, and Attitudes of Doctoral Students in APA-Accredited Clinical Psychology Programs, and Interns in APA-Accredited and APPIC-Member Internships

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# RECOVERY KNOWLEDGE, SKILLS, AND ATTITUDES OF DOCTORAL STUDENTS IN APA-ACCREDITED CLINICAL PSYCHOLOGY PROGRAMS, AND INTERNS IN APA-ACCREDITED AND APPIC-MEMBER INTERNSHIPS

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**Dissertation Approval**

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## Abstract

The concept of Recovery can be understood as an attitude or perspective about people, an attitude that encompasses beliefs about the respect, power, responsibility, empowerment, and hope that people deserve. Knowledge of and attitudes towards Recovery principles are instrumental to the development of Recovery-oriented approaches to mental health care. However, until the present study, information had not been gathered regarding the knowledge and attitudes that clinical psychology doctoral students and pre-doctoral interns have towards Recovery principles and the provision of Recovery-oriented services. A survey of a national sample of 189 doctoral students in APA-accredited programs, and 185 pre-doctoral interns in APA-accredited and APPIC-member internships was conducted, utilizing the Recovery Knowledge Inventory (RKI) to assess their knowledge of and attitudes towards Recovery principles and the provision of Recovery-oriented services. This survey also examined the self-perceived expectations of pre-doctoral interns to provide Recovery-oriented services utilizing the Recovery Self-Assessment: Provider Version (RSA-P). Mean RKI scores both for students and for interns evidenced a need for further education and training. Students and interns identified factors such as a lack of knowledge, of awareness and of training in Recovery as barriers to providing Recovery-oriented services. Additionally, mean intern RSA-P scores demonstrated a lack of consistent Recovery-orientation amongst internship training environments. Implications for doctoral-level clinical psychology training are discussed.

*Keywords:* recovery, recovery knowledge, competence, psychology training

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# Introduction

## Statement of the Problem

The concept of "Recovery" is one emerging idea that is positioned to influence the field of psychology. As the principles that compose Recovery continue to amass scientific support, it is critical that these principles are incorporated into the way psychologists conceptualize and intervene with individuals and groups experiencing mental health symptoms (Jacobson & Greenly, 2001; Swarbrick, 2009). Incorporating contemporary research findings pertaining to Recovery principles into psychological science will transform the way in which mental health conditions are understood and are treated by clinical psychologists (Anthony, 1993; Davidson et al., 2009; Evans, 2011).

However, there has not been a comprehensive study conducted in which data have been collected nationally from APA-accredited doctoral programs regarding the knowledge and attitudes that clinical psychology doctoral students have towards Recovery principles and the provision of Recovery-oriented services. Additionally, data have not been collected relative to where Recovery knowledge is imparted to doctoral students in APA-accredited clinical psychology program curricula. Currently, data have not been collected from interns regarding the expectations they have encountered on internship regarding their knowledge of and attitudes towards Recovery and Recovery-oriented services. It is therefore unclear whether or not Recovery principles are being taught consistently and adequately in APA-accredited clinical psychology doctoral programs and also what the competency expectations are in the internship experience in APA-accredited and APPIC-member internship programs. Describing the nature and scope of current training in Recovery principles, in addition to the Recovery-orientation

of training environments, would provide doctoral programs and internships the opportunity to prepare students and interns for the expectations they may encounter as they fulfill training requirements on internship and prepare to enter the world of professional psychology.

**Purpose of the Study**

The purpose of the present study was to survey doctoral students in APA-accredited clinical psychology programs and interns in APA-accredited and APPIC-member internships regarding their knowledge, skills, and attitudes towards Recovery principles and the provision of Recovery-oriented services. This study identified where in the doctoral curriculum these students are currently gaining training in Recovery principles and competencies. The present study compared these data with the expectations that interns report they encounter during placement in APA-accredited and APPIC-member internships; this was done in order to explicate any discrepancies between doctoral academic preparation and expected competencies in applied practice. Finally, this study made recommendations regarding future curriculum development and implementation in an effort to address any deficits in knowledge of Recovery principles and constructs imparted during APA-accredited clinical psychology doctoral training and the internship experience.

# Chapter Two: Review of the Literature

## Introduction

Assessing the knowledge, attitudes and skills in their competency training and development is an essential element in the training of psychology students in APA-accredited clinical psychology doctoral programs (APA, 2007, 2012; Fouad et al., 2009; NCSPP, 2007). Throughout the development of psychology as a science, research has been used to shape the specific knowledge, attitudes, and skills that are considered to be fundamental to practice. In this evolving climate, new ideas emerge; these are rigorously studied and may be subsequently incorporated into the definition of psychological practice (Davidson, Rowe, Tondora, O'Connell, & Lawless, 2009). The concept of "Recovery" is one emerging idea that is positioned to influence the field of psychology. As the principles that compose Recovery continue to amass scientific support, it is critical that these principles and their associated competencies are incorporated into the way psychologists conceptualize, assess, and intervene with individuals and groups experiencing mental health symptoms (Jacobson & Greenly, 2001; Swarbrick, 2009). Incorporating contemporary research findings pertaining to Recovery principles into psychological science will transform the way in which mental health conditions are understood and treated by clinical psychologists (Anthony, 1993; Davidson et al., 2009; Evans, 2011).

Specifically, the concept of Recovery can be understood as an attitude or perspective about people (Davidson et al., 2009; Resnick, Fontana, Lehman, & Rosenheck, 2005). Fundamentally, it encompasses beliefs about the respect, power, responsibility, empowerment, and hope that people deserve (Davidson et al., 2009;

Swarbrick, 2009). It may be thought of as advancing the national discussion about mental health symptoms to that of basic civil rights that should be afforded to all people (Davidson et al., 2009; Evans, 2011). Accordingly, beliefs about human rights and diversity are at the core of psychological practice, as well as at the core of training in the knowledge, skills, and attitudes required to practice clinical psychology competently (APA, 2007, 2012; Davidson et al., 2009; Evans, 2011; Fouad et al., 2009; NCSPP, 2007). This author utilized an online survey to assess doctoral students in clinical psychology and pre-doctoral interns regarding their knowledge of Recovery principles and also the place these principles hold in the training expectations for the practice of clinical psychology while on internship. Together, these served as the foundation for the current study.

## The History of the Recovery Movement

### Mental Health Care in Twentieth Century America

The early to mid-1900s were tumultuous times in America, drawing national public attention towards war and poverty (Grob, 1994; Whitaker, 2001). The Great Depression overshadowed the needs of the mentally ill, and economic recovery was on the forefront of American policy (Grob, 1994; Hall, 2005; Whitaker, 2001). However, stabilization of the economy provided an opportunity for policies to re-focus on providing for the needs of the vulnerable, and subsequently many social welfare programs were created (Hall, 2005; Isaac, 2008). Between 1955 and 1960, President Eisenhower convened the Joint Commission on Mental Illness and Health to assess the state of treatment services and costs, as well as to make recommendations for further progress (Smucker, 2007). Thus, the commission recommended that persons with severe mental

illnesses should receive priority when engaging in services and that outpatient Community Mental Health Clinics should be created to reduce the need for hospitalization. These recommendations were the catalyst for a shift away from the philosophy of confinement, towards that of community-based services for those with mental illness (Smucker, 2007).

**Deinstitutionalization**

Through the 1960s and 70s, a variety of political policies and programs were established and revised in an effort to address the needs of the people with mental illness (Grob, 1994, 1995). "Deinstitutionalization" was one framework that was intent on reversing the practice of committing those with serious mental illness to asylums or psychiatric wards for life, with a focus, instead, on persons being able to live in the least restrictive environments within a community of their choosing (Davidson, Hoge, Godleski, Rakfeldt, & Griffith, 1996; Davidson et al., 2009; Grob, 1994, 1995; Whitaker, 2001). The zeitgeist supported substantial policy shifts, including the creation of community mental health centers, and the constriction and the expansion of their funding (Grob, 1994, 1995; McLean, 1995; Swindle et al., 2000). Furthermore, the Americans View their Mental Health (AVTMH) survey of 1957 provided direction for national policy, culminating in legislation such as the Community Mental Health Centers Act (CMHCA) signed by President Kennedy in 1963 (Grob, 1995; Swindle et al., 2000). These policies were intent on creating an infrastructure to support the care of persons experiencing mental health conditions in their communities (Grob, 1995; Swindle et al., 2000). However, conflicts in allocating resources for community mental health centers (CMHCs) undermined their purposes, and shifts in national awareness towards drug

abuse and addiction pressured many CMHCs to focus on treating substance use disorders rather than providing services for those experiencing severe mental illness (Grob, 1995). By the early 1970s, the Nixon administration and the Ford administration worked to cut mental health funding, despite Congress being at odds with administration policies. Although the nation and its political representatives remained divided, persons experiencing mental health conditions struggled to get their needs met (Grob, 1995, 2005, 2006; McLean, 1995).

In 1977, President Carter established the President's Commission on Mental Health to assess the state of the nation in regard to mental health needs and services, leading to the approval of the Mental Health Systems Act (MHSA) by Congress (Grob, 1994, 2005). That same year, the National Institute of Mental Health (NIMH) launched the Community Support Program (CSP) to encourage states to develop "community support systems" for adults experiencing severe mental illness (Grob, 2006; McLean, 1995). Despite these advances, enforcement of, and support for, these policies continued to vacillate with each shift of political winds. Throughout the 1960s and 70s, although public perception and opinion about mental health problems appeared polarized on a national level, grassroots advocacy movements gained momentum (Grob, 1994, 1995; McLean, 1995). Consumers' personal stories such as those by Judi Chamberlain, whose first book was published in 1978, began to attract attention towards some of the issues faced by people with mental health conditions (Chamberlain, 1978; McLean, 1995).

**The Consumer/Survivor/Ex-Patient Movements**

The use of personal narrative to draw awareness to the problems faced by people with mental health conditions took root in the early 1900s. In 1908, Clifford Beers wrote

*A Mind that Found Itself*, an autobiographical perspective of his becoming ill, his subsequent engagement in treatment, and his journey back to health and functioning (Beers, 1908). This marked the inception of a trend that allowed people who experienced mental health symptoms, who often referred to themselves as, "consumers," "survivors," or "ex-patients" of the mental health system, to speak out against matters of injustice, stigma, disrespect, and disempowerment (Davidson et al., 1996; Deegan, 1996; Jacobson & Curtis, 2000). In sharing stories of their experiences, consumers reminded their audiences about the humanity shared by all people, including those experiencing mental illness. This trend evolved into a social movement in which consumers provided mutual support, and engaged in advocacy efforts in the political and social arenas (Davidson et al., 1996; Jacobson & Curtis, 2000).

Although the number of individuals who contributed to the Consumer movement are too numerous to be estimated, several became known as voices for the movement. One such individual, Judi Chamberlain, published her story entitled *On Our Own: Patient Controlled Alternatives to the Mental Health System* (1978). She spoke from the perspective of empowerment, and emphasized an individual's capability to make his or her own decisions in order to experience an improved quality of life apart from the mental health system (Chamberlain, 1978). Another individual, Patricia Deegan, a woman who had been diagnosed with schizophrenia, went on to manage her symptoms effectively and later become a psychologist (Deegan, 2008, 2013). Throughout her life, she advocated for the rights of persons experiencing mental health symptoms, speaking candidly about her own experiences within the mental health system (Deegan, 1996).

There were many instances in which treatment providers were also consumers of mental health services. In her book, *An Unquiet Mind: A Memoir of Moods and Madness* (1995), Kay Jameson relates her experiences with Bipolar disorder, and her attempts to manage her symptoms while maintaining her career in Psychiatry. She provided a perspective about the complicated struggle with symptoms and treatment that illustrated the similarities between mental health struggles and other common human dilemmas (Jameson, 1995). A psychologist named Frederick Frese, who was diagnosed with schizophrenia in young adulthood, developed his career around advocacy and treatment for mental health symptoms in a respectful and empowering manner (Frese, n.d.). He continues to participate in national advocacy efforts, in addition to researching and teaching psychology (Frese, n.d.).

The Consumer Movement was, in part, a reaction to a legacy of injustice, stigmatization, and the marginalization of individuals, based upon a single factor (Bellack, 2006; Davidson et al., 2009; Evans, 2011; Jacobson & Curtis, 2000). Rather than assuming a powerless or helpless role, this movement connected people with resources in order to live meaningful lives within the context of mental illness, and with tools to facilitate that process. Additionally, the Consumer Movement demonstrated the beneficial role that community resources and supports can play in achieving quality of life.

Although many self-identified “survivors” or “ex-patients” felt victimized by the mental health services system, many worked towards effecting changes in the system rather than rejecting it entirely (Bellack, 2006; Davidson et al., 2009; Evans, 2011; Jacobson & Curtis, 2000).

**Person Classifying Language**

The Consumer/Survivor/Ex-Patient Movement was seen by some as a social movement related to the Civil Rights movement, in which infringements of civil rights were enacted through the restrictions placed on opportunities, power, decision-making, and respect afforded to persons who experienced mental health conditions (Davidson & Roe, 2007). The diagnosis of such conditions implied that one's identity was shaped by the condition, becoming "an alcoholic," "a schizophrenic," or "a borderline," which insinuated permanence of the condition. Beliefs about permanent impairment contributed to the development of stigma about "being labeled" with a mental illness (Davidson & Roe, 2007; Flanagan & Davidson, 2007; Flanagan, Miller, & Davidson, 2009).

Accordingly, the American Psychiatric Association attempted to address the problem with a caveat included in the DSM-III, emphasizing that the system of classification is of the disorders themselves, not of the people experiencing the disorders (American Psychiatric Association, 1980). This statement was included in each subsequent edition or revision of the manual (American Psychiatric Association, 1987, 1994, 2000). However, researchers have suggested that within the psychological literature from 1975-2004, "person classifying" language occurred approximately as often as nondiscriminatory language (Flanagan & Davidson, 2007). This finding highlighted the role that organizational leaders and treatment providers may play in perpetuating stigma; it also highlighted the need to incite change from a "Top-Down" approach (Davidson et al., 2009; Flanagan et al., 2009). Additionally, researchers suggest that advocacy efforts must include personal transformations, as well as policy and systemic transformations, to adequately address the wide range of disparities

encountered by these groups (Barnard, 2011; Davidson & Roe, 2007; Davidson et al., 2009; Flanagan & Davidson, 2007; Flanagan et al., 2009).

## Severe Mental Illness: Research Outcomes and Government Funding

In 1969, the World Health Organization (WHO) initiated a pilot study to investigate the course and outcome in persons diagnosed with schizophrenia (WHO, 1973). Research conducted at this time indicated that schizophrenia had a variable course and outcome regarding symptom severity, intensity, and overall prognosis (Strauss & Carpenter, 1977; WHO, 1973). This variability was inconsistent with many common conceptualizations about schizophrenia, and began to call many assumptions about schizophrenia into question (Bellack, 2006; Carpenter & Kirkpatrick, 1988; Strauss & Carpenter, 1977; WHO, 1973). These factors contributed to an increase in long-term studies of the course and the outcome of schizophrenia.

In 1987, the Vermont longitudinal study of persons with severe mental illness was published (Harding, Brooks, Ashikaga, Strauss, & Breier, 1987a, 1987b). Researchers observed long-term outcomes of persons who were hospitalized for exhibiting severe mental health symptoms, many of whom met criteria for a diagnosis of schizophrenia. Participants were discharged between 1955 and 1965 into a community-based aftercare program, and received follow-up at10-years and 20-25-years postdischarge. Results demonstrated that at 10-year follow up, 70% of participants had not been rehospitalized, and at 20-25-year follow up, 50-66% had markedly diminished or insignificant levels of symptoms. This long-term data indicated the possibility that persons with severe mental health symptoms, including a diagnosis of schizophrenia, could drastically improve or recover entirely from their symptoms (Harding et al., 1987a, 1987b).

Subsequent long-term studies produced similar findings about variable patterns in the course of schizophrenia and the potential for recovery (Bellack, 2006; Davidson, & McGlashan, 1997; DeSisto, Harding, McCormick, Ashikaga, & Brooks, 2005a, 2005b; Harrow, Grossman, Jobe, & Herbener, 2005). The significance of these studies can be interpreted as a paradigm shift, wherein scientific data could no longer be used as a justification for prejudices towards mental illness (Davidson et al., 2009; Davidson, Harding, & Spaniol, 2005; DHHS, 2003). Consequently a diagnosis of schizophrenia did not carry the same implication of permanent impairment that it once did. Rather, an emphasis could be placed on identifying how to treat and manage the symptoms of schizophrenia and other severe mental illnesses (Anthony, 1993; Bellack, 2006; Davidson et al., 2005, 2009).

Efforts during the 1980s to counteract the stigma of mental illness and emphasize the need to target and treat symptoms catalyzed research that studied the prevalence of mental health disorders. Findings from these studies indicated that many mental health conditions occurred in a significant percentage of the population (American Psychiatric Association, 1980, 1987), and concluded that many people met criteria for multiple diagnoses (American Psychiatric Association, 1980, 1987). However, increases in demand served to exacerbate difficulties in seeking, accessing, and remaining in treatment, and matters of discrimination, stigma, and marginalization in society lingered (Barnard, 2011; Davidson & Roe, 2007; Flanagan & Davidson, 2007; Smucker, 2007). Although research demonstrated that some disorders were likely to improve over time or with treatment, disorders such as schizophrenia were long considered to be pervasive and debilitating, and had a bleak prognosis (Bellack, 2006; Strauss & Carpenter, 1977).

Despite studies demonstrating variable courses and outcomes for schizophrenia, preconceptions about the fate of those experiencing serious mental health conditions were resistant to change (Anthony, 1993; Bellack, 2006; Davidson et al., 2005, 2009; DHHS, 2003; Harding and Zahnister, 1994). Between studying the nature of mental illness, providing options and promoting access to services, and also adequately funding these services, systemic problems in mental health care provision occurred at almost every level (Anthony, 1993; Barnard, 2011; Davidson et al., 2005, 2009; Grob, 1994, 1995, 2006; Smucker, 2007; Whitaker, 2001).

**The Late Twentieth Century: the 1980's and 1990's**

Changes in funding for mental health services, established in the MHSA in 1980, were quickly overturned as the newly elected Reagan administration took office (Grob, 1995, 2005, 2006; McLean, 1995). The National Plan for the Chronically Mentally Ill, originally commissioned by President Carter, in collaboration with the Social Security Administration and what is now the referred to as the Department of Health and Human Services, continued to contribute to programmatic changes in Medicaid, Medicare, and Social Security Disability eligibility, despite Reagan's lack of support (Goldman & Grob, 2006). Under Reagan, allocation of public funding changed from distinct appropriations to block grants covering mental health and substance abuse services, leaving many CMHCs underfunded (Grob, 2006).

In the mid-1980s, NIMH's CSP advocated for the development of Community Support Systems (CSS) that would attempt to fill the service gaps remaining since deinstitutionalization (Anthony, 1993; Grob, 1995; McLean, 1995). The CSS became a model for identifying and outlining services that promoted Recovery (Anthony, 1993,

2000; Anthony, Cohen, Farkas & Gagne, 2002). Throughout the 1990s, the Boston University Center for Psychiatric Rehabilitation advocated for the development of attitudes and services that increased support, enhanced empowerment and self-direction, protected equal rights, and promoted access to services (Anthony, 1993, 2000; Anthony et al., 2002). This model of Recovery-oriented systems of care included comprehensive assessment and individualized options, as well as self-help (Anthony, 2000). The progress and accomplishments of the 1990s paved the way for further political shifts following the turn of the century.

## Recovery Transformation

### Political Shifts Toward Recovery

In 2001, President George W. Bush established the New Freedom Initiative to promote access to opportunities and services for persons with disabilities (DHHS, 2003). This initiative identified mental illness as a significant contributor to disability in the United States. A subdivision of this initiative, the New Freedom Commission on Mental Health (NFC), identified three barriers to care for Americans with mental illnesses;

> "stigma surrounding mental illness, unfair treatment limitations and financial requirements placed on mental health benefits in private health insurance, and a fragmented mental health service delivery system" (DHHS, 2003, p. 1).

Additionally, public health concerns identified by the NFC included high costs, both direct through service provision, and indirect through loss of productivity, incarceration, and premature death (DHHS, 2003).

Findings indicated that persons experiencing mental health concerns who choose to seek services discover that the mental health system can be difficult to understand and

navigate. Insurance involvement and management of services, varying location of services, and cost and transportation issues, among other practical barriers, contribute to underutilization of services. The NFC concluded in their recommendations that the interaction of (a) underutilized services and high costs related to handling more crises and hospitalizations, and (b) funding longer periods of intensive treatment, demonstrate the reciprocal nature of these issues and the need for change at a systemic level (DHHS, 2003). Rather than perpetuating a pattern of service utilization that was ineffective, the report advocated for a change in the focus of service provision to that of "Recovery,"

> "…the process in which people are able to live, work, learn, and participate fully in their communities. For some individuals, recovery is the ability to live a fulfilling and productive life despite a disability. For others, recovery implies the reduction or complete remission of symptoms" (DHHS, 2003, p. 7).

As a result, the NFC report cast a vision of "achieving the promise of community living for everyone" (p. 6), transforming the system of mental health service provision into one that promoted empowerment, accessibility, and responsibility (DHHS, 2003). Critical aspects of these recommendations for transformation include advancements in research, technology and practice, in order to provide consumers with the best options available for pursuing Recovery in and from their mental health symptoms (DHHS, 2003; Davidson & Roe, 2007). This approach emphasized individualized and collaborative care, in which consumers actively participate in their treatment planning and implementation (DHHS, 2003). Additionally, the NFC report underscored the need to educate the American public about mental health conditions to combat stigmatization, and the need for early screenings, assessments, and interventions to address the underutilization of services

identified in their investigation. Overall, the recommendations of the NFC aimed to shift the way mental health symptoms are to be perceived, approached, and addressed in America toward a model of Recovery (DHHS, 2003).

**Defining Recovery**

Although the concept was largely understood and accepted, the lack of consensus on the definition of Recovery and its components contributed to difficulties in translating and incorporating Recovery-informed principles into the provision of mental health services (Davidson et al., 2009; Evans, 2011; Goldman & Grob, 2006; Grob, 1991, 1999; LeBoutillier, Leamy, Bird, Davidson, Williams, & Slade, 2011). The concept of Recovery initially indicated a return to a previous level of functioning, and was expanded to a broader perspective when mental health conditions were included in the definition (Anthony, 2000; Resnick et al., 2005). Recovery from mental health conditions was referred to as a process that included hope, individual decision-making, and involvement in the community (Resnick et al., 2005).

Discrepancies emerged in what various researchers included in their definition of Recovery. Some included factors such as acknowledgement of the diagnosed mental health condition (Noiseux, Tribble, Leclerc, Ricard, Corin, Morissette, & Lambert, 2009), yet others included adaptation to the experienced symptoms, a shift in focus to overall well-being, and a redefinition of identity (Bellack, 2006; Resnick et al., 2005; Noiseux et al., 2009). Moreover, conflicts were described in the literature regarding whether or not particular aspects must be included in the definition of the Recovery process, such as an individual's development of spirituality (Resnick et al., 2005; Noiseux et al., 2009). Some models of Recovery even articulated subdivisions that included internal resources

such as hope and empowerment, and external conditions such as human rights and a "positive culture of healing" (Jacobson & Greenley, 2001, p. 484).

**SAMHSA Consensus Statement on Recovery**

In 2004, the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA), attempted to address discrepancies about the definition of Recovery by holding the National Consensus Conference on Mental Health Recovery and Mental Health Systems Transformation. The overarching definition of Recovery that was set forth at that time stated that:

> "Mental health recovery is a journey of healing and transformation enabling a person with a mental health condition to live a meaningful life in the community of his/her choice and to achieve his/her full potential" (SAMHSA, 2006, p. 2).

Utilizing a multidisciplinary team approach, participants created the National Consensus Statement that outlined the 10 Fundamental Components of Recovery and advanced a description of Recovery that served to unify the field of Recovery-oriented research as well as Recovery-oriented service transformation (SAMHSA, 2006).

The 10 Fundamental Components of Recovery represent interconnected and multifaceted concepts that serve as an operational definition for Recovery and may be used as one means by which Recovery-orientation may be evaluated in research, assessment, intervention and provision of mental health services. It was agreed that the aspects of Recovery considered fundamental to its overall definition included: Self-Direction, Individualized and Person-Centered, Empowerment, Holistic, Non-linear, Strengths-Based, Peer Support, Respect, Responsibility, and Hope. This multifaceted

description of Recovery also provided a framework for training and assessing the knowledge, skills, and attitudes of treatment providers (SAMHSA, 2006).

The term empowerment has come to stand for a variety of concepts within the context of recovery from severe mental illness, and it is largely dependent upon the vantage point and larger social context framing the discussion. Those who have lived with the impact of serious mental health symptoms, including the impact of the reactions of those around them and the mental health care system, bring a different perspective to the definition of empowerment when contrasted to those who provide mental health services (Chamberlain, 1997; Honey, 1999; McLean, 1995; Nelson, Lord & Ochocka, 2001). The definition of empowerment when providing mental health services must therefore reflect the struggles that birthed the consumer/ex-patient/survivor movement, yet also allow for a shift in the way that services are provided to those who choose to participate, or not participate in them (Anthony, Rogers & Farkas, 2003; Hickey & Kipping, 1998; Honey, 1999; McLean, 1995; Rose, 2000).

Consequently, empowerment as a multidimensional concept must include the restoration of power to those who do not have this power. This restoration may include the ability to make decisions, to have an increased sense of control over one's life and goals, and to be entrusted with responsibility for one's own life with respect for individual preferences (Chamberlain, 1997; Honey, 1999; McLean, 1995; Nelson et al., 2001; Rocha, 1997; Rose, 2000). If the balance of power is restored, the consumer may be supported in being self-directed throughout the decision-making process, understanding the available options and choosing whether or not to participate in those services (McLean, 1995; Salzer, 1997). Therefore, empowerment and self-direction are

aspects of a dynamic process that may lead to an increased experience of choice, power, and control (Linhorst, Hamilton, Young & Eckert, 2002; McLean, 1995; Ryles, 1999). For those who choose to engage in mental health services, empowerment may involve a breadth of choices throughout the process of treating mental health symptoms, including self-determination of goals, and deciding what steps they would like to take in order to reach those goals (Anthony et al., 2003; Honey, 1999; McLean, 1995; Nelson et al., 2001; Rocha, 1997; Rose, 2000). For those who choose not to engage in psychiatric services, this could include the availability of consumer-led, self-help and community support options (Chamberlain, 1988; Chamberlain, Rogers, & Sneed, 1989; Honey, 1999; Lefley, 2003; McLean, 1995; Segal, Silverman & Temkin, 1993).

The SAMHSA consensus statement (2004) incorporates these various dynamics into its 10 Fundamental Components, stating,

> "Consumers have the authority to choose from a range of options and to participate in all decisions- including the allocation of resources- that will affect their lives, and are educated and supported in so doing. They have the ability to join with other consumers to collectively and effectively speak for themselves about their needs, wants, desires and aspirations. Through empowerment an individual gains control of his or her own destiny and influences the organizational and societal structures in his or her life (p. 1)."

Self-direction allows a person to choose one's own goals and make decisions about how these goals will be pursued (Anthony et al., 2003; Bassman, 1997; Chamberlain, 1977; 1988; Davidson et al., 2008; Deegan, 1988; Linhorst et al., 2002; McLean, 1995; Nelson et al., 2001). Impairment resulting from severe mental health symptoms, which may

interfere with understanding and decision-making, may be interpreted as a reason to limit self-direction; however, actions that instill hope and provide individualized care are critical during these times. Historically, persons experiencing impairments in functioning have been subjugated and disrespected, whereas the Recovery model emphasizes the need for respect and empowerment regardless of symptom severity (Anthony, 2000; Chinman et al., 1999; Davidson et al., 2008; Hansen et al., 2004; Linhorst et al., 2002; McLean, 1995; Prilleltensky, 1993; Segal et al., 1993; Strauss, 1989).

Additionally, personal accounts of consumers clearly indicate the unique journey that composes the process of recovery; it varies over time and among persons. These narratives emphasize the nonlinear nature of the recovery process. Holistic care accounts for these individual goals and preferences, addressing what the person needs or desires in the present as well as what can promote quality of life in the future. Holistic evaluation, treatment planning, and case management also involve taking a strengths-based approach, rather than focusing purely on identifying and remediating deficits (Anthony, 1993, 2000; Anthony et al., 2002; Chamberlain, 1998; Davidson et al., 2009; Deegan, 1988; Evans, 2011; Hansen et al., 2004; Hickey & Kipping, 1998; Linhorst et al., 2002; McLean, 1995; Rapp & Goscha, 2004).

Overall, providing options that accommodate individual preferences, although beneficial, is insufficient to address the power differentials inherent in treatment. Progress is made when consumer-directed and self-help interventions are supported and facilitated; however, power is truly balanced only when peers are involved at every level of professional and consumer-led services. Peer support encompasses intentional, mutual-support that people provide to others with similar life experiences, as well as

formal employment of persons in recovery within the mental health care system. This allows for opportunities to assist consumers in navigating the mental health care system, provides models for the process of recovery, and incorporates advocacy or perspectives beyond the scope of some providers' experiences (Chamberlain, 1978, 1990, 1996; Davidson et al., 2009; Davidson, Chinman, Kloos, Weingarten, Stayner, & Tebes, 1991; Deegan, 1992; Garrison, Ackerson, & Forrest, 2010; Kurtz, 1990; Rogers, Teague, Lichenstein, Campbell, Lyass, Chen, et al., 2007).

## The Impact of Recovery-Oriented Services

There is extensive literature on the integration of Recovery principles into the provision of Recovery-oriented services (Anthony, 1993, 2004; Chinman et al., 2002; Davidson, et al., 2005, 2007, 2009, 2010; DHHS, 2009; Farkas, Gagne, Anthony, & Chamberlain, 2005; Frese et al., 2001; Evans, 2011; Laudet, 2008; Le Boutillier et al., 2011; Oades et al., 2005; Resnick, et al., 2005; Swarbrick, 2009; White, 2008). Additionally, research has shown that the provision of Recovery-oriented services benefits individual systems, communities, and society at large (APA, n.d.; Anthony, 2004; Davidson et al., 2007, 2009; Evans, 2011; Farkas et al., 2005; White, 2008). Initially, this may be done through increased outreach efforts, improving access and providing community-based services (Evans, 2011; Farkas et al., 2005; White, 2008). Overall, the goal of improving retention rates within services is accomplished through "holistic, strengths-based" assessment (White, 2008, p. 4), collaborative treatment planning, and interventions utilizing evidence-based practices (EBP) (Davidson et al., 2009; Evans, 2011; Farkas et al., 2005; White, 2008). Incorporating Recovery principles into an organization or community involves addressing barriers within the entire process

of mental health treatment, engagement, access, care, retention, and follow-up (Evans, 2011; Farkas et al., 2005; White, 2008).

Advocates of Recovery integration emphasize the ways in which organizations may benefit from systems transformation. Research indicates that consumer engagement in Recovery-oriented services is related to reduced rates of rehospitalization and utilization of emergency services (APA, n.d.; Evans, 2011; Harding et al., 1987b). This translates to decreased overall costs; emergency services are costly and extended hospitalization and repeat admissions into intensive levels of care increase overall treatment costs (APA, n.d.; Davidson et al., 1996; Evans, 2011; Harding et al., 1987b; Swarbrick, 2009). Likewise, collaborative treatment planning is seen as increasing participation in treatment recommendations, and decreasing the amount of time and money spent on early termination from services (Anthony, 2004; APA, n.d.; Belack, 2006; Davidson et al., 1996, 2007, 2009; Erney, 2009; Evans, 2011; Swarbrick, 2009). However, actively engaging in systems-level transformation necessitates the active participation of organizational, community, and societal leadership (Anthony, 2004; APA, n.d.; Davidson et al., 1996, 2007, 2009; DHHS, 2005; Erney, 2009; Evans, 2011; SAMHSA, 2010).

In addition, there is a growing amount of research outlining the benefits of Recovery-Oriented Service provision (Anthony, 2004; APA, n.d.; Davidson et al., 1996, 2007, 2009; DHHS, 2005; Erney, 2009; Evans, 2011; SAMHSA, 2010). Benefits can be seen in consumers' increased levels of investment in treatment, decreased rates of rehospitalization and utilization of emergency services, and decreased overall costs. Effective utilization of case management, such as through the Assertive Community Treatment (ACT) model, has been shown to contribute to significant improvement in

lowering the rates of rehospitalization, to maintenance of stable housing, to a decrease in the level of symptom severity, and to an increase in overall quality of life (Rapp & Goscha, 2005). The use of EBP interventions allows consumers to choose between the most effective and efficacious treatments available, encouraging them to take an active role in their individualized treatment plan (Anthony, 2004; APA, n.d.; Davidson et al., 1996, 2007, 2009; DHHS, 2005; Erney, 2009; Evans, 2011; SAMHSA, 2010).

**Recovery-Oriented Service Environments**

As evidence of decreased costs and lower rates of rehospitalization emerge, many organizations and communities have responded by making a commitment to incorporate Recovery into their system of care. This has been seen on city and on state levels in Arizona, Connecticut, Michigan, New York, Ohio, Pennsylvania, and Wisconsin (APA, n.d.; Belack, 2006; Davidson et al., 2009; Erney, 2005; Evans, 2011; Halvorson and Whitter, 2009; Jacobson & Greenley, 2001; OMHSAS, 2010; Reisner, 2005; Townsend, Boyd, Griffin, Hicks, Hogan, & Martin; 2000; White, 2008). In 2003, The Veteran's Administration (VA) formalized their pledge to incorporate Recovery principles into their services (DVA, 2003; Erney, 2005). The SAMHSA Recovery to Practice Initiative represents another movement in the expansion of Recovery-Oriented Services (DHHS, 2003; DSG, 2010; SAMHSA, 2010; SAMHSA, n.d.)

Foundational to the idea of creating Recovery-Oriented Systems of Care (ROSC) are the practices of comprehensive assessment and evaluation of a person's experiences, symptoms, needs, goals, and preferences (Anthony 1993, 2000; Davidson et al., 2009; Evans, 2011). Empowering consumers regarding the pursuit of these goals involves providing education about options and resources available and encouraging and

respecting their choices. The availability of EBP allows consumers to gain an understanding of possible outcomes in choosing to engage in specific interventions (Essock, Goldman, Van Tosh, Anthony, Appell, Bond, et al., 2003; Frese, Stanley, Kress, & Vogel-Scibilia, 2001; Sanderson, 2003). Making options available within an agency can more effectively facilitate funding and staffing resources and also increase consumers' involvement in developing their own treatment, thereby promoting collaboration and increasing adherence to treatment (Mestemaker, as cited in Davidson et al., 2006).

**Barriers to Recovery-Oriented Systems of Care**

The magnitude of the shift in the delivery of mental health services from a Recovery-oriented perspective poses obstacles that must be addressed and overcome if systems are to be transformed. Researchers and advocates for Recovery-transformation such as William Anthony, Larry Davidson, Arthur Evans and their collaborators, have worked from a community and from a statewide level of mental health treatment to identify barriers to embracing Recovery-oriented services (Anthony, 2004; Davidson et al., 2005; Davidson et al., 2009; Evans, 2005, 2011). Although some barriers may be rooted in stigma, often they reflect genuine concerns or misunderstandings that can be addressed through education or through compromise (Anthony, 2004; Davidson et al., 2005; Davidson et al., 2009; Evans, 2006, 2011; Woody et al., 2005).

Davidson and colleagues (2005; 2009) condensed the barriers they identified into overarching themes, outlining the top 10 concerns about the implementation of Recovery principles in practice and in systems transformation. They concluded that addressing these concerns is critical in changing the attitudes and beliefs that are associated with

practices that are inconsistent with Recovery principles (Davidson et al., 2005; Davidson et al., 2009). The first concern is that "Recovery" is a new word for an old construct, currently receiving attention because it is a trend, rather than a set of principles that will make a distinct contribution to the practice of mental health. Davidson and colleagues (2005; 2009) have addressed this concern by discussing the evolution of Recovery as a construct. They note its progression over time to incorporate civil rights, integrative case conceptualization, collaborative treatment planning, and the perspective of "Recovery in" a mental health condition as well as the possibility of "Recovery from" a mental health condition. Also highlighted is the fact that many changes that reflect Recovery-oriented service provision have not been implemented nationally on a large scale, indicating that a gap exists between the legacy of "Recovery," and the adoption of Recovery-principles in practice (Davidson, et al., 2005; Davidson, et al., 2009).

Davidson et al. raised concerns about the resources required to implement Recovery-oriented services, focusing specifically on staffing, time, finances, and insurance coverage for services (Davidson, et al., 2005; Davidson, et al., 2009). In addressing this issue, the authors reiterated that Recovery involves a perspective about people, rather than merely incorporating a set of services. This may involve connecting people with services or resources, but it is also fundamentally expressed by the way in which people are engaged (Davidson et al., 2005; Davidson et al., 2009). Concerns regarding health care coverage aligned with the Institute of Medicine (IOM) *Crossing the Quality Chasm* (2001) report, illustrating how gaps in service coverage decreased the quality of, and access to, healthcare for persons with mental health or substance abuse conditions (IOM, 2001). They recommended a re-design of the healthcare system to

address these needs, improve the quality of healthcare, and sustain improved long-term outcomes (IOM, 2001; Evans, 2011).

Additional concerns about Recovery embodied the beliefs of many providers who practice from a medical model perspective, which suggests that people with severe mental illness (SMI) cannot or will not "recover" from their symptoms; Recovery is seen therefore, as being unrealistic or even patronizing. Several actions were promoted to address this concern, including early detection and intervention, and broadening the definition of "Recovery" to include both "in" and "from" symptoms. Dissemination of the research on recovery from schizophrenia is also critical, because many treatment providers may not be aware that people can recover from SMI. Additionally, the authors delineated the civil rights implications of this concern; consumers may be treated as incapacitated, thereby legitimizing stigma, discrimination, and beliefs that consumers are "second-class citizens" (p. 1286) who do not have equal rights or power (Davidson, et al., 2009).

Another focus of Recovery included views about treatment decisions and consumers' levels of impairment. Davidson et al. (2009) discussed the limited contexts, in which people are actually severely impaired; these have been limited chiefly to acute instances of disconnect from reality and/or acute suicidal, self-harm, or homicidal intent. This distinction has been contrasted to the experience of chronic and fluctuating symptoms, which do not necessarily limit consumers from engaging in empowered, collaborative decision-making. For many treatment providers, the most challenging aspect of this cognitive shift involves balancing the power differential between provider and consumer, removing the dynamic that the provider, by receiving intensive training, is

an “expert” not only in his or her field of study, but also in the knowledge of what is best in the lives of consumers. Instead, Davidson et al. advocated for a collaborative model, in which providers come alongside consumers, offering assistance related to their fields of study and considering the consumers to be the “expert” on what they want and what is best for their lives (Davidson, et al., 2005; Davidson, et al., 2009).

In the wake of the establishment of EBPs and the Empirically-Supported Treatments (EST) movement, some expressed concern that Recovery stood in opposition to EBPs. Several authors purported that this was a reflection of misinformation about Recovery and EBPs, because the use of EBPs is consistent with Recovery principles. They emphasize that providing consumers with the best available choices for treatment is a fundamental principle of the Recovery and EST movements. Additionally, numerous authors have asserted that EBP should include not only interventions that demonstrate efficacy in decreasing symptoms, but also interventions that support or promote a lifestyle of Recovery for consumers. This expands the scope of ESTs yet maintains an emphasis on improved quality of life (Davidson, et al., 2005; Davidson, et al., 2009; Frese, et al., 2001).

Managing risk and responsibility was the final theme in the concerns identified by Davidson and colleagues (2005, 2009). They responded to these concerns by taking an integrative approach to conceptualizing the experiences of consumers. Primarily, they reiterated that there are limited contexts in which people are severely functionally impaired, in acute instances of disconnect from reality, and/or with intent to harm oneself or others, with an emphasis on the need for appropriate assessment of risk. In all other contexts, they maintain, consumers of mental health services “pose no significant risk to

the community" (p. 1562). The assumption that persons who experience mental health conditions pose an increased threat to others is rooted in fear and stigma, and is inconsistent with population statistics. Increased risk is often perceived by treatment providers, who entrust the consumers with responsibility for their lives and decisions, perhaps reflecting their own biases as a result of passing control from the service world to the consumer (Davidson, et al., 2005; Davidson, et al., 2009).

**SAMHSA Recovery to Practice Initiative**

Lack of dissemination of new knowledge, skills, and attitudes can contribute to the perpetuation of stigma and misinformation. In 2009, the Center for Mental Health Services (CMHS) Office of the Associate Director for Consumer Affairs, which is a division of SAMHSA, contracted the Development Services Group, Inc. (DSG) to address the problem of dissemination. They launched a 5-year Recovery to Practice (RTP) initiative in response to the 2003 President's New Freedom Commission report, the central focus of which is to promote the "awareness, acceptance, and adoption" of Recovery-oriented services by developing training curricula for five disciplines of mental health service provision (DHHS, 2003; DSG, 2010; SAMHSA, 2010; SAMHSA, n.d.). These disciplines are represented by the primary professional association of each discipline: psychiatry, psychology, psychiatric nursing, social work, and peer support specialists. The American Psychiatric Association (APA), American Psychological Association (APA), American Psychiatric Nurses Association (APNA), Council on Social Work Education (CSWE), and the National Association of Peer Specialists (NAPS), recruited a national panel of professionals in its specific discipline to develop

training curricula for incorporating the 10 Fundamental Components of Recovery into their disciplines (DSG, 2010; SAMHSA, 2010; SAMHSA, n.d.).

A goal of the RTP has been to create a comprehensive online Recovery Resource Center (RRC, available online at: http://www2.dsgonline.com/rtp_listserv/; and at: http://www.samhsa.gov/recoverytopractice/) to promote the dissemination of Recovery principles both to professionals and to the general public (DSG, 2010; SAMHSA, 2010; SAMHSA, n.d.). The RRC is an easily accessible and centralized information center that is consistently updated with information and trainings on Recovery principles and the application of Recovery-oriented services. The ultimate goals of the RTP initiative are to promote collaboration and a multidisciplinary team approach when working with consumers of mental health services, and to convey a hopeful, respectful, and strengths-based approach to the provision of mental health services. The RTP has sought to transform the attitudes and beliefs of professionals and the community at large, utilizing education and awareness as a means of enhancing personal and professional ethics and values (DSG, 2010; SAMHSA, 2010; SAMHSA, n.d.).

**Summary**

Over the course of the last century, there has been a dramatic shift in the way mental illness has been conceptualized, based on groundbreaking research and the personal narratives of those experiencing mental health symptoms (Anthony, 1993; Bellack, 2006; Davidson et al., 2009; Deegan, 1996: Evans, 2011; Jacobson & Curtis, 2000). This shift has prompted many in the field of psychology and psychiatric rehabilitation to develop a Recovery-oriented approach to the treatment and management of mental illness (Anthony, 2000; Anthony et al., 2002; Frese et al., 2001; Essock et al.,

2003). However, dissemination and implementation of Recovery-oriented services, although adequately addressing barriers, also necessitates an understanding of the nature of training in Clinical Psychology.

## Training in Clinical Psychology

### The Development of Training Standards for Clinical Psychology Students

In December 1945, the American Psychological Association (APA) received a request from the Veterans Administration (VA) for a list of universities that provided high quality training of providers of psychological services (APA, 2007, 2012). The APA identified 22 universities where the faculty, curricula, and facilities were judged to provide this level of training. The APA then considered these exemplars to set the standard for the institution of accreditation criteria for education and training programs in psychology, now overseen by the Commission on Accreditation (CoA). Accreditation, therefore, has come to represent the highest standard of educating and training graduate students in psychology to perform the minimum competency expected of a professional psychologist, and to meet criteria for licensure eligibility.

Accreditation addresses a vast array of domains in the education and training of psychology doctoral students. Minimum standards have been established regarding aspects of training such as curriculum content, demonstration of competency, and minimum hours required in internship training. Of particular importance are the outlined requirements for curriculum content that include five major domains, representing the breadth of clinical psychology. These five domains are: (1) scientific psychology and research methods, (2) scientific, methodological and theoretical foundations of psychological practice, (3) diagnosing or measuring problems through psychological

assessment and measurement with subsequent formulation and implementation of treatment interventions, (4) issues of individual and cultural diversity in all its applications, and (5) attitudes for lifelong learning and professional development in the context of scientific developments in knowledge and the field of psychology (APA, 2007, 2012).

Accreditation also includes the identification of minimum standards of training for internships that provide field training to doctoral students in psychology. Additionally, internship accreditation standards established by the APA include the amount and variety of recipients of services, training activity sequence, time spent in didactics, and time spent in supervision. Internships must show that they require interns to demonstrate intermediate to advanced levels of knowledge, skills, competencies, abilities and proficiencies in areas of assessment, diagnosis, intervention, consultation, supervision, research, and demonstration of attitudes promoting respect for individual and cultural diversity (APA, 2007, 2012).

Accreditation is not a static process; new revisions have been made in relevant areas of accreditation since its inception and accordingly, accredited programs undergo extensive reviews to ensure that quality standards are maintained (APA, 2007, 2012). Although the CoA sets minimum standards and expectations of accredited programs, the way in which each program achieves those standards varies (APA, 2007, 2012; Fouad et al., 2009; NCSPP, 2007). In addition to accreditation, the APA strives to set forth a model for what a psychologist would be able to demonstrate in his or her knowledge of psychology, skills in psychological services and interventions, and attitudes towards oneself, others, and the world (APA, 2007, 2012). This exemplar of a psychologist

empowers students and trainees to reflect upon their professional development and encourages practicing professionals to continue their growth throughout the duration of their careers.

For instance in 2010, the APA commissioned the Recovery Advisory Committee (RAC) as part of the 5-year SAMHSA Recovery-to-Practice Initiative and the APA commitment to Recovery principles and Recovery-oriented service provision (APA, n.d.). The RAC comprises leaders in the field of Recovery-oriented research and service, as well as educators and consumers of mental health services. The APA commissioned the RAC to research, develop, and make suggestions regarding the dissemination of a graduate curriculum to train future psychologists in Recovery principles and Recovery-oriented service provision (APA, n.d.). Until its conclusion in 2015, the RAC will make suggestions about the ways in which psychology students, interns, and psychologists can develop and enhance their knowledge, skills, and attitudes, incorporating Recovery principles into their provision of services (APA, n.d.).

**Competencies Promoted in Accredited Psychology Doctoral Training Programs**

Another way to consider standards for the training of doctoral students in psychology is the development of competency in areas considered relevant to professional psychology. Professional organizations, such as the APA, the Association of Psychology Training Clinics (APTC), the Council of Chairs of Training Councils (CCTC), and the National Council of Schools in Professional Psychology (NCSPP), have outlined developmental competencies that psychology doctoral students are expected to demonstrate prior to being granted a doctoral degree in psychology (APA, n.d.; Fouad et al., 2009; NCSPP, 2007). APA competency benchmarks are specifically outlined in

developmental stages of readiness to acquire and implement knowledge, skills, and attitudes at specific markers in training, namely, practicum, internship, and professional practice (Fouad et al., 2009). NCSPP Developmental Achievement Levels (DALs) were developed and disseminated to articulate these stages of readiness to practice, further breaking down each content area into categories of Knowledge, Skills and Attitudes (NCSPP, 2007).

In the NCSPP DALs, the suggested student competencies are subdivided into seven core areas: Relationship, Assessment, Intervention, Diversity, Research/Evaluation, Management/Supervision, and Consultation/Education (2007). The APA Competency Benchmarks are broken down into two subdivisions of competencies, foundational and functional competencies. Foundational Competencies include Professionalism, Reflective Practice/Self-Assessment/Self-Care, Scientific Knowledge and Methods, Relationships, Individual and Cultural Diversity, Ethical Legal Standards and Policy, and Interdisciplinary Systems. Functional Competencies include Assessment, Intervention, Consultation, Research/Evaluation, Supervision, Teaching, Management, and Advocacy. These broad content areas are subsequently broken down into specific areas for training and demonstration of acquired knowledge, skills, and attitudes reflecting each competency (Fouad et al., 2009; NCSPP, 2007).

Both the APA Competency Benchmarks and NCSPP DALs have been used in detailed evaluations of student knowledge, skills, and attitudes in each content area. Curricula and outcomes from the goals, objectives, and competencies for APA-accredited programs must demonstrate effective training outcomes in each competency, distinct from the theoretical orientation of the program in question (APA, 2007, 2012). These

programs must also demonstrate successful development of competency, based on each program's stated goals, objectives, and competencies, within the framework of the objectives and standards set forth by the Commission on Accreditation (APA, 2007, 2012). Student evaluations through coursework, supervisor evaluations in practicums, comprehensive exams, and evaluations by faculty within their training programs, demonstrate that the student is progressing through the developmental milestones outlined in the competencies (APA, 2007, 2012; Fouad et al., 2009; NCSPP, 2007). By the time a student is ready to graduate with a doctorate in Psychology, the degree-granting institution or program must be able to demonstrate that the student has successfully progressed through each of the competency areas and is ready for professional practice as a psychologist, including the pursuit of licensure (APA, 2007, 2012; Fouad et al., 2009; NCSPP, 2007).

## Measuring Recovery Competence in Clinical Psychology Trainees

Measuring Recovery knowledge or the Recovery-orientation of doctoral clinical psychology students or programs is a large undertaking, especially considering the difficulties encountered in defining Recovery and SAMHSA's recent adoption of a consensus definition (SAMHSA, 2004). Measuring competency in a paradigm such as Recovery involves measuring acquired knowledge that encompasses particular attitudes and skill components (Oades, Deane, Crowe, Lambert, Kavanaugh, & Lloyd, 2005). This can be thought of as being similar to the measurement of competency in an individual's approach to individual and cultural diversity (Sue & Sue, 2007). Emphasizing the civil rights issues faced by persons experiencing mental health symptoms necessitates an approach similar to the training and measurement of

competency to that of diversity in culture, race, gender, creed, sexual orientation, and disability (Davidson et al., 2009; Evans, 2011; Sue & Sue, 2007).

In 2000, the U.S. Department of Health and Human Services and the Human Services Research Institute compiled inventories that attempted to measure Recovery and Recovery-orientation (Ralph, Kidder, & Phillips, 2000). This compendium, part of an effort to disseminate measures of Recovery-orientation, provided the means to acquire data that could be used when working with individuals, treatment providers, or treatment facilities. In 2005, a second volume of the compendium was published, including more recently developed measures and updated data (Campbell-Orde, Chamberlain, Carpenter, & Leff, 2005). These measures provided an opportunity to identify misunderstanding, problems, and barriers to implementing Recovery-oriented services (Campbell-Orde et al., 2005; Ralph, Kidder, & Phillips, 2000).

## Recovery Inventories

### Recovery Knowledge Inventory

One of the aforementioned inventories is the Recovery Knowledge Inventory (Bedregal et al., 2006), a 20-item self-report measure used to identify both general and specific knowledge and attitudes about the Recovery principles. This measure utilizes a Likert scale to identify a participant's current Recovery-oriented knowledge and attitudes (i.e. "Not everyone is capable of participating in the recovery process," and "The more a person complies with treatment, the more likely he or she is to recover.") to identify areas for future training as well as to evaluate effectiveness of training (Davidson et al., 2009).

**Recovery Self-Assessment: Provider Version**

The Recovery Self-Assessment: Provider Version (RSA-P; O'Connell et al., 2005), is a 36-item, self-report measure used to identify the overall conceptualization of the Recovery-orientation of the practices in a facility or agency. It utilizes a Likert scale to allow participants to rate the Recovery-orientation of their settings, having versions for administrators, providers, consumers and family or support persons. The provider version of the RSA assesses practices in the work environment that contribute to a Recovery-oriented treatment environment, related to systems transformation (i.e. "Staff use a language of recovery (e.g. hope, high expectations, respect) in everyday conversations," and "The development of a person's leisure interests and hobbies is a primary focus of services."). Data obtained from the RSA can be analyzed to create an individual rating, the rating for an agency profile, or aggregate profiles for a region or specific level of services (Davidson et al., 2009).

**Recovery-Orientation in Training**

Although academic training in many practitioner-oriented psychology programs articulate the expectation that doctoral students should be trained in matters of social justice, diversity, and ethics, these expectations have not been extended to include Recovery (APA, 2007, 2012; Fouad et al., 2009; NCSPP, 2007). In the Situational Analysis conducted by the Recovery Advisory Committee (2011), it was found that of those who responded to an online survey, seven accredited doctoral programs provided the opportunity for students to engage in formal coursework about Recovery (APA, 2011). Similarly, six accredited internship programs articulated an expectation that interns should practice from a Recovery-oriented perspective (APA, 2011). On a national

level, the movement towards embracing Recovery-Oriented Service provision may require psychologists and psychology students to develop the knowledge, skills, and attitudes to do so (DHHS, 2003; DSG, 2010; DVA, 2003; Erney, 2005; SAMHSA, 2010; SAMHSA, n.d.).

**The Present Study**

To date, there has never been a comprehensive assessment of the knowledge, skills, and attitudes that psychology doctoral students and interns have towards Recovery principles and the provision of Recovery-oriented services. Similar to the APA Division 12 Task Force survey that explored where Empirically-Supported Treatments were incorporated into the training of doctoral students and interns, it would be valuable to determine the current level of knowledge, skills, and attitudes that doctoral students and interns have towards Recovery, as a result of their current training (Chambless et al., 1996; Chambless et al., 1998; Woody et al., 2005). The present study utilized the Recovery Knowledge Inventory (RKI; Bedregal et al., 2006), and the Recovery Self-Assessment: Provider Version (RSA-P; O'Connell et al., 2005), to obtain this data.

In addition, a brief qualitative survey asked participants to identify where in their academic curriculum they have been exposed to Recovery principles. Participants were asked about their employment and training experiences, and the degree of exposure that they have had in providing Recovery-oriented services in those settings. By measuring Recovery knowledge across varying applications, this study identified specific ways in which Recovery may enhance, or be incorporated into, the curriculum and experiential training of clinical psychology doctoral students. The addition of qualitative questions regarding exposure to Recovery knowledge, environment and overall experience

provided perspectives on how clinical psychology students may learn about Recovery-oriented services and what barriers they perceived to incorporating Recovery into their practices.

**Implementing a Recovery-Oriented Curriculum**

Similar to the process of defining recovery in the field of psychology, there is no current standardized training curriculum in Recovery-oriented service provision or systems-transformation available for clinical psychology doctoral students. In the Recovery to Practice Situational Analysis of 2011, the RAC set forth a vision for the training of clinical psychology doctoral students in Recovery-oriented service provision or systems-transformation (APA, 2011). The stated goals included preparing psychologists to engage in their work in a manner that embodies Recovery principles and facilitates the overall health and well-being of the people with whom they work (APA, 2011). Accordingly, the present study aimed to expand upon the existing knowledge by collecting information about the knowledge, attitudes, and skills of clinical psychology doctoral students and predoctoral interns regarding Recovery principles and the provision of Recovery-Oriented services.

# Chapter Three: Research Questions and Hypotheses

## Research Questions

1. Do doctoral students and predoctoral interns in APA-accredited clinical psychology programs and APA-accredited and APPIC-member internships have knowledge of Recovery principles and the provision of Recovery-oriented services?

2. Where in the curriculum do students in APA-accredited clinical psychology doctoral programs gain knowledge about Recovery principles and the provision of Recovery-oriented services? Are there specific courses dedicated to educating students about Recovery principles and the provision of Recovery-oriented services? Is training about Recovery principles and the provision of Recovery-oriented services embedded in other coursework? Are there other areas of training or supervision that impart knowledge of Recovery principles? Are there any barriers or problems that a participant perceives in learning about or practicing from a Recovery-oriented perspective?

3. What do APA-accredited and APPIC-member internships expect from interns, per intern self-report, regarding the practice of Recovery principles and the provision of Recovery-oriented services? Do interns report that Recovery is a part of the environment they encounter on internship?

4. Is there a relationship between interns' knowledge of Recovery principles, and the environmental expectations they report encountering while practicing in an APA-accredited or APPIC-member internship?

## Hypotheses

1. It is hypothesized that there will be a difference between students' and interns' knowledge of Recovery principles and the provision of Recovery-oriented services,

related to their stage in academic training in APA-accredited clinical psychology doctoral programs, and APA-accredited and APPIC-member internships, as measured by the RKI.

2. It is hypothesized that there will be a relationship between interns' knowledge of Recovery principles, as measured by the RKI, and the contextual expectations that they report encountering while practicing in an APA-accredited and APPIC-member internship, as measured by the RSA-P.

# Chapter Four: Method

## Overview

The present study gathered data regarding the knowledge, skills, and attitudes of doctoral students and interns in APA-accredited clinical psychology doctoral programs and APA-accredited and APPIC-member internships, towards Recovery principles and the provision of Recovery-oriented services. Doctoral students and interns were given access to brief online surveys to ascertain their knowledge, skills, and attitudes towards Recovery principles and Recovery-oriented services, and to identify where they obtained education, training, or exposure to these principles. Additionally, interns were given access to a survey to identify the training expectations that they encounter regarding Recovery principles and the provision of Recovery-oriented services while fulfilling the requirements of their internship.

## Design

The present study was conducted as a prospective, mixed methods correlational survey design, utilizing both quantitative and qualitative components. Two quantitative surveys, the Recovery Knowledge Inventory (RKI) (Bedregal, O'Connell & Davidson, 2006), and the Recovery Self-Assessment, Provider Version (RSA-P) (O'Connell, Tondora, Croog, Evans & Davidson, 2005) were administered via the online survey platform, Survey Monkey. The RKI and RSA-P are not copyrighted, and are made available for public use; however, it is recommended that permission be obtained when using the RSA-P (Campbell-Orde et al., 2005; O'Connell et al., 2005). Consequently, permission was obtained from the correspondence authors of these surveys to include their material in this limited distribution online format for the sole purposes of the present

study. Participants were prompted to fill out a brief qualitative survey that included questions about where they received training in Recovery principles and the provision of Recovery-oriented services, as well as their perceptions of the barriers to incorporating Recovery principles and creating Recovery-oriented systems of care.

**Participants**

For the present study, in an effort to obtain a representative sample of the population, student recruitment materials were sent to the Director of Clinical Training (or identified administrative staff) at every APA-accredited clinical psychology doctoral program, as identified on the APA-accredited doctoral programs website (APA, n.d.). Similarly, intern recruitment materials were sent to the Internship Training Director (or identified administrative staff) at every APA-accredited and APPIC-member site, as identified on the APPIC Directory Online. An online platform (www.SurveyMonkey.com) was used to gather the data from participants in both groups, spanning this large geographical area.

There were 237 APA-accredited clinical psychology doctoral programs (APA, n.d.) whose current (nonintern) students composed the first population of interest at the time of the present study. All matriculating students in APA-accredited programs who were not participating in a predoctoral internship were eligible for participation. A variety of factors impacted the size of the overall population, including the variable number of students admitted to each school per year; attrition rates per cohort, per year; and the duration of these programs (which varies between 4 and 8 years) (APA, n.d.). Thus, the response rate obtained in the current study was unclear.

**Inclusion and Exclusion Criteria**

Students who were actively enrolled in APA-accredited clinical psychology doctoral programs, both Ph.D. and Psy.D., were eligible for participation in the study. Current interns in APA-accredited or APPIC-member internships were eligible for participation in the study. Interns who were completing APA-accredited internships but who were not enrolled in an APA-accredited clinical psychology doctoral program were excluded from eligibility to participate in the study. Additionally, participants who completed the doctoral student survey and indicated therein that they are completing a predoctoral internship were excluded from the study.

In regard to missing item responses on the measures used in the current study, this decision-making process was approached with caution. Given the purpose of the study, to measure and draw conclusions pertaining to the knowledge of Recovery principles of doctoral students and predoctoral interns, we chose to exclude participants in the attempt to minimize the possibility of introducing error into the study's conclusions (Allison, 2001; Pigott, 2001). This decision-making process required that "assumptions about the nature of the data and about the reasons for the missing observations" be made, while attempting to minimize "the risk of obtaining biased and misleading results" (Pigott, 2001, p. 354). Accordingly, these considerations included the frequency of missing responses on a given item, because this could indicate whether or not the information was missing completely at random (MCAR), missing at random (MAR), or missing not at random (MNAR) (Allison, 2001; Pigott, 2001).

More specifically, when determining whether or not to utilize listwise deletion of a given participant, the author considered the overall number of participants in each

group who were missing data and the overall frequency of missing responses on a given item. On the RKI, 13 doctoral student participants were missing one or more responses. Four items on the RKI (items 10, 11, 16 and 18) were missed by two of these participants, and each other item that had a missed response, was missed by one participant. The low frequency of any single item being missed by multiple participants appeared to indicate that the information was MCAR, and thus listwise deletion was used, bringing the total number of eligible doctoral student participants from 202 to 189.

Regarding predoctoral interns, a total of 31 participants had missing responses to items on the Recovery Knowledge Inventory (RKI), the Recovery Self-Assessment: Provider Version (RSA-P), or both. Two items on the RKI (items 6 and 12) were missed by four of these participants; one item (11) was missed by three participants, and each other missing item was missed by one participant. On the RSA-P, two items (18 and 31) were missed by three participants; five items (7, 12, 14, 20, and 27) were missed by two participants, and each other item missing a response had been missed by one participant. Similarly, this group demonstrated a low frequency of any single item being missed by multiple participants, indicating that it is reasonable to conclude that these responses were also MCAR. Thus, listwise deletion was used in these cases, bringing the total number of eligible predoctoral interns from 216 to 185. It appeared that, given the low number of participants in each group who were missing responses to items on the measures, and the indication that these responses were MCAR, exclusion of these participants did not detract from the validity of the conclusions drawn from the present study, yet served to minimize the risk of drawing inaccurate or misleading conclusions.

## Recruitment

Hyperlinks to the Internet address for the student survey were distributed to Directors of Clinical Training at all APA-accredited clinical psychology doctoral programs via e-mail, requesting that they forward the hyperlink and information about the study to their actively enrolled students. Internship Training Directors at all APA-accredited and APPIC-member internship sites received the hyperlink to the Internet address for the intern survey via e-mail, requesting that they forward the hyperlink and information about the study to their current interns. Instructions in the body of the e-mail indicated to potential participants that their participation would be voluntary, anonymous, could be discontinued at any time, and would not influence their standing either in the school or in the internship setting.

## Measures

### Recovery Knowledge Inventory

The Recovery Knowledge Inventory (RKI; Bedregal et al., 2006) is a 20-item self-report measure designed to assess participants' knowledge and attitudes regarding Recovery-oriented practices (i.e. "Not everyone is capable of participating in the recovery process," and "The more a person complies with treatment, the more likely he or she is to recover."). Each item is measured, utilizing a five-point Likert scale (where 1 = Strongly Disagree and 5 = Strongly Agree). A higher score signifies a greater understanding of Recovery and Recovery-oriented services. The RKI is a commonly used method of assessing Recovery knowledge and attitudes of a variety of health care providers including mental health staff, nurses, and medical students (Cleary & Dowling, 2009; Crowe, Kelly, Pepper, McLennan, Deane, & Buckingham, 2013; Feeney, Jordan,

& McCarron, 2013; Meehan & Glover, 2009). It has been used to identify areas for training as well as for evaluating the effectiveness of training (Bedregal et al., 2006; Davidson et al., 2009). Additionally, the RKI was constructed to minimize face validity in an attempt to counteract social desirability effects, with the additional component of reverse scoring several items. The 20-items retained as part of the measure were calculated using a Principal Component Factor Analysis, with factors that had an eigenvalue of one or greater remaining. Four factor domains were retained (i.e. "Roles and Responsibilities in Recovery" (7 items; 17% of the variance), "Non-linearity of the Recovery Process" (6 items; 13% of the variance), "the Role of Self-Definition and Peers in Recovery" (5 items; 12% of the variance), and "Expectations regarding Recovery" (2 items; 8% of the variance)), which accounted for 50 percent of the overall variance in the measure. The eigenvalues of the domains were 4.96, 2.43, 1.35, and 1.21, respectively. Although lack of established psychometric properties remains a limitation to the use of the RKI (Johnson, 2010), it was concluded that the information obtained by this inventory directly addresses the nature and purpose of the present study, thus outweighing this limitation.

**Recovery Self-Assessment: Provider Version**

The Recovery Self-Assessment: Provider Version (RSA-P; O'Connell et al., 2005) is a 36-item self-report measure used to identify a participant's perception of the Recovery-orientation of the practices in a facility or agency, assessing practices in the work environment that contribute to a Recovery-oriented treatment environment. It utilizes a 5-point Likert scale (where 1 = Strongly Disagree and 5 = Strongly Agree), with the inclusion of a Not Applicable response option, in order to identify aspects

Recovery-oriented service provision within a system (Campbell-Orde et al., 2005; Davidson et al., 2009, O'Connell et al., 2005). The RSA is formatted in versions for practitioners, facility directors, consumers and family or support persons. The Practitioner version of the RSA (RSA-P) assesses providers' beliefs concerning the degree to which the program engages in practices that contribute to a Recovery-oriented treatment environment, related to systems transformation. It prompts participants to rate items, relative to whether or not they are consistent with Recovery principles and the provision of Recovery-oriented services (i.e., "Staff use a language of recovery (e.g. hope, high expectations, respect) in everyday conversations," and "The development of a person's leisure interests and hobbies is a primary focus of services.").

The RSA-P is constructed with face validity and may be prone to social desirability effects, making anonymous administration ideal. The 36 items retained as part of the measure were calculated using a Principal Component Factor Analysis, with factors that had an eigenvalue of one or greater remaining. Five factors were retained (i.e. "Life Goals" (11 items; 13.7% of the variance), "Involvement" (8 items; 13.3% of the variance), "Diversity of Treatment Options" (6 items; 9.8% of the variance), "Choice" (6 items; 8.9% of the variance), and "Individually-Tailored Services" (5 items; 8% of the variance)), which accounted for 53.8 percent of the variance in the measure. The internal consistency of these factors was .90, .87, .83, .76, and .76, respectively. Because this inventory directly assesses perceptions related to the purpose of the present study, this author chose to utilize this inventory despite the lack of established psychometric properties (Campbell-Orde et al., 2005; Johnson, 2010), which remains a limitation of the use of the RSA-P.

**Qualitative Survey Questions**

The qualitative portion of the survey differed between the student and intern versions of the survey. The student survey provided short answer questions regarding a participant's training in Recovery principles and the provision of Recovery-oriented services. The students were also asked to respond to brief demographic questions regarding the settings in which they have worked (i.e., Inpatient Psychiatric hospital, Outpatient, Community Mental Health Center, etc.), and their years of experience (i.e., 1, 2-4, 5-10, etc.). The intern survey asked participants to respond to short answer questions regarding their training in Recovery principles and the provision of Recovery-oriented services. The interns were also asked to respond to brief demographic questions regarding the settings in which they have worked (i.e., Inpatient Psychiatric hospital, Outpatient, Community Mental Health Center, etc.), their years of experience (i.e., 1, 2-4, 5-10, etc.), and their perceptions of their formal or informal Recovery training. Additionally, the intern survey included short answer questions regarding areas of their perceived weaknesses or barriers to incorporating Recovery into their practices; they were also asked about creating Recovery-oriented systems of care, and being prepared to fulfill required expectations while on internship. Responses were double-coded for concepts that were refined and clustered into theoretical constructs and overarching schemes that emerged; this was done by a team of two doctoral students with qualitative research experience and/or a research committee member. This double coding for themes and constructs served to assure that bias had not been introduced into the analysis and interpretation of the qualitative responses.

**Procedure**

1. Hyperlinks to the Internet address for the student survey were distributed to Directors of Clinical Training at all APA-accredited clinical psychology doctoral programs via e-mail, requesting that they forward the hyperlink and information about the study to their actively enrolled students. Internship Directors and Training Directors at all APA-accredited and APPIC-member internship sites received the hyperlink to the Internet address for the intern survey via e-mail, requesting that they forward the hyperlink and information about the study to their current interns.
2. Interested participants read the body of the forwarded e-mail that included a description of the study, requirements for participation, the voluntary nature of participation, and anonymity of participants. Informed consent was signified by clicking on the icon to continue the survey.
3. Survey questions were completed by participants, who were instructed that they were able terminate their participation in the study at any time by exiting out of the Survey Monkey Internet address.

# Chapter Five: Results

## Statistical Analysis

For Research question 1, descriptive statistics were calculated to describe the frequency distribution and central tendency of scores on the RKI for doctoral students and pre-doctoral interns. A Principal Components Analysis (PCA) was conducted for the RKI to determine if the factor structure of the RKI generalized to a sample comprising psychology doctoral students in APA-accredited training programs and interns in APA-accredited and APPIC-member internships. Factors identified in the PCA were compared with the original factors and item loadings identified by the original authors of the instrument (i.e., Roles and Responsibilities in Recovery, Non-linearity of the Recovery Process, the Role of Self-Definition and Peers in Recovery, and Expectations regarding Recovery). To test Hypothesis 1, independent samples t-tests were conducted to compare the overall means between doctoral students and pre-doctoral interns on the RKI.

Research question 2 was scored, using the grounded theory for qualitative analysis (Corbin & Strauss, 2007; Glaser & Strauss, 2012). This allowed participants to disclose experiences with, training in, problems and barriers to practicing from a Recovery-informed perspective. Responses were double-coded for concepts that were refined and clustered into theoretical constructs and overarching schemes that emerged; this was done by a team of two doctoral students with qualitative research experience and/or a research committee member. This double coding was utilized to cross-validate themes, patterns, and theoretical constructs that appeared evident in the research transcripts. The validation process provided a forum in which themes, patterns, and processes were discussed, confirmed, clarified, corrected, or reconfigured, based on each

team member's individual analysis of the research data. The validation team communicated through electronic mail, telephone conversations, and one meeting in which they discussed and determined the most significant areas of discussion within the findings.

To address Research question 3, descriptive statistics were calculated, and the frequency distribution and central tendency of scores for the RSA-P were reported. Finally, to address Research question 4 and Hypothesis 2, correlational analyses were conducted to examine whether or not a relationship existed between the two variables (i.e., knowledge as measured by the RKI, and training and practice expectations as measured by the RSA-P), and if a relationship did exist, the extent to which they co-varied. A scatterplot was calculated to depict whether or not a linear relationship was present between the two variables. This scatterplot indicated that no relationship existed between intern Recovery knowledge and the expectations that they encountered during their internships to practice in a Recovery-oriented manner.

**Descriptive Statistics**

A total of 366 participants initiated participation in the doctoral student survey. Of the 366 initiated surveys, 149 were incomplete and were excluded from the sample (109 surveys were left blank; 27 surveys included demographic information about the participant without the completion of the Recovery Knowledge Inventory (RKI), and 13 surveys had missing responses on the RKI). Thirteen respondents' scores were excluded because they missed more than 10% of the items on the RKI. The missed items were missed at random; few items were missed by more than 1 participant. Of these 217 eligible surveys, 28 participants indicated that they are currently completing internship

training, and were thus ineligible and were excluded from the doctoral student sample. The remaining total number of student participants was 189. Additionally, 173 of these student participants provided qualitative responses.

Predoctoral interns in APA-accredited and APPIC-member internships composed the second population of interest for this study. Spanning across two internship-training years, 2012-13 and 2013-14, an overall total of 6,478 internship positions were fulfilled (3,152 and 3,326, respectively) (APPIC, n.d.). Of the possible intern participants, 377 initiated participation in the intern survey. Of the 377 initiated surveys, 192 were incomplete and excluded from the sample (93 surveys were left blank; 39 surveys included demographic information about the participant without the completion of the RKI and the Recovery Self-Assessment: Provider Version (RSA-P); 29 surveys provided completed demographic information, and a completed RKI without the completion of the RSA-P, and 31 surveys had missing responses on the RKI and RSA-Ps). In regard to missing item responses, due to the low frequency of any single item being missed by multiple participants, indicating that the information was MCAR, these 31 participants were also excluded, using listwise deletion. The resulting total number of intern participants was 185, representing an overall response rate of 2.85 %. Additionally, 175 of these intern participants provided qualitative responses.

**Preliminary Analyses**

Preliminary analyses were conducted to examine the characteristics of the sample to determine whether or not there were significant differences between the two groups. Of the overall sample ($n$ = 374), doctoral students composed 50.53 percent ($n$ = 189) of the total sample recruited, and interns composed 49.47 percent ($n$ = 185). Additionally,

females were overrepresented both in the pre-doctoral intern and in doctoral student groups ($n$ = 147; 77.77%; $n$ = 147; 79.46%), compared with males ($n$ = 36; 19.46%; $n$ = 41; 21.69%) and persons identifying as transgender or other genders ($n$ = 2; 1.08%; $n$ = 1; 0.53%), respectively. Persons in age groups 36 and older were underrepresented both in the pre-doctoral intern and in doctoral student groups ($n$ = 21; 11.35%; $n$ = 27; 14.29%), respectively, as well as those living in Hawaii ($n$ = 2; 1.08%; $n$ = 4; 2.12%) and Canada ($n$ = 9; 4.86%; $n$ = 2; 1.06%), respectively.

Chi-square analyses were conducted to examine differences between the groups according to these demographic characteristics. Significant differences were found between doctoral students and pre-doctoral interns when considered by age range; $x^2(5, n = 374) = 67.76$, $p = .00$, Cramer's V = .43. This indicates that a relationship existed between doctoral trainee status (i.e., student or intern) and age. Significant differences were found between doctoral students and pre-doctoral interns when considered by the highest degree previously earned; $x^2(2, n = 374) = 30.94$, $p = .00$, Cramer's V = .29, indicating a relationship between doctoral trainee status and highest degree previously earned. Additionally, significant differences were also found between doctoral students and pre-doctoral interns when considered by location; $x^2(6, n = 374) = 14.36$, $p = .03$, Cramer's V = .20. This indicated that a relationship existed between doctoral trainee status and location. Caution is urged when interpreting the relationships found between these variables because expected values for individual cells did not meet minimum criteria. No significant results were found between the groups in regard to gender or current degree in pursuit.

**Results of Primary Research Questions and Hypotheses**

Regarding Research question 1 ("Do doctoral students and predoctoral interns in APA-accredited clinical psychology programs and APA-accredited and APPIC-member internships have knowledge of Recovery principles and the provision of Recovery-oriented services?"), an examination of the overall mean scores on the RKI found that doctoral students ($n$ = 189) had a mean of 3.50, with a standard deviation of .38, ranging from 2.60 to 4.90. Interns ($n$ = 185) had a mean of 3.59 on the RKI, with a standard deviation of .37, ranging from 2.55 to 4.75 (see Figures 1 & 2 for distribution of means).

Regarding Hypothesis 1, which stated that there would be a significant difference between doctoral student and pre-doctoral intern recovery knowledge, an independent samples t-test was conducted to compare the overall mean scores of the RKI for both groups. The alpha level for the present study was set at $p$ = .05. Consistent with this hypothesis, results indicated that there was a significant difference between doctoral students (M = 3.50, SD = .38) and pre-doctoral interns (M = 3.59, SD = .37); $t(372)$ = 2.36, $p$ = .02. Although this difference was statistically significant, it was not clinically meaningful in regard to the practical differences in knowledge between the groups.

Regarding Research question 1, the 20 items of the RKI were examined for factorability. The Kaiser-Meyer-Olkin measure of sampling adequacy met recommended levels (.82) and results indicated a significant finding for the Bartlett's Test of Sphericity ($x^2$ (190) = 1144.697, $p < .001$). All of the diagonals of the anti-image correlation matrix were above .5; therefore, each item was included in the analysis. All of the communalities of the items were above .3, indicating that a proportion of the variance in each item was shared among components.

A Principal Components Analysis (PCA) was conducted in order to ascertain if the principal components of the RKI identified by the original authors, who sampled, "staff… who provide mental health and addiction services", within nine agencies in the state of Connecticut, generalize to the current sample of doctoral students and interns. The authors of the RKI identified four main components in their original analysis of the RKI (Bedregal et al., 2006). These included "Roles and Responsibilities in Recovery;" "Non-linearity of the Recovery Process;" "the Role of Self-Definition and Peers in Recovery;" and "Expectations regarding Recovery." A comparison between the items retained in the original and present studies are contained in Table 4.

For the present study, criteria for retaining components included eigenvalues of one or greater, and the overall percentage of variance accounted for by the components. Additionally, items with component loadings of .3 and above were retained for each specific component. A total of five components were retained; the first contributed to 20.41% of the overall variance with an eigenvalue of 4.08. The second component contributed 8.92%, followed by the third component which contributed 6.58%, the fourth component which contributed 6.18%, and the fifth component which contributed 5.12% of the variance (with eigenvalues of 1.79, 1.32, 1.24, and 1.03, respectively). These five components cumulatively represented 47.21% of the overall variance of the RKI.

Using a Varimax rotation, five items were primarily loaded onto Component 1; 5 (.58), 11 (.35), 13 (.72), 14 (.45), and 17 (.58). This included items such as, "Not everyone is capable of actively participating in the recovery process," and "It is often harmful to have too high of expectations for clients," which had the strongest primary loading, and was considered to be similar to the component originally identified by the

authors as “Expectations regarding Recovery,” (Bedregal et al., 2006). Component 2 retained three of the items originally identified by the authors in “The Role of Self-Definition and Peers in Recovery.” This included items: 8 (.73), 12 (.67), and 20 (.55), with, “The pursuit of hobbies and leisure activities is important for recovery,” as the strongest primary loading.

There were three items retained for Component 3; 4 (.67), 16 (.70), and 19 (.59). These items stated, “Symptom management is the first step towards recovery from mental illness/substance abuse”; “Symptom reduction is an essential component of recovery,” and “The more a person complies with treatment, the more likely he/she is to recover.” For the present study, this content was labeled as, “the Role of Symptoms and Treatment in the Overall Recovery Process,” which was not originally discussed as a distinct component. It appears that this may be related to the original component, “Non-linearity of the Recovery Process” (Bedregal et al., 2006).

Additionally, there were two items loaded onto Component 4: item 6 (.54), “People with mental illness/substance abuse should not be burdened with the responsibilities of everyday life,” and item 9 (.81), “It is the responsibility of professionals to protect their clients against possible failures and disappointments.” This component was considered to be similar to the component labeled “Roles and Responsibilities in Recovery” by the authors (Bedregal et al., 2006). Component 5 consisted of one item, 10 (.45), which stated, “Only people who are clinically stable should be involved in making decisions about their care.” Six items were cross-loaded into different components, resulting in their not being included in one of the main components.

To measure the internal consistency of the components identified in this analysis of the RKI, Cronbach's alpha was derived. Results indicated that alpha levels for each specific component were below .6, indicating poor reliability within these components (.58, .50, .52, .42). However, the overall measure had a Cronbach's alpha of .78, indicating good internal consistency of the RKI as a whole. Thus, despite the poor reliability of the components composing the RKI derived from the present sample, the good reliability of the overall RKI indicates that the RKI is reliably measuring inter-related aspects recovery knowledge, demonstrating its appropriate use in the present study as well as its ability to draw accurate conclusions from these results.

Research questions 3 and 4 were then examined. As previously noted, pre-doctoral interns (n = 185) had a mean of 3.59 on the RKI, with a standard deviation of .37, ranging from 2.55 to 4.75 (See Figure 2). On the Recovery Self-Assessment: Provider Version (RSA-P), interns had a mean summary score of 3.51 with a standard deviation of .62, ranging from .00 to 4.97 (See Figure 3). A correlation between RSA-P and PKI was found to be none significant. Thus the null hypothesis, stating that a relationship did not exist between the two variables was retained. A scatterplot indicated that no relationship was present between the two variables (See Figure 4) and that numerous outlying variables were present in the sample.

Qualitative questions were included in the present study to address research question 2, pertaining to areas where and in what manner doctoral trainees are imparted recovery knowledge; individual perspectives regarding the provision of recovery-oriented services, and perceived barriers to the implementation of recovery-oriented services. Responses were coded for concepts that were refined and clustered into theoretical

constructs and overarching schemes, utilizing the grounded theory for qualitative analysis (Glaser & Strauss, 2012; Kazdin, 2003). Of the 374 participants included in the study, 175 interns and 173 doctoral students provided a response to these questions.

Upon coding the doctoral student qualitative responses, 17 concepts emerged from the data (See Table 5). These concepts were clustered into four theoretical constructs; Knowledge and Understanding about Recovery Principles; Recovery-oriented Approaches to Working with Individuals; Positive Attitudes Towards Individuals, and Systems-level Factors. The four theoretical constructs comprised two overarching schemes; Personal, Individual, or Small-group-level Dynamics; and Systems-level Dynamics.

Of the doctoral students who provided qualitative responses (n = 173), 84 participants (48.55%) indicated a lack of knowledge, understanding, awareness, or exposure to information regarding the provision of recovery-oriented services, including a lack of formal education or training. One participant stated, “lack of familiarity regarding "recovery-oriented services" is probably the largest barrier,” and another noted, “A barrier to using this model is that it has been rarely discussed in my classes.” Furthermore, one student declared, “I am surprised that it receives barely any attention in my current doctoral program,” with another concluding, “I don't feel as though I have received thorough training.” One described a need for “not only [providing] training to future clinicians, but to entire institutions from the top-down.”

A group of doctoral students (n = 35, 20.23%) provided responses that demonstrated or specifically mentioned problems related to misunderstandings, regarding the provision of recovery-oriented services. These responses included describing

"recovery" as relating exclusively to the 12-step model and addictions; occasionally noting concerns about adopting recovery-oriented practices such as: "Recovery, in various forms, have been a part of substance abuse treatment, yet it has not been very efficacious." Some responses demonstrated a belief that clinicians are responsible for limiting client goal setting, stating, "If goals are set that are beyond the client's reach, he or she is set up for failure;" and that "Focusing too much on recovery could set them up for failure when they return to such a situation feeling recovered and then relapse." Additionally, some verbalized misconceptions about recovery, noting that it is not a helpful approach "…in the case of psychosis or substance abuse where the individual does not wish to change," or in working with "clients [who] are sometimes manipulative and unmotivated to change." Participants also described problems with misunderstanding recovery involving "…the fact that a recovery based model may look different depending on the sub discipline," contributing to "a lack of uniform language and application."

However, there was also a subset of doctoral students (n = 35, 20.23%) who indicated that they value or believe in recovery principles and recovery-oriented services, describing them as "beneficial," "an excellent concept," and "a good outlook to have, [that] can certainly inform all aspects of treatment." One individual stated, "I highly respect and value Recovery-oriented services," and another declared, "Recovery-oriented services should be the standard for practice."

Another salient concept within the responses (n = 33, 19.08%) was related to funding barriers, institutional barriers, and an overall lack of resources. These responses included difficulties in funding programs, limited resources within an agency, difficulties instituting change within a system, and difficulty facilitating client access to services.

Some made mention of barriers related to the "culture" of their agency, indicating resistance to adopting recovery-oriented practices involving, "historical views on mental illness [and] substance abuse [that] inhibits professionals from changing their mindset." Additionally, a participant described difficulties related to "non-cohesive treatment teams or treatments provided by multiple practitioners who are not in communication, and treatment providers who do not listen." Conversely, one participant remarked, "The main barrier that I see, based on my own experience at work and practicum, is that this is one of the things that insurance companies, accrediting organizations, etc. like to push on everyone without actually understanding what it means."

Upon coding the pre-doctoral interns' qualitative responses, 17 concepts emerged from the data (See Table 6). These concepts were clustered into five theoretical constructs; Knowledge and Understanding about Recovery Principles; Recovery-oriented Approaches to Working with Individuals; Positive Attitudes Towards Individuals; Provider Concerns, and Negative Provider Attitudes/Perceptions; and Systems-level Factors. The five theoretical constructs comprised two overarching schemes; Personal, Individual, or Small-group-level Dynamics; and Systems-level Dynamics.

Of the pre-doctoral interns who provided qualitative responses (n = 175), 68 participants (38.90%) indicated their own lack of knowledge, awareness or exposure to information regarding the provision of recovery-oriented services, or as a barrier in the field of psychology, including a lack of formal education or training. Several participants indicated, "This is the first time I've heard the phrase 'Recovery-oriented services'." One participant noted, "We don't really focus on "recovery" at any of the places I have worked," and another stated, "In my internship agency, this is not the focus." Some

interns reported, “I feel like I never received formal… education and thus rarely emphasize that aspect of treatment, perhaps out of ignorance,” describing that they “do not think there is much training… about them.” One specifically noted, “I do not know anything about providing Recovery-oriented services and would not feel competent doing so.” Additionally, one verbalized a desire for literature and training that involves “specifying which aspects of recovery-oriented services may or may not be applicable to a work with a given population.”

An additional 30 participants (17.14%) verbalized having a misunderstanding or misinterpretation of recovery principles and/or their integration into clinical practice. As in the doctoral student sample, these responses also included describing “recovery” as relating exclusively to the 12-step model and addictions, with one intern declaring, “I think that Recovery-oriented services are often mistakenly considered synonymous with "substance abuse/dependence" treatment.” Some individuals verbalized beliefs that the recovery process is not compatible with the experience of relapses, noting that it is difficult to “think positively about the likelihood of patient success due to high relapse rates.” One person indicated frustration at this perceived incompatibility, stating, “I think the recovery programs are not adequate. With such a high rate of relapse and many, many visits to recovery programs, something is missing.” Some misunderstandings about Recovery reflected a perception that it is not a holistic approach, and “may not take into account other factors such as family environment, genetic factors, [and] cultural differences.” Furthermore, one intern verbalized a belief that EBPs do not promote recovery, stating, “The EBP/CBT-bias in healthcare promotes a symptom-reduction approach that misses the rest of the human being.”

Some misunderstandings were presented as concerns, as well as negative provider attitudes or perceptions, with 12.57 % of interns providing these responses (n = 22). Some were concerned about risk situations; one noted that in these situations recovery is "difficult" to focus on because "reducing suicidal/aggressive thoughts and actions is the priority," and another emphasized the need to "not see [clients] as more competent than they are." One intern claimed that, "In order for a client to be fully healed, their substance abuse issues need to be stabilized." Several verbalized a perception that recovery is not applicable to serious mental illness, with one person stating that "severe and persistent mental illness… tends to interfere with forward progression in recovery," and another describing that recovery principles are "not always helpful with the most severe patients." Several participants discussed the idea that recovery is not possible, and may be harmful or disappointing for clients, with one individual noting, "Not all recovery-oriented goals are realistic or compassionate to expect from some patients," and another concluding "For some (individuals with personality disorders, PTSD) the term 'recovery' is misleading and instead providers should focus on symptom reduction."

Negative provider attitudes, including factors such as "burn out" and "cynicism," were cited as prevalent barriers. A participant noted, "The biggest barrier to providing these services is the attitude of the providers, [who] will continue to minimize patients' needs and concerns," and another verbalized that "Many psychologists view themselves as experts on the client's problems." This was seen by some as disconcerting, indicating that "Staff and treatment teams often seem to discount the perspective and goals of individuals who have been unable to take care of themselves in the community," and that "There is a lack of respect for mentally ill people and a disbelief in their ability to recover

despite growing evidence to the contrary." Some related negative provider attitudes to power dynamics, concluding "Most providers have been raised in… systems that exist to exert power over others, and thus approach their client work from this perspective."

Conversely, nearly a third of pre-doctoral interns (n = 53, 30.29%) indicated that they value or believe in recovery principles and recovery-oriented services, describing them as "important," "very beneficial," and "ideal." Several participants stated that they "strongly believe" in Recovery-oriented services. One individual said that they are "paramount to good treatment," and another declared that they can be "very helpful in many settings." Ultimately, several concluded that recovery principles "should be integrated into everyone's work."

Similar to doctoral students, one-fourth of pre-doctoral interns (n = 44, 25.14%) verbalized concerns related to funding barriers, institutional and systemic barriers, problems with access, and an overall lack of resources. These responses also included difficulties in funding programs, limited resources within an agency, difficulties instituting change within a system, and difficulty facilitating client access to services. Interns cited "bureaucratic red tape" and "managed care" as contributing to difficulties in providing Recovery-oriented services. One person shared, "Hospitals are constantly facing budget cuts which makes it more and more difficult to deliver these services," and another reported that these services cannot be provided in an "over-extended clinic" because it "requires too much time of the work week dedicated to multidisciplinary meetings and case management services." One intern saw the problem as, "Certain settings do not allow for the flexibility of effectively implementing recovery services," proposing the solution that, "If more psychologists held higher level administrative

positions and not business men or medical doctors that adhere stringently to the disease model, then implementation of recovery services should be easier to implement."

Additionally, some individuals made mention of barriers related to other systems-level factors. Several participants discussed problems with implementation within a setting, noting, "Our hospital is trying to incorporate the recovery model, but there is a lot of resistance to it from staff who have worked here a long time," and attributing some resistance to "paternalism among staff." Some framed change as a matter of time, describing that, "When implementing change within organizations… it takes time to get everyone on board and up-to-date." Some also spoke to the impact that society and/or public opinion have on the provision of mental health services, including "publicity which emphasize[s] managing the 'dangers' and 'cost' of those with mental illness and substance abuse… rather than recovery."

# Chapter Six: Discussion

As mental health recovery continues to be seen as a social justice issue, and becomes more of an expectation of quality service delivery in behavioral health treatment programs (Anthony, 2004; Davidson et al., 2007, 2009; Evans, 2011; Farkas et al., 2005; White, 2008), it is becoming increasingly important that clinical psychology doctoral students experience a transformation in their personal knowledge, skills, and attitudes towards Recovery. Prior to the present study, there had not been research conducted measuring the knowledge and attitudes of clinical psychology doctoral students and pre-doctoral interns regarding Recovery principles and the provision of Recovery-oriented services. Additionally, there had not been an investigation of the perceptions of pre-doctoral interns concerning the expectations of providing Recovery-oriented services while completing their internship. Furthermore, there was no existing research pertaining to a place in their doctoral curriculum in which Recovery knowledge is imparted to doctoral students in APA-accredited clinical psychology programs. Clinical psychology doctoral students represent future leaders and advocates for the rights of those who experience mental health conditions, and these students may have the capacity to play critical roles in Recovery-oriented systems transformation.

## Summary and Implications of Findings

The present study sought to identify what doctoral students and pre-doctoral interns knew about Recovery, as measured by the Recovery Knowledge Inventory (RKI). The RKI uses a five point scale wherein inaccurate understandings of Recovery constructs are indicated by a score of 0 to 2.99, with 3 representing a neutral stance on a given construct, and scores approaching 5 indicating increasing levels of Recovery

knowledge. Findings indicated that the average doctoral student's knowledge of Recovery constructs was greater than neutral with a mean of 3.50, remaining however, 1.5 points below the highest possible score of Recovery knowledge as measured by the RKI. Compared with doctoral students' scores, pre-doctoral interns were found to have a similar level of understanding, represented by a mean of 3.59. Although cut-off scores have not been established to quantify the level of Recovery knowledge that a particular RKI score indicates, mean scores that are slightly greater than neutral provide evidence that further education and training is required for individuals to be considered knowledgeable about Recovery principles.

Further support for this inference was substantiated because both students and interns demonstrated some inaccurate understandings and a need for further training in specific content areas, as evidenced by mean scores below neutral (3) on individual items. These gaps in knowledge were seen in areas such as Items 16, "Symptom reduction is an essential component of recovery" (M = 2.14; M = 2.48, respectively), and 14, "There is little that professionals can do to help a person recover if he/she is not ready to accept his/her illness/condition or need for treatment" (M = 2.88; M = 3.14, respectively).

When prompted for additional information via qualitative responses, both groups reflected some critical misunderstandings about Recovery, describing it as relating exclusively to the 12-step model and addictions. Furthermore, some responses suggested a lack of awareness of current research regarding Recovery-oriented approaches. Rather participants expressed beliefs that it has "not been very efficacious," and noting that it is not a helpful approach "…in the case of psychosis or substance abuse where the

individual does not wish to change," or in working with "clients [who] are sometimes manipulative and unmotivated to change." Nearly one-fifth of predoctoral interns verbalized misinterpretations of Recovery principles and/or their integration into clinical practice, including describing that the Recovery process is not compatible with the experience of relapses, that it is not a holistic approach, and that it does not take individual and cultural differences into account.

Both doctoral students and predoctoral interns expressed concerns that may influence their approaches to working with individuals. These concerns included situations during which there is risk of suicidal or aggressive behaviors, potential substance abuse relapse, and acute episodes of psychosis or other serious mental illness, despite current literature advocating for the potential benefits of utilizing Recovery-oriented approaches (Anthony, 2000, 2004; Anthony et al., 2002; Davidson et al., 2009; Evans, 2011; Frese et al., 2001). These misunderstandings and concerns may indicate that doctoral students believe that Recovery principles cannot be incorporated into practices across settings, and that experiencing Recovery is not possible for all individuals. Results suggest that these study participants may not understand that Recovery-oriented approaches emphasize breaking the cycles of disempowerment, stigma, hopelessness, and discouragement that often contribute to rehospitalization and alienation from "living a satisfying, hopeful, and contributing life even with limitations caused by the illness" (Anthony, 1993, p. 17).

Finally, some responses demonstrated a belief that clinicians are responsible for limiting client goal setting, stating "if goals are set that are beyond the client's reach, he or she is set up for failure," and that "focusing too much on recovery could set them up

for failure when they return to such a situation feeling recovered and then relapse." Alternatively, some practicing psychologists involved in training clinicians in the provision of Recovery-oriented services have asserted that limiting individual goal-setting requires the clinician to make assumptions about the individual's current and future capabilities (Brinen, A.P.; personal communication, Sept 18, 2013; and March 6, 2014). The former stance shifts the emphasis in treatment away from engagement, collaboration, maintenance of a working alliance, and pursuit of meaningful, valued goals, leaving the clinician in the role of "dream crusher" (Brinen, A.P.; personal communication, Sept 18, 2013; and March 6, 2014).

Upon examining the RKI for factorability, the present study found five components which cumulatively represented 47.21% of the overall variance of the RKI; however, alpha levels for each of these factors was below .6, demonstrating poor internal consistency (.58, .50, .52, .42). The poor reliability of the factors indicated that the current sample did not identify certain aspects of Recovery as being strongly related and contributing to a specific component of Recovery. For example, although items such as, "Not everyone is capable of actively participating in the recovery process," and "It is often harmful to have too high of expectations for clients," were seen by some as related concepts, this was not consistently reported. Additionally, six items were cross-loaded into different factor domains, indicative of participants' relating these items to multiple concepts within the overall construct of Recovery. This was evident despite good internal consistency for the measure as a whole, with an alpha of .78, demonstrating that the RKI did reliably assess Recovery as an overall construct. Essentially, these findings

indicate that the current sample may not have demonstrated a clear conceptualization of the interrelated concepts that compose the global notion of Recovery.

Despite many similarities, the present study also addressed the differences in Recovery knowledge between doctoral students and predoctoral interns. Specifically, it was hypothesized that there would be a significant difference between what doctoral students and predoctoral interns know about Recovery. The basis for this hypothesis was related to the assumption that predoctoral interns would have been engaged in clinical psychology training for a more intensive and longer duration of post academic preparation time, may have exhibited proficiencies in a greater variety of areas, and would have already demonstrated the competencies that allowed for their progression through the course of doctoral training. This study found that there was a significant difference between the levels of knowledge of predoctoral interns and doctoral students, as measured by the RKI ($t(372) = 2.36$, $p = .02$.). Although indicating that interns knew more than students about the overall content that composes Recovery knowledge, this did not coincide with either group demonstrating knowledge that approximated the highest levels of accuracy ($M = 3.50$, $SD = .38$; $M = 3.59$, $SD = .37$, respectively).

In relation to this difference, the present study sought to identify where clinical psychology trainees gain knowledge about the principles and constructs that compose Recovery. Facilitating the education of clinical psychology doctoral trainees involves establishing foundational knowledge, skills, and attitudes upon which further competencies are built throughout the training process, culminating in the trainee being considered ready to graduate and enter into professional practice (APA, 2007, 2012; Fouad et al., 2009; NCSPP, 2007). Measuring competency in a paradigm such as

Recovery involves measuring acquired knowledge that also encompasses particular attitudes, and skill components (Oades et al., 2005). Qualitative responses provided by both doctoral students and interns revealed that numerous participants (48.55% and 38.90%, respectively) verbalized some lack of knowledge, understanding, awareness, or exposure to information regarding Recovery principles and the provision of Recovery-oriented services, including a lack of formal education or training in Recovery-informed principles in their doctoral curriculum. From a competency-building perspective, the results of the current study demonstrated that both doctoral students and predoctoral interns have yet to gain the foundational knowledge that would allow them to demonstrate competency in these content areas, as exhibited in RKI scores and verbalized misunderstandings of Recovery principles.

Some participants in this study identified a lack of knowledge and exposure as a problem, noting “A barrier to using this model is that it has been rarely discussed in my classes” and further stating, “I am surprised that it receives barely any attention in my current doctoral program.” Several participants indicated, “This is the first time I've heard the phrase ‘Recovery-oriented services’,” with one stating “I feel like I never received formal… education and thus rarely emphasize that aspect of treatment, perhaps out of ignorance.” One specifically noted, “I do not know anything about providing Recovery-oriented services and would not feel competent doing so.” Participants described this as the case both in school and internship settings, with one stating, “In my internship agency, this is not the focus,” and another concluding, “I don't feel as though I have received thorough training.” Participants in the present study did not verbalize having engaged in formal coursework related to Recovery.

Despite a lack of formalized training in Recovery principles, there were numerous doctoral students (*n* = 35, 20.23%) and predoctoral interns (*n* = 53, 30.29%) who indicated that they value or believe in Recovery principles and Recovery-oriented services. These participants described Recovery principles as "important," "beneficial," and "ideal," with several stating that they "strongly believe" in Recovery-oriented services. Several noted that this approach is "paramount to good treatment," and can be "very helpful in many settings." Ultimately, one concluded, "Recovery-oriented services should be the standard for practice" with another declaring that they "should be integrated into everyone's work." These reported opinions illustrate that many of the doctoral trainees who are aware of Recovery principles view them favorably and would potentially welcome or pursue formalized training if it were made available in academic curricula or internship didactic training.

The perceptions of predoctoral interns regarding the Recovery-orientation of internship training environments were also evaluated in the present study. Results indicated that interns had a mean score of 3.51, signifying that their self-perceived Recovery-oriented service provision was limited. However, there are a numerous variables that may influence these findings. Specifically, institutional variables that may be related to the nature of specific internship settings (i.e., university counseling centers, forensic settings, inpatient psychiatric hospitals, outpatient psychiatric departments) may interfere with the ability to compare Recovery implementation directly across internship settings. The nature and scope of the specific tasks required of interns (e.g., providing individual therapy, supervising practicum students, writing assessment reports), the flexibility allowed within a given environment, the availability of, and interaction with,

supervisors and other staff, and the variety of expectations regarding intern performance and development may impact the way in which Recovery principles are integrated into the practices of a particular setting. Such aspects may have contributed to a participant's perception that specific facets of Recovery-oriented service provision are not applicable to his or her setting; this may have affected his or her overall mean score. Thus, without further information about these differences, inferences drawn from the RSA-P are speculative in nature.

Additionally, the use of the RSA-P may not have provided a comprehensive picture of the training environment because it did not assess for additional factors that may influence the perceived Recovery-orientation of a site (e.g., the presence of peer support programs, use of electronic medical records, transportation and access issues within the communities at large). Similarly, it must also be considered that scores may have reflected variance within the internship-training environment in regard to the attitudes of individual staff members and the types of practices that were considered standard within the setting. Systems-level factors have been identified as a significant barrier within the healthcare system, with concern expressed within the New Freedom Commission on Mental Health (NFC) about "unfair treatment limitations," "financial requirements placed on mental health benefits in private health insurance," and "a fragmented mental health service delivery system" that is difficult to understand and navigate (DHHS, 2003). The NFC findings concurred with the Institute of Medicine (IOM), relating the underutilization of services to the varying location of services, cost and transportation issues, and other practical barriers, resulting in gaps in service coverage that decrease the quality of mental health services (DHHS, 2003; IOM, 2001). One could conclude that, in

the present study, participants had perhaps a greater insight than overall mean scores would surmise because participants frequently recognized these issues, with many (*n* = 77, 22.13%) citing funding, access, and other institutional variables as the biggest barriers to implementing Recovery-oriented approaches within their internship settings. Incorporating Recovery principles into an organization or community involves addressing barriers within the entire process of mental health treatment, engagement, access, care, retention, and follow-up (Evans, 2011; Farkas et al., 2005; White, 2008). Although it appears that psychologists have an opportunity to play a key role in addressing these barriers within the healthcare system, future psychologists may not be prepared to do so most effectively without participating in training in the implementation of Recovery-oriented approaches.

Last, the current study found that no relationship was present between the Recovery knowledge of a predoctoral intern and his or her perception of the Recovery-orientation of his or her internship training setting. There appear to be a host of potentially confounding variables that may be influencing this relationship. Specifically, predoctoral interns have control over where they apply to be considered for an internship position; however, they hold no direct control over the outcome of the match process. Additionally, it may be difficult for intern applicants to assess the Recovery-orientation of an internship site through available informational brochures or during an interview, making it difficult to gauge accurately until after they have begun training in the setting. An intern applicant who is highly knowledgeable about Recovery may match to a setting that is not highly Recovery-oriented. Rather, other factors may influence the decisions of intern applicants both when applying to and when ranking sites. These may include the

geographic location, target population, and nature of the training site (e.g., inpatient psychiatric hospital, outpatient psychiatric department, forensic setting), among others. Although the present study did not consider these variables when hypothesizing a relationship between predoctoral intern knowledge and perceived Recovery-orientation of their internship setting, these may be targets for future study.

As indicated by the findings of the present study, it may be helpful in the future that a standardized curriculum be developed and disseminated with potential to assist in training clinical psychology doctoral students and predoctoral interns in Recovery principles and the provision of Recovery-oriented services. Although some participants were aware of the need for training, identifying this as a weakness of their graduate education, others verbalized beliefs and opinions that reflected inaccurate understandings of Recovery principles with seemingly little awareness of their errors. Many students and interns reported little formal exposure to Recovery principles, which may provide insight into their slightly greater than neutral Recovery knowledge scores, coinciding with its relative absence from their graduate training curriculum and substantiating the assertion that further education and training is required for individuals to be considered knowledgeable about Recovery principles. In light of the growing body of literature signifying the benefits of incorporating Recovery into practice (Anthony, 2000, 2004; Anthony et al., 2002; Davidson et al., 2009; Evans, 2011; Frese et al., 2001), it may be beneficial that APA-accredited doctoral programs engage in conversations regarding the education of clinical psychology doctoral trainees in Recovery principles, which may help prepare them for their future roles in professional practice.

**Limitations**

Potential limitations to the present study related to methods of recruitment, the construction and ordering of the survey, properties of the measures included in the study, as well as the scope of the study. For the present study, online recruitment methods were used as the means of data collection. Literature suggests that response rates for this method of recruitment tend to be lower than those of mail-in surveys, although it appears that a variety of factors, including incentives for participation, may influence these outcomes (Fricker & Schonlau, 2002). For the present study, engaging in a large-scale mail-in survey with the addition of incentives for participation was cost prohibitive. Although the potential for a low response rate was an important consideration, the benefits of recruiting on a national level were considered to outweigh this limitation. There may also be a variety of factors that influenced which members of the overall population chose to participate in the survey. Self-selection biases may include perceptions regarding the personal relevance or irrelevance of Recovery, previously held beliefs about Recovery, a lack of interest in Recovery, time limitations, or other factors which may serve to limit the generalizability of this study's findings to the overall population of clinical psychology doctoral students and predoctoral interns.

There are several limitations related to the construction of the survey used in the present study. In regard to the ordinality of the questions presented in the survey, a lengthy demographics section preceded the Recovery-focused measures. It could be possible that the demographics section was perceived as cumbersome, contributing to the overall attrition from the study, perhaps specifically those participants who did not complete the measure(s) after completing the demographics portion. Additionally, the

time required in completing the survey, and the lack of incentive for doing so, may have contributed to the number of incomplete or empty surveys.

There are several limitations related to the measures that were chosen for use in this study, the RKI and RSA-P (Bedregal et al., 2006; O'Connell et al., 2005). These measures were chosen because of their content and focus of measurement, the internal consistency reported in the publication of these measures, as well as their widespread use throughout the recovery literature. However, there is a lack of published studies focused on psychometric properties, including reliability, normative data, and cut-off scores, available for these measures (Campbell-Orde et al., 2005; Johnson, 2010). It is possible that the results of the present study may be affected by validity or reliability factors within these measures. In addition, the face validity of many of the items in these measures may have served to cue or prompt participants regarding an expected answer, potentially introducing social desirability biases. In an effort to maximize response rates, the surveys were administered in a different format (through the online platform of Survey Monkey) than had previously been implemented; thus it is unclear whether or not this contributed to the discrepancies seen between the present study and those conducted by the original authors.

There were additional limitations regarding the scope and breadth of information gathered in the present study. Numerous variables may have influenced the outcomes of the RSA-P scores. As previously mentioned, institutional variables related to the nature of specific internship settings and scope of the specific tasks required of interns at these sites, as well as other factors that may influence the perceived Recovery-orientation of a site, may have interfered with the ability to compare Recovery implementation directly

across internship settings. The lack of information regarding these additional aspects of training sites serves as a limitation that may have affected RSA-P scores. The author of the present study did not account for certain predoctoral intern variables, such as the lack of control over the outcome of the match process and individual intern applicant priorities and decision-making when applying to, and ranking, potential internship sites. In another effort to maximize response rates, the survey was kept brief and the qualitative portion of the study was abbreviated. This limited the ability to assess for biases or stigma related to Recovery-principles and the provision of Recovery-oriented services, as well as serving to exclude many other potentially relevant topics. Limits in the scope of this study also related to the focus on understanding and describing this sample of the population of doctoral students and predoctoral interns, rather than examining ways in which Recovery knowledge is assessed, as well as deemphasizing the variety of institutional and environmental factors that may contribute to the Recovery-orientation of a service environment.

## Future Directions

**Curriculum development and dissemination.** Implications of the present study include the need for the development of a formalized and standardized curriculum to be implemented across APA-accredited clinical psychology doctoral programs. Results suggested that many doctoral students and predoctoral interns have not been formally exposed to Recovery-principles, and furthermore, informal exposure was inadequate in providing a thorough knowledge of Recovery-principles, transformation of attitudes towards Recovery, or understanding of the skills necessary in providing Recovery-oriented services. As the APA Recovery Advisory Committee moves forward in the

development of a comprehensive Recovery curriculum, it would be beneficial to be considered for implementation by APA-accredited doctoral programs as part of their standard curriculum. This curriculum could serve to train future psychologists, preparing them to practice and lead in this emerging climate and also in promoting a belief in the inherent value of all people as meaningful contributors to society, regardless of the status of mental health symptoms.

**Educational research.** Although dissemination of a Recovery curriculum may be seen as important in light of the findings of the current study, it is also critical that research be conducted to evaluate the effectiveness of a Recovery curriculum upon dissemination and at follow-up. This would allow for revisions within the curricula, and the identification of additional needs in training. Subsequent to the implementation of a formalized curriculum, follow-up studies can build upon information gathered in the present study to assess the impact of the Recovery curriculum on doctoral students' and predoctoral interns' Recovery knowledge, skills, and attitudes. This may facilitate further identification of differences between doctoral students and predoctoral interns in regard to gaining and building upon foundational knowledge of Recovery principles, as well as in developing the attitudes and skills involved in the Recovery-oriented provision of psychological services. Additionally, it may be appropriate to explore those factors that may mediate or moderate the relationship between a doctoral trainee's knowledge of Recovery-principles, the transformative experiences that influence their attitudes towards Recovery, and process of developing skills in providing Recovery-oriented services.

Along with efforts focused on dissemination of Recovery curricula, it may be beneficial to examine the means by which Recovery knowledge, skills, and attitudes are

assessed. This may involve the refinement of existing measures of Recovery or the development of new measures. Additional emphasis may be placed on validating existing measures of Recovery knowledge, such as the RKI, establishing normative data for use across a variety of demographic variables, and establishing cut-off scores to indicate categories or labels related to the level of Recovery knowledge associated with a particular score. This may provide a common language across a variety of treatment settings and provider types in discussing Recovery knowledge acquisition, skills development, and attitudinal transformation.

**Clinical outcomes research.** The assertion that training clinicians in Recovery-principles would be beneficial to individuals seeking mental health treatment is predicated on the available research indicating that Recovery-oriented approaches to care will promote quality of life, enhance service engagement, and are associated with reduced rates of rehospitalization and utilization of emergency services (Anthony, 2004; Davidson et al., 2007, 2009; Evans, 2011; Farkas et al., 2005; Harding et al., 1987b; White, 2008). There has been a lack of research in these areas demonstrating the influence of Recovery-oriented approaches to care in a variety of contexts and settings. This may contribute to Recovery principles being seen as aspirational, rather than practical. As such, the ability to study, overtly, the influence that Recovery-oriented interventions have on these issues will provide a clearer gauge of the relationship between Recovery-oriented practices and clinical outcomes. This may allow for further development and assessment of approaches to integrating Recovery principles into evidence-based practices (EBP's), and may promote further research and the establishment of EBP's in working with specific presenting issues (e.g., psychotic

symptoms or negative symptoms associated with Schizophrenia or Psychotic Spectrum Disorders). Conversely, clinical outcomes research may highlight problems in the effectiveness of Recovery-oriented approaches to care. This could subsequently provide opportunities to address those problems, and ultimately allay the concerns of those who question whether or not Recovery-oriented services may negatively impact clinical outcomes for some individuals.

**Systems-transformational research. A** consideration of the influence that formal Recovery training may have on doctoral trainees, there remains a lack of clarity about what should constitute the priority of the APA in training future psychologists who will be at the front lines in Recovery-oriented service environments. Specifically, the manner in which APA-accredited and APPIC-member internships integrate Recovery principles into their service environments has not yet been articulated as an important benchmark of accreditation. These may be the first steps in examining the vast array of variables that may influence the Recovery-orientation of an internship training environment, such as the nature and emphasis of the services provided in a given setting. Presumably, these variables would influence the Recovery transformation of such an environment. It may be feasible to track these changes over time and identify factors that assist or impede Recovery transformation. Finally, this may provide predoctoral interns with the opportunity to be involved in systems-level evaluation and redesign, honing skills that may be integral to their future work as independent professionals or as members of interdisciplinary teams.

**Conclusions**

The ultimate goal of an APA-accredited clinical psychology program is to develop knowledgeable, competent, and skillful future clinical psychologists, who are prepared to engage ethically in the tasks that characterize the work of a clinical psychologist. To this end, it remains vital that these programs persist in their efforts to be champions in the field of mental health care and research, educating and advocating for the most accurate and comprehensive approaches to understanding and treating mental health symptoms, to providers in other healthcare disciplines, policy makers, and the public at-large. The findings of the present study substantiate the argument for the formal development and dissemination of a curriculum for use in promoting Recovery knowledge acquisition, skills development, and attitudinal transformation in clinical psychology doctoral trainees, who are the future leaders, educators, and advocates in the field of behavioral healthcare. As clinical outcomes research findings continue to amass, indicating the benefits of taking a Recovery-oriented approach to care, it may become increasingly important that clinical psychology doctoral students in APA-accredited programs and predoctoral interns in APA-accredited and APPIC-member internships develop proficiency in these approaches.

Paramount to the APA accreditation process, specific topic areas are required through the course of training, such as ethics and individual and cultural diversity. These are considered especially critical to the foundations of practice, and are aimed at protecting clients and facilitating the highest standards of care. Although this training does not guarantee a lack of ethical breaches, it serves to dispel ignorance and the perpetuation of misinformation on the part of the treatment providers, representing a

standard by which to hold them accountable. As the field of professional psychology continues to evolve, in the era of health care reform and systems of care that are driven by outcomes and a public health perspective, it remains a challenge to psychology training programs to make training the most relevant to real life practice that is empowering to all constituents, and that is based in empirical data that has demonstrated that Recovery is possible, even for those with severe and persistent mental illness. It is hoped that this study will be useful to those who continue to engage in those conversations about future directions in training, in order to keep psychology relevant and vital to the mental, emotional, and physical health of all people, regardless of diagnosis, ability, or disability.

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## Appendix A: Figures

Figure 1.

*Distribution of Student RKI Means*

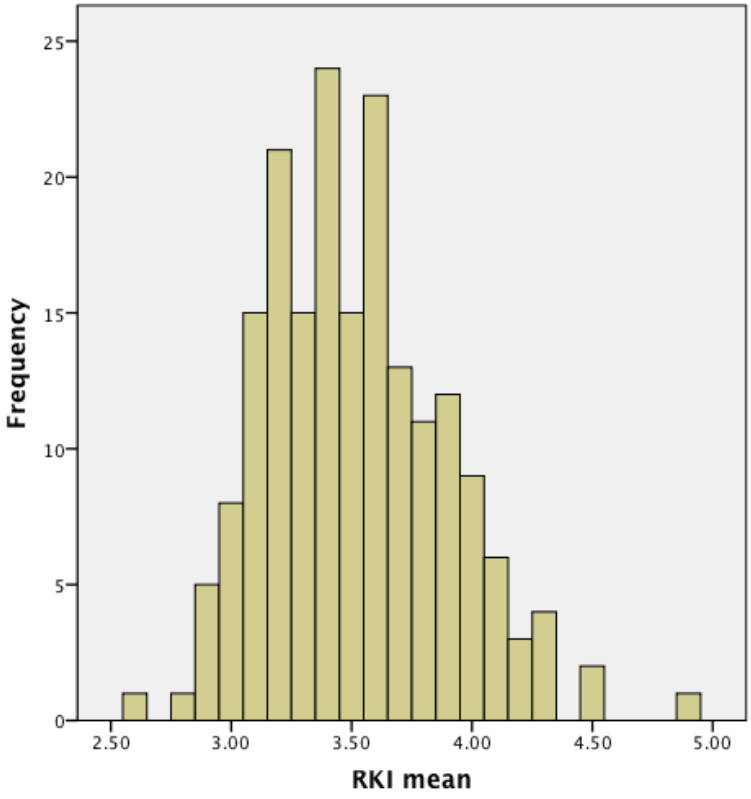


Figure 2.

*Distribution of Intern RKI Means*

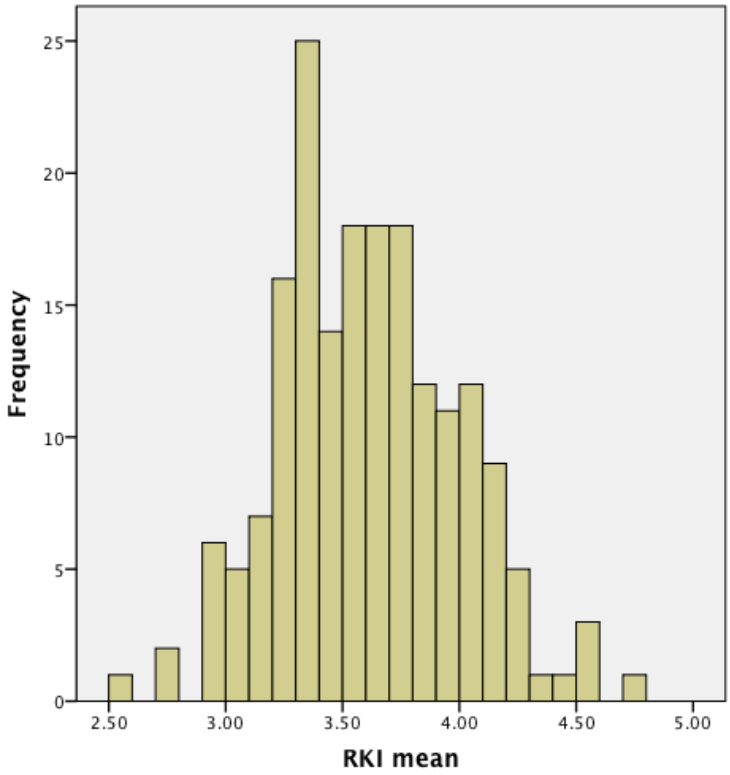


Figure 3.

*Distribution of Intern RSA-P Means*

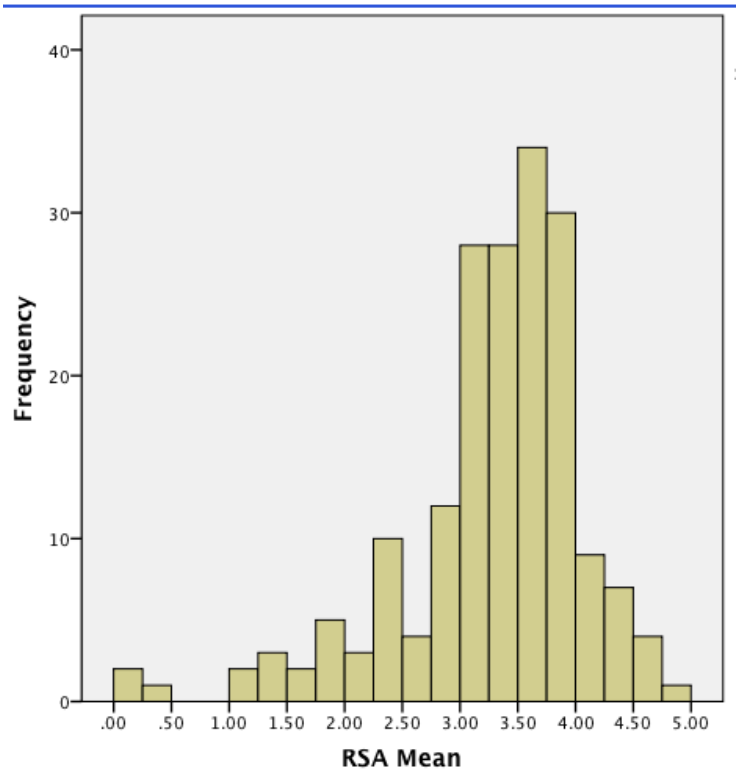
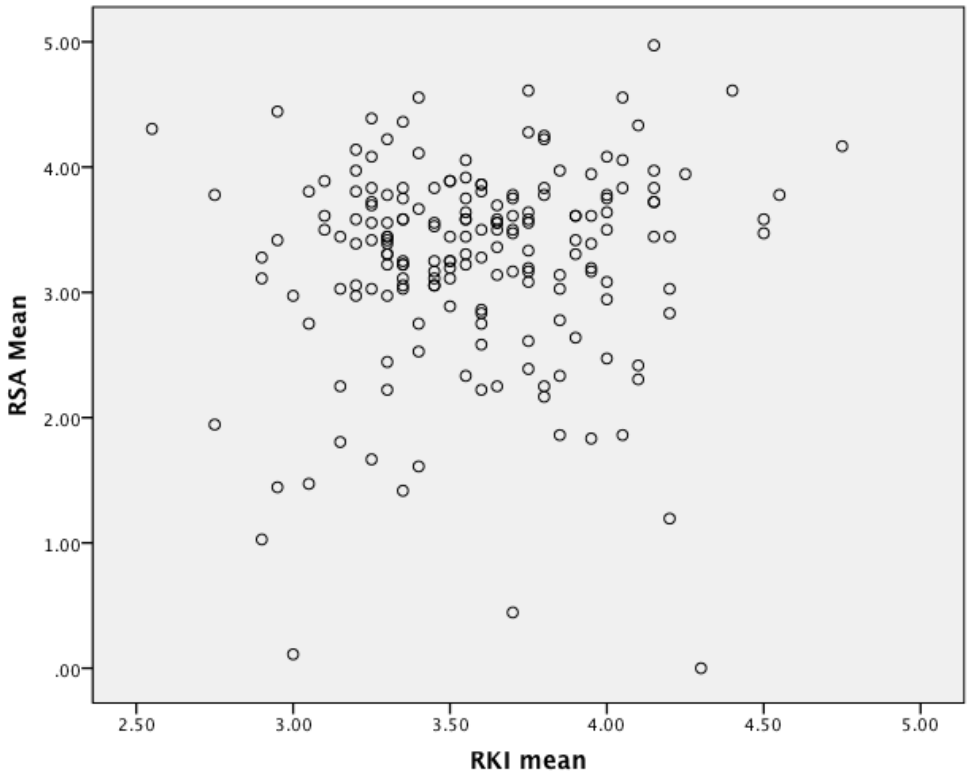


Figure 4.

*Scatterplot of Intern RKI and RSA-P Means*



## Appendix B: Tables

Table 1.

*Student Demographic Characteristics*

| Demographic | *N* | Percent |
|---|---|---|
| Gender | | |
| Male | 41 | 21.69 |
| Female | 147 | 77.77 |
| Transgender | 1 | 0.53 |
| Other/No Response | 0 | 0.00 |
| Age Range | | |
| 21-25 | 55 | 29.10 |
| 26-30 | 80 | 42.33 |
| 31-35 | 27 | 14.29 |
| 36-45 | 20 | 10.58 |
| 46-55 | 6 | 3.17 |
| 56-65 | 1 | 0.53 |
| 66+ | 0 | 0.00 |
| Highest Prev. Degree Earned | | |
| Bachelors Degree | 44 | 23.28 |
| Masters Degree | 143 | 75.66 |
| Doctorate | 2 | 1.06 |
| Degree in Pursuit | | |
| Ph.D. | 70 | 37.04 |
| Psy.D. | 118 | 62.43 |
| Ed.D. | 0 | 0.00 |
| No Response | 1 | 0.53 |
| Location | | |
| Northeast | 73 | 38.62 |
| Northwest | 14 | 7.41 |
| Southeast | 36 | 19.05 |
| Southwest | 26 | 13.76 |
| Midwest | 34 | 17.99 |
| Hawaii/Pacific Island | 4 | 2.12 |
| Canada | 2 | 1.06 |

Table 2.

*Internship positions filled, by accreditation status and training year*

| Total positions by accreditation status | Internship Positions by Training Year | |
|---|---|---|
| | 2012-13 | 2013-14 |
| APA-accredited | 2,363 | 2,506 |
| APPIC-member only | 789 | 820 |
| Total positions filled | 3,152 | 3,326 |

Table 3.

*Intern Demographic Characteristics*

| Demographic | *N* | Percent |
|---|---|---|
| Gender | | |
| Male | 36 | 19.46 |
| Female | 147 | 79.46 |
| Transgender | 0 | 0.00 |
| “Genderqueer” | 1 | 0.54 |
| Other/No Response | 1 | 0.54 |
| Age Range | | |
| 21-25 | 0 | 0.00 |
| 26-30 | 123 | 66.49 |
| 31-35 | 41 | 22.16 |
| 36-45 | 15 | 8.11 |
| 46-55 | 5 | 2.70 |
| 56-65 | 1 | 0.54 |
| 66+ | 0 | 0.00 |
| Highest Prev. Degree Earned | | |
| Bachelors Degree | 7 | 37.84 |
| Masters Degree | 173 | 93.51 |
| Doctorate | 5 | 2.70 |
| Degree in Pursuit | | |
| Ph.D. | 83 | 44.86 |
| Psy.D. | 102 | 55.14 |
| Ed.D. | 0 | 0.00 |
| No Response | 0 | 0.00 |
| Location | | |
| Northeast | 48 | 25.95 |
| Northwest | 10 | 5.41 |
| Southeast | 32 | 17.30 |
| Southwest | 36 | 19.50 |
| Midwest | 48 | 25.95 |
| Hawaii/Pacific Island | 2 | 1.08 |
| Canada | 9 | 4.86 |
| Internship Accredit. Status | | |
| APA-accredited | 125 | 67.57 |
| APPIC-member only | 60 | 32.43 |

Table 4.

*Comparison between components in the original and present studies*

| Component | Items retained by the original authors | Items retained in the present study |
|---|---|---|
| Roles and Responsibilities in Recovery | 2, 6, 7, 9, 10, 11, 18 | 6, 9 |
| Non-linearity of the Recovery Process* | 4, 14, 15, 16, 17, 19 | 4,* 16,* 19* |
| The Role of Self-Definition and Peers in Recovery | 1, 3, 8, 12, 20 | 8, 12, 20 |
| Expectations regarding Recovery | 5, 13 | 5, 11, 13, 14, 17 |
| The Role of Symptoms and Treatment in the Overall Recovery Process* | | 4,* 16,* 19* |
| Not Included | | 1, 2, 3, 7, 15, 18 |

*These may be related, but distinct, concepts

Table 5.

*Student Qualitative Theoretical Constructs*

| Scheme | Theoretical Construct | Concepts | Frequency | T.C. Total | Scheme Total |
|---|---|---|---|---|---|
| Personal, Individual, or small-group-Level dynamics | Knowledge and understanding about recovery principles | Lack of knowledge, understanding or exposure to recovery | 84 | 156 | 214 |
| | | Misunderstanding recovery principles | 35 | | |
| | | Values or believes in recovery principles | 35 | | |
| | | Personal experience in recovery | 2 | | |
| | Recovery-oriented approaches to working with individuals | Individualized/ Person-centered | 9 | 41 | |
| | | Self-direction/ Autonomy regarding life and goals | 9 | | |
| | | Focus on enhancing quality of life | 4 | | |
| | | Strengths-based approach to care | 3 | | |
| | | Flexible approach | 3 | | |
| | | Holistic approach | 3 | | |
| | | Evidence-Based Practices | 7 | | |
| | | Peer Support | 3 | | |
| | Positive attitudes towards individuals | Empowerment | 5 | 17 | |
| | | Respect | 4 | | |
| | | Instilling Hope | 4 | | |
| | | Counteracting Stigma | 4 | | |
| Systems-Level dynamics | Systems-level factors | Funding/ Institutional barriers/ Lack of resources | 33 | 33 | 33 |

Table 6.

*Intern Qualitative Theoretical Constructs*

| Scheme | Theoretical Construct | Concepts | Frequency | T.C. Total | Scheme Total |
|---|---|---|---|---|---|
| Personal, Individual, or small-group-Level dynamics | Knowledge and understanding about recovery principles | Lack of knowledge, understanding or exposure to recovery | 68 | 151 | 253 |
| | | Misunderstanding recovery principles | 30 | | |
| | | Values or believes in recovery principles | 53 | | |
| | Recovery-oriented approaches to working with individuals | Individualized/ Person-centered | 13 | 54 | |
| | | Self-direction/ Autonomy regarding life and goals | 11 | | |
| | | Focus on enhancing quality of life | 4 | | |
| | | Strengths-based approach to care | 9 | | |
| | | Flexible approach | 2 | | |
| | | Holistic approach | 5 | | |
| | | Evidence-Based Practices | 6 | | |
| | | Peer Support | 4 | | |
| | Positive attitudes towards individuals | Empowerment | 3 | 26 | |
| | | Respect | 5 | | |
| | | Instilling Hope | 11 | | |
| | | Counteracting Stigma | 7 | | |
| | Provider concerns, and negative provider attitudes/ perceptions | Provider concerns, and negative provider attitudes/ perceptions | 22 | 22 | |
| Systems-Level dynamics | Systems-level factors | Funding/ Institutional barriers/ Lack of resources | 44 | 44 | 44 |

## Appendix C: Recovery Knowledge Inventory

## Appendix D: Recovery Self-Assessment: Provider Version