

COUNSELOR FACTORS AFFECTING THE WORKING ALLIANCE BETWEEN  
REHABILITATION COUNSELORS AND CLIENTS WITH MENTAL ILLNESS:  
SOCIAL COGNITIVE PERSPECTIVE

By

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## ABSTRACT

### COUNSELOR FACTORS AFFECTING THE WORKING ALLIANCE BETWEEN REHABILITATION COUNSELORS AND CLIENTS WITH MENTAL ILLNESS: SOCIAL COGNITIVE PERSPECTIVE

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The working alliance between counselors and clients has been considered a significant component in the counseling process. Given the fact that rehabilitation counseling is a collaborative process between an individual with disability and a rehabilitation counselor, the development of the positive working alliance is also seen as an effective vocational rehabilitation intervention in the rehabilitation counseling field. Especially for clients with mental illness, a strong working alliance with their counselor is one treatment related factor that has a powerful and positive impact on their recovery. To provide individuals with mental illness with quality services, it is important to identify factors that can significantly affect the development of the positive working alliance. Although it is well recognized that there are significant counselor differences in their ability to facilitate positive working alliance with their clients, little research has examined the effects of counselor cognitive factors, such as attitudes and counseling self-efficacy, as significant counselor attributes contributing to the development and facilitation of the working alliance when working with clients with mental illness.

Therefore, the current study focused on examining the relationships between counselor cognitive factors (i.e., rehabilitation counselors' attitudes toward individuals with mental illness and their recovery, counseling self-efficacy, and counseling outcome expectancy) and the working alliance between rehabilitation counselors and their clients with mental illness. A sample of 227 certified rehabilitation counselors were randomly selected from the database of Commission on

Rehabilitation Counselor Certification (CRCC). A cross-sectional and quantitative study design via an Internet-based survey was utilized in the current study.

Results of this study showed that rehabilitation counselors' attitudes toward individuals with mental illness and their recovery, counseling self-efficacy, and counseling outcome expectancy were positively correlated with the working alliance between rehabilitation counselors and clients with mental illness. In addition, counseling self-efficacy and counseling outcome expectancy were the significant predictors of the working alliance.

Data obtained from the current study can provide valuable information to current rehabilitation counselors and rehabilitation counselor education programs to facilitate counselor professional development. Limitations of the study, and implications for pre- and in-service education and training and future research were also provided.

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# **CHAPTER 1**

## **INTRODUCTION**

The working alliance (WA) between counselors and clients has been considered one of the most significant components in the counseling process, regardless of specific techniques or theoretical orientation (Lambert & Barley, 2002). Defined as collaboration between a client and a counselor based on the development of a relationship bond as well as a shared agreement to the goals and tasks of counseling (Bordin, 1979), the WA is one of the most salient common factors across all forms of psychotherapies and counseling that can have a positive impact on the success of counseling (Wampold, 2001). The extant meta-analyses (Horvath, Del Re, Flückiger, & Symonds, 2011; Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000) confirmed that the WA had a significant positive relationship with the counseling outcomes, with the effect sizes ranging from .22 to .28.

The WA between rehabilitation counselors and the clients with disabilities has received increased attention as an effective vocational rehabilitation intervention in the field of rehabilitation counseling (Chan et al., 2012). Like other counseling processes, rehabilitation counseling can also be fueled by the effective WA since rehabilitation counseling is a collaborative process between an individual with disability and a rehabilitation counselor (Kierpiec, Phillips, & Kosciulek, 2010). By developing and maintaining positive WA, rehabilitation counselors can effectively encourage clients with disabilities to be actively involved in the rehabilitation counseling process, make an informed decision, be empowered, and take responsibility for their decision making (Kosciulek, 2000, 2004). Literature has also identified that therapeutic relationships between rehabilitation counselors and clients significantly affected positive rehabilitation outcomes (Lustig, Strauser, Rice, & Rucker, 2002).

Especially for clients with mental illness, a strong WA with their counselor is one treatment related factor that has a powerful and positive impact on their recovery (Kondrat, 2008). The current recovery paradigm in the field of psychiatric rehabilitation is related to a belief that individuals with severe mental illness can indeed have a meaningful and satisfying life in spite of limitations caused by illness (Anthony, 1993). Recovery-oriented approaches emphasize the significance of developing and maintaining an effective WA between counselors and clients with mental illness in supporting recovery (Oades et al., 2005). Therapeutic relationships established from mutuality and collaboration can facilitate recovery by developing hope and meaning in one's life as well as supporting him or her to take personal responsibility (Hicks, Deane, & Crowe, 2012; Slade, 2010).

Given the significance of a positive WA when working with clients with mental illness, it is important to identify factors that could be related to the development of a strong WA. Without understanding factors contributing to the development of the quality WA, finding the WA-outcome association is of limited use to rehabilitation counselors (Constantino, Arnow, Blasey, & Agras, 2005). Al-Darmaki and Kivlighan (1993) described that the quality of the WA can be determined based on the following four factors: client pre-therapy characteristics; counselor personal characteristics; counselor technical activity; and the congruence between counselor-client expectancy. Effects of client characteristics are well described and studied in the previous literature (Al-Darmaki & Kivlighan, 1993; Constantino, et al., 2005; Couture et al., 2006). While the contribution of counselor related factors to the WA now receiving more attention (Nissen-Lie, Monsen, & Ronnestad, 2010), counselor variables may have been overlooked in the relative literature compared to client factors (Ackerman & Hilsenroth, 2003). It is well recognized that there are significant counselor differences in their ability to facilitate positive

WA with their clients (Heinonen et al., 2014; Nissen-Lie, Havik, Hoglend, Monsen, & Ronnestad, 2013). While a number of previous studies have identified the impacts of several counselor factors on the development of the WA, such as private life events (e.g., Nissen-Lie et al., 2013), personality, interpersonal style (e.g., Heinonen et al., 2014), and stress and coping (e.g., Briggs & Munley, 2008), little research has examined the effects of counselor cognitive factors, such as attitudes and counseling self-efficacy, as significant counselor attributes contributing to the development and facilitation of the WA when working with clients with mental illness.

### **Statement of the Problem**

**Professionals' negative attitudes toward people with mental illness.** Negative attitudes toward individuals with disabilities still exist in our society (Chan, Livneh, Pruett, Wang, & Zheng, 2009). Stereotypes, prejudice, and discrimination caused by negative societal attitudes significantly influence the lives of individuals with disabilities, limiting opportunities for education, employment, and independent living (Antonak & Livneh, 2000; Chan et al., 2009; J. Chan et al., 2011). However, individuals with mental illness even experience a higher degree of stigma than persons with other types of disabilities, which is often described as the “hierarchy of stigma” (Smart, 2009, p. 34). Defined as discrediting marks toward a certain group (Goffman, 1963, as cited in Corrigan, Mueser, Bond, Drake, & Solomon, 2008), stigma is one of the significant barriers to the life goals of individuals with mental illness (Corrigan, 2004).

Attribution theory explains how stigma against individuals with mental illness can be formulated as a social cognitive process and how discriminative behaviors can be developed and maintained as effects of stigma (Corrigan et al., 2000). Attribution theory purports that attributions of a cause of an event can influence cognitive, affective, and behavioral

consequences (Weiner, 1985). Two major dimensions on which attributions are developed are controllability and stability. Controllability refers to the amount of individual efforts and influences that are made over a cause of an event (Weiner, 1985). In regard to mental illness, this dimension can be seen as whether the cause of the mental illness is controllable by an individual who has it, or whether the individual can strive to cope with the illness (Chan et al., 2011; Corrigan, 2000). Stability refers to the temporal nature of a cause, indicating the extent to which the cause is stable or changing over time. Regarding mental illness, stability is related to whether symptoms of mental illness will be stable over time, which can influence a belief about treatment and recovery possibility of mental illness (Corrigan, 2000).

It is crucial to examine service provider attitudes toward individuals with mental illness since attitudes play a significant role in the lives of individuals with mental illness. People with mental illness usually meet with service providers when they are at their most vulnerable points and they rely on providers to understand their illness and recovery assistance needs (Wahl & Aroesty-Cohen, 2010). The attitudes and behaviors of service providers toward their clients with mental illness are therefore very important treatment factors for facilitating positive recovery (Chaplin, 2000). How people with mental illness are viewed by professionals can have a significant impact on treatment outcomes and the quality of life experienced by those with mental illness (Gray, 2002; Sartorius, 2002). When service providers hold positive beliefs about recovery for their clients, they inspire hope in their clients and support people with mental illness to actively participate in the recovery process (Sowers, 2005).

Although it is expected that service providers will hold positive attitudes toward individuals with mental illness, service providers may not be always immune to stigmatizing beliefs (Overton & Medina, 2008). Some professionals doubt the possibility of recovery and

even contribute to stigma (Hugo, 2001), sharing public concerns that people with mental illness are violent and dangerous (Nordt, Rossler, & Lauber, 2006; Van Dorn, Swanson, Elbogen, & Swartz, 2005). Service providers' negative attitudes toward people with mental illness can also create new barriers to receiving treatment. Negative attitudes of professionals who provide direct services to clients with mental illness have been attributed to feelings of helplessness and often result in inadequate treatment interventions for their clients (Cohen, 1990). Moreover, if service providers have negative attitudes toward clients with mental illness, they might not show therapeutic or satisfying interaction with their clients because these negative attitudes may interfere with professionals' ability to respond helpfully to their clients' needs or to establish successful therapeutic relationships (Hugo, 2001; Wahl & Aroesty-Cohen, 2010). Therefore, the attitudes of professionals toward their clients with mental illness may be a significant contributor to both the therapeutic alliance between the two and eventual rehabilitation outcome for the client (Kaplan, 1982).

Attribution theory might also help understand how service provider attitudes toward individuals with mental illness may affect their behaviors during the service delivery (Charles, 2015). If service providers, including mental health or rehabilitation counselors, believe that individuals with mental illness are responsible for the onset of the illness and less capable of fully participating in treatment and their conditions are unlikely to be improved or changed, they may be more likely to believe that providing treatment and support will be less effective for this population. Such negative thoughts and beliefs toward individuals with mental illness may significantly affect counselor behavior during service delivery and therefore influence the relationship with their clients.

While the majority of previous literature has focused on examining stigmatizing attitudes toward people with mental illness held by the general public (Broussard, Goulding, Talley, & Compton, 2012; Corrigan et al., 2000; Corrigan, 2004; Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000), attention to the attitudes of service providers has also been given recently (Schulze, 2007). Over the past two decades, researchers have examined mental health professionals' attitudes toward people with mental illness, which specifically focused on samples of psychiatrists, psychologists, nurses, and social workers (Hugo, 2001; Jorm et al., 1997; Murray & Steffen, 1999; Schulze, 2007; Wahl & Aroesty-Cohen, 2010). However, relatively few studies have been conducted in the field of counseling or rehabilitation counseling. A small number of most recent studies have investigated the attitudes of licensed professional counselors (Hoy & Holden, 2014; Smith & Cashwell, 2010, 2011). Only two studies were found that included a sample of rehabilitation counselors (Carney & Cobia, 1994; Thomas, Curtis, & Shippen, 2011). The results from these studies indicated that rehabilitation counselors had more positive attitudes toward people with disabilities than other human service professionals. However, there are no data in the literature addresses rehabilitation counselor attitude variation and how attitudes affect the WA between rehabilitation counselors and their clients with mental illness.

**Counseling self-efficacy and outcome expectancy.** Social Cognitive Theory (SCT) helps understand how individuals can acquire and maintain certain behaviors (Wise, 2002). SCT views people as active agents who actively shape their environments, behaviors, thoughts, and emotions rather than passive followers influenced by external or internal forces (Lent & Maddux, 1997). According to SCT, certain cognitive constructs have huge impacts on individual motivation and performance (Fabian & Waugh, 2001). In SCT, much attention has been paid to the construct of self-efficacy. Perceived self-efficacy refers to individual judgments of how well

they can perform a specific behavior that can lead a desired outcome when dealing with prospective situations (Bandura, 1977). Self-efficacy is considered as a significant fundamental mechanism of human agency (Bandura & Locke, 2003), which partly influences people's decision on whether they will engage in a certain task (Bandura, 1986; Larson & Daniels, 1998). While received relatively less attention than self-efficacy, outcome expectancy is the other important cognitive construct stressed in SCT (Bandura, 1986). Outcome expectancy is defined as one's belief that performing certain behavior will bring about desired consequences (Bandura, 1977; Wise, 2002). Outcome expectancy is distinguished from self-efficacy because self-efficacy is related to the belief about one's ability to perform a behavior whereas outcome expectancy is related to one's judgment on whether one's behavior will lead to a desirable outcome (Bandura, 1977, 1986). Examining perception of self-efficacy and outcome expectancy together rather than the analysis of single construct alone might provide a more complete understanding of human behavior (Williams & Bond, 2002; Wise, 2002).

Expanded from the SCT, counseling self-efficacy (CSE) is considered a significant factor for counselor development, and examined extensively in counseling training and education literature (Kozina, Grabovari, De Stefano, & Drapeau, 2010; Larson, 1998; Larson & Daniels, 1998; Lent et al., 2006). Defined as counselors' beliefs about their capabilities to effectively work with clients in the near future, CSE can be seen as a primary determinant of effective counseling performance (Larson & Daniels, 1998), affecting counselors' cognitive, affective, and behavioral responses in counseling sessions (Lent et al., 2006). Counselors with higher self-efficacy would be more likely to utilize counseling skills that are helpful to their clients, to manage tasks conducted during sessions, and to interact more effectively with challenging clients and cases, compared to those with lower CSE (Larson & Daniels, 1998; Lent, Hill, & Hoffman,



2003). Moreover, counselors with high self-efficacy are willing to put forth efforts to develop and maintain positive therapeutic relationship with their clients (Larson, 1998).

Moreover, counseling outcome expectancy (COE) is related to counselors' judgment on whether their performance conducted in the counseling sessions will bring about positive change for their clients (Larson, 1998; Schwartz, 2016). It is assumed that along with CSE, COE could be an important cognitive construct that is associated with the successful performance in the counseling process.

CSE and COE are particularly critical components when working with clients with mental illness (Jimenez, 1985; Jones, 2014). Due to symptoms caused by the fluctuation of the illness, hardships, life challenges, and the stigma against people with mental illness, counselors may experience difficulty helping individuals with mental illness which result in less confidence and lower self-efficacy and negative prediction about counseling outcome (Jones, 2014). Counselors who are unsure about their ability to effectively provide services and pessimistic about client achievement of set goals may not create proper therapeutic relationships with clients with mental illness (Lent et al., 2003).

Previous literature has identified that higher CSE is associated with lower counselor anxiety, better counselor performance (e.g., utilizing microcounseling skills, problem solving skills, etc.), higher self-esteem, and positive COE (Al-Darmaki, 2004; Larson et al., 1992; Larson & Daniels, 1998; Sipps, Sugden, & Faiver, 1988; Schiele, Weist, Youngstrom, Stephan, & Lever, 2014). However, little work has been done to examine the relationship between CSE and the WA. CSE may have an impact on the three components (i.e., task, goals, and bonds) of the WA between a counselor and a client (Ganske, 2008). Counselors with high self-efficacy may make more efforts to accept or approach clients as well as develop and maintain positive

therapeutic relationships with their clients (Bruton, 2013). Counselors who are confident about their ability to work with specific clients tend to believe that they will be effective in solving problems (Larson et al., 1992), therefore they may actively deal with difficult counseling tasks (Barnes, 2004). In addition, counselors with higher self-efficacy are more likely to demonstrate counseling skills such as showing empathy or assessing client issues or concerns (Halverson, Miars, & Livneh, 2006), which can be related to a strong WA (Ackerman & Hilsenroth, 2003). Therefore, it is important to understand the relationship between CSE and the WA for clients with mental illness. O'Sullivan (2012) mentioned that little research has been conducted on such issues.

While several researchers and professionals in the field of behavioral, social science, psychology have understood the importance of cognitive factors (i.e., efficacy and outcome expectations) in behaviors and investigated such constructs, only a small amount of studies has been conducted on COE and its significance on counselor performance and outcomes (Al-Darmaki & Kivlighan, 1993; Iannelli, 2000; Joyce & Piper, 1998; Katz & Hoyt, 2014). COE was rarely included in the various studies that examine the effects of counselor factors on the counseling process and client outcomes (Schwartz, 2016). Further, there is no study that identified the relationship between COE and counselor performance in the rehabilitation research. No published studies have been found looking at both rehabilitation counselor CSE and COE as variables that can influence rehabilitation counselor performance and counseling outcome, such as a WA. Given the support for the significance of CSE and COE on various counselor behaviors and performance (Snyder, 1995), both constructs taken together in a study may provide valuable input in the existing body of rehabilitation counselor education and training research.

In addition, the majority of studies on CSE have used samples of counseling trainees rather than experienced counselors (Kozina et al., 2010; Schiele et al., 2014; Sipps et al., 1988; Stoltenberg, 1998; Urbani et al., 2002). While counseling trainee self-efficacy and skill development are crucial for their future work with clients with disabilities, it is also important to examine CSE among experienced counselors since counselors may be efficacious differently based on client characteristics (e.g., type of disabilities). Counselors who work with diverse clients might feel more effective when helping clients with specific type of disabilities or characteristics, and it is possible that counselors may avoid working with certain types of clients when they feel less efficacious (Lent et al., 2006).

### **Purpose of the Study**

The purpose of this study is to explore rehabilitation counselors' cognitive factors (i.e., rehabilitation counselor attitudes toward individuals with mental illness and their recovery, rehabilitation counselor CSE, and COE) that can affect the WA between rehabilitation counselors and clients with mental illness. It is anticipated that this study will yield data useful for better understanding rehabilitation counselors' perceptions of their clients with mental illness. It will also emphasize the significance of rehabilitation counselors' understanding of their own thoughts, cognitions, and values and how they could affect the establishment of positive WA and the rehabilitation counseling process. In addition, the information obtained in this study could be used in pre- and in-service education and training. Rehabilitation counselor education programs may incorporate the information into curriculum in order to provide effective education and training by giving students opportunities to understand their own values and attitudes toward diverse populations, including individuals with mental illness. Further, in-service training and clinical supervision could utilize the data obtained in this study when developing training

programs that enhance rehabilitation counselor knowledge, skills, and competencies to work collaboratively with clients with mental illness. Therefore, the current study is designed to examine both counselor attitudes toward individuals with mental illness and their recovery, CSE, and COE as constructs which influence the WA between counselors and clients with mental illness.

The research questions and hypotheses of interest in this study will be as follows:

1. What are the relationships between rehabilitation counselor attitudes (toward individuals with mental illness and recovery), CSE, COE, and the WA among rehabilitation counselors and their clients with mental illness?
  - 1a. The attitude of rehabilitation counselors toward individuals with mental illness and recovery will be positively correlated with rehabilitation counselors' perceived WA.
  - 1b. The CSE and COE of rehabilitation counselors will be positively correlated with rehabilitation counselors' perceived WA.
2. How do rehabilitation counselor attitudes (toward individuals with mental illness and recovery), CSE, and COE interact and predict the WA among rehabilitation counselors and their clients with mental illness?
  - 2a. When controlling for rehabilitation counselor demographic characteristics such as gender, age, race/ethnicity, years of experiences as rehabilitation counselors, in-service training experiences, and caseload size as well as rehabilitation counselor social desirability bias, rehabilitation counselor attitudes (toward individuals with mental illness and recovery), CSE and COE will account for a significant amount of variance in the WA among rehabilitation counselors and clients with mental illness.

## **Definition of Terms**

**Individual with mental illness.** An individual with mental illness refers to a person who has a diagnosis of mental illness such as schizophrenia, mood disorders (e.g., major depression, bipolar disorder), anxiety disorders (e.g., obsessive-compulsive disorder, posttraumatic stress disorder), and personality disorders (e.g., borderline personality disorder), which can affect the individuals' major life functioning such as independent living or employment (Corrigan et al., 2008).

**Rehabilitation counselor.** A rehabilitation counselor is defined as a counselor who has specific knowledge, skills, attitudes, and competencies to develop and maintain professional relationships as well as work collaboratively with individuals with physical, mental, developmental, intellectual, and emotional disabilities to achieve their personal, social, psychological, and vocational goals (Rehabilitation Counseling Consortium, 2005, as cited in Leahy, 2012).

**Working alliance.** Bordin (1979) posited that the working alliance between counselors and clients can be developed and maintained based on the three components: (1) an agreement on goals; (2) an assignment of tasks; (3) and the development of bonds.

**Recovery.** Anthony (1993) defined recovery as “a deeply personal, unique process of changing one’s attitudes, values, feelings, goals, skills, and/or roles” (p. 15) in order to live a satisfying and hopeful life as well as develop new meaning and purpose in one’s life in spite of an existing mental illness.

**Stigma.** Stigma is considered as any mark of disgrace, which can be either visible (e.g., race, gender) or invisible (e.g., sexual orientation, mental illness), that can lead to stereotypes, prejudice, and discrimination (Corrigan et al., 2008; Goffman, 1963; Wassel, 2014).

**Attitude.** Ajzen (1993) postulated three components of the attitudes toward a certain person, thing, place, and place: (1) the cognitive component of attitude refers to an individual's thoughts, beliefs, and opinions associated with an attitude object; (2) the affective component of attitude refers to one's feelings or emotions related to the attitude object; (3) and the behavioral component indicates one's intent or readiness to behave in a certain way regarding the object.

**Self-efficacy.** Self-efficacy is defined as the perceived capability to take a certain action or behavior to obtain a desired result in a given situation (Bandura, 1977).

**Counseling self-efficacy.** Counseling self-efficacy refers to a counselor's beliefs about their ability to effectively work with clients in the near future counseling session, which can be seen as a primary determinant of effective counseling performance (Larson & Daniels, 1998).

**Counseling outcome expectancy.** Counseling outcome expectancy can be defined as counselors' judgment on whether their performance conducted in the counseling sessions will produce positive change for their clients (Larson, 1998; Schwartz, 2016).

## **CHAPTER 2**

### **LITERATURE REVIEW**

The purpose of this study is to explore the counselor cognitive factors that can affect the positive working alliance (WA) between rehabilitation counselors and their clients with mental illness, namely, counselors' attitudes toward their clients with mental illness and recovery as well as perceived counseling self-efficacy (CSE) and counseling outcome expectancy (COE). In order to understand the significance of counselor attributes to the WA between rehabilitation counselors and clients with mental illness, a thorough examination of previous studies will be crucial. Therefore, this chapter provides more in-depth literature reviews on each construct.

#### **Working Alliance**

The field of counseling and psychotherapy has made an effort to look at the effectiveness of different types of counseling techniques and psychotherapies. Research has been identified that one form of psychotherapy or counseling technique might not be better than another type of psychotherapy (e.g., client centered counseling vs. cognitive behavioral therapy), concluding that psychotherapies could generally be seen as effective, which has been referred to as "the Dodo bird effect" (Lambert & Ogles, 2004; Martin et al., 2000; Wampold, 2001). This has brought more attention to the general or common counseling factors, which are defined as elements that are common across all forms of psychotherapies or counseling. These common factors seem to have more positive impacts on therapeutic outcomes than specific features of each counseling technique (Wampold, 2001). More specifically, Wampold (2001) identified that approximately two third of the effects of psychotherapy comes from general or common factors whereas specific factors or ingredients (e.g., homework assignment in cognitive behavioral therapy) have a minimal impact on the effectiveness of counseling, accounting for only about 8% of the entire

proportion. These common factors include the alliance between the client and the counselor, empathic listening and goal setting, client expectation for change, and so forth. Among them, the WA has been found to be the most salient factor in the effective counseling outcomes. The reason why the WA is considered as a common factor is because it drew attention across different counseling theories and disciplines (Wampold, 2001). Many have believed that the changes clients make are closely related to the relationship they have with their counselors (Johnson & Wright, 2002), and the WA can be the key component to develop effective relationships between counselors and clients (Lustig et al., 2002). The term therapeutic WA originated in psychoanalytic theory, and the impact of counselor-client relationship on the treatment was recognized in the early 20<sup>th</sup> century (Johnson & Wright, 2002). Although the therapeutic relationship in the psychodynamic therapy was more related to transference, the concept later has been used in a more general way (Bordin, 1979; Johnson & Wright, 2002). Rogers's client centered theory is another influential counseling theory that emphasized the importance of active therapeutic relationship (e.g., empathy, unconditional positive regards, and genuineness) (Horvath & Greenberg, 1989). Over the years, the concept of alliance has included various aspects of the relationship such as the client's affective relationship with the counselor, the client's motivation and ability to work collaboratively with the counselor, the counselor's empathic responding to the client and willingness to involve the client, and the agreement between the counselor and the client toward counseling goals and tasks (Horvath & Luborsky, 1993).

Bordin (1979) conceptualized the notion of the WA encompassing all therapeutic relationships. He proposed "that the WA between the person who seeks change and the one who offers to be a change agent is one of the keys, if not the key, to the change process" (1979, p.



252). According to his theory, the WA is defined as collaboration between the client and the counselor based on the development of a relationship bond as well as a shared agreement to the goals and tasks of counseling. He described three components of the WA: goals, tasks, and bonds. First, goals are the target of the intervention, which could be regarded as treatment outcomes (Chan, Shaw, McMahon, Koch, & Strauser, 1997; Horvath & Greenberg, 1989). In the field of rehabilitation counseling, such goals will be more related to employment or adjustment to disability (O'Sullivan, 2012), but these goals could vary depending on the practice settings, counselors' theoretical orientation, and the issues and problems clients have. Moreover, the goal setting should be based on the mutual agreement between the client and the counselor (Johnson & Wright, 2002). When the counselor tries to work collaboratively with the client in setting a specific goal, the client may have a sense of feeling that the counselor has the commitment to helping him or her and the counselor sees him or her as an equal partner (Lustig et al., 2002).

Second, tasks refer to the in-counseling behaviors and cognitions that the client and the counselor engage in (Horvath & Greenberg, 1989). Bordin (1979) postulated that the effectiveness of the tasks depend on how the counselor can clearly relate the assigned task to the client's issues and problems as well as the client's motivation to change. This construct encompasses counselors' skills, the perception of clients about counselors' ability to help, and the agreement and collaboration relative to the specific tasks. Those tasks need to be decided based on the consideration of clients' internal and external circumstances (Johnson & Wright, 2002). When their relationship is well developed, both the client and the counselor may perceive these tasks as relevant and effective. Further, both the client and counselor need to take a responsibility to successfully perform these tasks (Lustig et al., 2002). Last, the concept of

bonds is related to positive personal attachments between the client and the counselor, such as feelings of liking, trusting, caring, understanding, and respect (Bordin, 1994; Horvath & Greenberg, 1989). The degree of bonds will be strongly associated with goals and tasks. The counseling process within which the counselor works toward deeper personal feelings or experience of the client will require deeper trust and bond between the counselor and the client rather than the completion of intake paperwork (Bates, 2012; Bordin, 1979).

Research on the WA in the fields of counseling and psychotherapy has continued to accumulate the empirical evidence about the impact of the WA on the treatment or counseling outcomes such as symptom reduction (e.g., depression, anxiety, and mood), interpersonal problems, general psychological functioning, benefits, satisfaction and improvement, and early treatment termination (Horvath et al., 2011; Horvath & Luborsky, 1993; Martin et al., 2000). More specifically, in a review of extant meta-analyses, Horvath and Symonds (1991) examined 24 studies relating the quality of the WA to the therapy outcomes and found that the WA was positively related to the treatment outcomes with an average effect size of .26. In addition, a follow-up meta analytic review of 68 studies conducted by Martin et al. (2000) showed the positive relationship between the WA and outcomes, with the average effect size of .22. A more recent study conducted by Horvath et al. (2011) also found a similar result in the relationship between the WA and positive counseling outcomes ( $r = .28$ ). These results indicate the moderate but highly reliable relationship between the WA and psychotherapy and counseling outcomes. As it is already mentioned, the WA is considered as a common factor rather than specific type of intervention or a technique used in certain counseling theory since the alliance represents the quality of partnership and mutual collaboration between counselors and clients as well as facilitates the counseling process (Bordin, 1994; Horvath et al., 2011; Martin et al., 2000).

Therefore, many psychotherapy and counseling studies have emphasized the importance of the WA as one of the significant variables (Martin et al., 2000).

**Working alliance with clients with mental illness.** Initiating and fostering the WA can be crucial especially for clients with mental illness, in terms of achieving positive outcome and recovery (Donnell, Lustig, & Strauser, 2004). Often, people with mental illness confront self-defeating thoughts and behaviors that are major characteristics of mental illness. The appearance of these symptoms and the public's lack of understanding of people with mental illness may cause the general public to develop negative attitudes toward them, and eventually influence their social relationships with other people. The WA not only provides the strong relationship between the client and the counselor, but could imbue the client with strong feelings of acceptance and support, and the decreased feeling of isolation. This in turn enhances successful rehabilitation and recovery outcomes for the client with mental illness (Donnell et al., 2004; Kondrat, 2008).

The interrelationship between the counselor and the client with mental illness can be a key ingredient that can enhance the process of the recovery for the client. Russinova (1999) stressed that the service providers' ability to promote recovery as well as provide resources and supports in the recovery process will strongly influence the psychiatric rehabilitation outcomes for this population. This concept is truly parallel to the components of the WA: goals, tasks, and bonds (Bordin, 1979). The shared agreement on the necessary resources and supports, and the client's belief that the counselor devotes to his or her recovery process will allow stronger alliance established between the counselor and the client, which can eventually promote successful recovery and treatment outcomes (Donnell et al., 2004). Given the fact that the current community mental health service delivery emphasizes the principles of client empowerment,

client centeredness, and collaboration between the service provider and the client, it is crucial that service providers and counselors need adequately to develop collaborative relationships with their clients with mental illness by seeing the client beyond the illness, focusing more on strengths, and promoting the value of hope (Anthony, 1993). Service providers should also be aware that clients with mental illness who perceive the negative and weak WA with their counselor are less likely to engage in the service provision as well as return to the service they are receiving, at worst (O'Sullivan, 2012).

Several studies have demonstrated the importance of WA between the client with mental illness and the counselor in the intervention process. Donnell and colleagues (2004) investigated the relationship between WA and vocational rehabilitation outcomes among people with severe mental illness. The results indicated that employed clients had a stronger WA than those without employment outcomes, and a stronger WA was related to employed clients' satisfaction with current job. Moreover, the WA was related to the clients' positive perception of future employment prospects. Davis and Lysaker (2007) examined the impact of the therapeutic alliance on work performance among clients with schizophrenia who received a 26-week cognitive-behavioral therapy (CBT) based vocational rehabilitation program, and the result identified the positive relationship between the WA and work performance.

Chinman, Rosenheck, and Lam (2000) studied the effects of the case management relationship on clinical outcomes among homeless persons with severe mental illness. In this research, authors used a modified version of the Working Alliance Inventory in order to measure the relationship between case managers and their clients with severe mental illness. The study found that strong relationship with case manager was significantly associated with fewer days of homelessness and a higher level of general life satisfaction. Another research conducted by

Neale and Rosenheck (1995), which examined the relationship between therapeutic alliance and outcomes among clients in a Veterans Affairs intensive case management program, showed that strong therapeutic alliance was associated with reduced symptom severity and improvement of community living skills. Authors used the word “therapeutic alliance” in their study, but definition of the concept turned out to be the same as WA.

Also, Kondrat (2008) examined the relationship between the WA and the subjective perception of quality of life among people with severe mental illness, and the result revealed that a stronger WA predicted the clients’ perceptions of more positive quality of life. Hicks and colleagues (2012) explored the relationship between the WA and recovery and hope over time in populations with mental illness, and the result showed that the WA predicted positive change in recovery, but changes in recovery also predicted the alliance. These studies have confirmed that establishing and maintaining a positive WA between the counselor and the client with mental illness can be one of the most significant factors that can actually lead to successful counseling or treatment outcomes as well as the client’s recovery.

**Working alliance in rehabilitation counseling.** The WA is also important in the service delivery in the field of rehabilitation counseling. The philosophy of rehabilitation counseling emphasizes consumer informed choice and empowerment as key concepts in the rehabilitation counseling service provision, which is reflected in the regulations. The Rehabilitation Act Amendments of 1992 and 1998 emphasize the importance of personal responsibility and self-determination, consumer informed choice, equal access, and full participation in the vocational rehabilitation process by explicitly stating all services should be carried out with these principles (Hagen-Foley, Rosenthal, & Thomas, 2005; Hein, Lustig, & Uruk, 2005). Consumer choice is seen as a decision-making process in which consumers make their own choices based on the

information in terms of selecting employment goals and rehabilitation services (Hagen-Foley et al., 2005; Kosciulek, 2004). When individuals with disabilities are encouraged to make informed choice and self-determination in the rehabilitation counseling process, their empowerment, which is defined as an approach to maximize consumers' opportunity to control over their lives, could be enhanced (Kosciulek, 2004).

To incorporate these concepts in the rehabilitation counseling, the process should be dynamic, creative, and individualized therefore clients with disabilities feel included, independent, and empowered in their life choices (Kosciulek, 2000, 2004). Like other counseling processes, rehabilitation counseling can also be fueled by the effective WA since rehabilitation counseling is a collaborative process between an individual with disability and a rehabilitation counselor (Kierpiec et al., 2010). Consistent with the concept of the WA, both the rehabilitation counselor and the client with disability try to explore the client's strengths, resources, priorities, abilities, capabilities, interests, and rehabilitation needs throughout the counseling process. The counselor and the client also try to identify any options, resources and barriers to achieving specific rehabilitation goals such as employment, as well as develop and carry out a plan that will result in successful and meaningful outcomes for the client (Kierpiec et al., 2010; Kosciulek, 2004). Two most important factors in the rehabilitation counseling process regarding the WA will be the quality of the client's participation and the motivation to become involved in the process (Lustig et al., 2002). Consumers with disabilities who are well engaged in the process and well connected with counselors will benefit most from rehabilitation counseling (Chan et al., 1997; Kosciulek, 2004).

Not many, but a number of research has been conducted to examine the impact of the WA on rehabilitation outcomes. In addition to Donnell et al. (2004) study mentioned earlier,

Lustig and colleagues (2002) examined the relationship between the WA and vocational rehabilitation outcomes using the existing data on 2,732 vocational rehabilitation clients in one state. The results indicated that employed clients reported stronger WA with their counselor and other staff, better job satisfaction, and more positive perception of future employment prospects than those without employment outcomes. A study done by Strauser, Lustig, and Donnell (2004), which looked at the relationship between the WA and employment outcomes among individuals with mild intellectual disability, also showed the similar result that there is a positive relationship between the WA and employment outcomes. In a subsequent study, Lustig, Strauser, and Weems (2004) investigated the effects of demographic characteristics and the WA on employment outcomes among clients residing in urban or rural areas. The study showed the similar results that regardless of geographic characteristics employed clients had better WA with their counselor.

**Counselor factors.** As well recognized the significance of the WA in the counseling process, it is also important to understand factors that can influence stronger WA between the counselor and the client. Among the four factors Al-Darmaki and Kivlighan (1993) have identified, implications of counselor factors (i.e., counselor attributes and techniques) are just beginning to be investigated in the literature. Nissen-Lie et al. (2010) conducted a study to examine counselor variability in the patient rating of the early WA, and the results indicated that the substantial proportion (about 17%) of variability in the patient early alliance rating was due to differences between counselors. Baldwin, Wampold, and Imel (2007) also found that counselor variability in the client-rated WA attributes the alliance-outcome correlation, indicating counselors who can establish and maintain stronger WA with their clients can have better client counseling outcomes than those who cannot have positive WA. Therefore,

identifying counselor attributes to the WA can provide valuable information in developing positive WA.

As mentioned before, counselors' personal characteristics and their technical activity can play significant roles in developing a strong WA (Nissen-Lie et al., 2010). Ackerman and Hilsenroth (2001, 2003) examined previous studies in order to identify specific counselor personal characteristics as well as counseling techniques that may facilitate or hinder a positive WA between counselors and clients. Table 1 presents brief summary of those factors.

Table 1

*Positive and Negative Counselor Attributes and Techniques on the WA*

<b>Positive Counselor Factors on the WA</b>	
<b>Personal attributes</b>	<b>Counseling Techniques</b>
Flexible	Exploration
Experienced	Depth
Honest	Reflection
Respectful	Supportive
Trustworthy	Notes past therapy success
Confident	Accurate interpretation
Interested	Facilitates expression of affect
Alert	Active
Friendly	Affirming
Warm	Understanding
Open	Attentive to a client's experience
<b>Negative Counselor Factors on the WA</b>	
<b>Personal attributes</b>	<b>Counseling Techniques</b>
Rigid	Overstructuring the therapy
Uncertain	Failure to structure therapy
Exploitative	Inappropriate self-disclosure
Critical	Managing
Distant	Unyielding transference interpretation
Tense	Inappropriate use of silence
Aloof	Belittling
distracted	Superficial interventions

*Note.* Counselor factors identified in this table are adopted from Ackerman & Hilsenroth (2001, p. 182; 2003, p. 28).



Counselors' capacity to connect with clients and willingness to help them under any circumstances as well as personal attributes such as dependability, benevolence, warmth, friendliness, flexibility, and responsiveness are positively related to developing and maintaining the alliance with their clients. In addition, the therapeutic relationship could be boosted when counselors can demonstrate the ability to show interests in clients' issues and problems, openness, enthusiasm, empathy, trustworthiness, congruence, positive regards, and competencies (Ackerman & Hilsenroth, 2003; Hersoug, Høglend, Havik, Lippe, & Monsen, 2009). Moreover, counselors' great comfort working with clients closely, the ability to handle difficult situations during the counseling process, and possession of better interpersonal relationship skills will predict high quality of the bond component of the WA (Hersoug et al., 2009; Nissen-Lie et al., 2010). On the other hand, the WA between counselors and clients will not be developed well if counselors are too rigid, impatient, more distanced, disconnected, indifferent, try to control the situation, show the least interests in clients and are distracted by their own personal issues, and lack warmth, respect, and confidence (Ackerman & Hilsenroth, 2001; Hersoug et al., 2009; Nissen-Lie et al., 2010). Inappropriate utilization of counseling techniques can also prevent from developing proper therapeutic alliance. For example, counselors' hasty interpretation on clients' behaviors or emotions, inappropriate self-disclosure, over-structured counseling sessions, and inappropriate use of silence, etc. might disturb clients in exploring their own issues and concerns. Clients might be less likely to trust counselors when they have this type of experience frequently, causing decreased therapeutic relationship and alliance with counselors (Ackerman & Hilsenroth, 2001; Hersoug et al., 2009). These negative counselor characteristics and inappropriate counseling skills will impede the continuous growth of the WA and result in early and premature termination of counseling (Ackerman & Hilsenroth, 2001).

Rehabilitation counselors' personal characteristics and counseling skills are equally important in the rehabilitation counseling process. Rehabilitation counselors could develop an effective WA and the counseling process could be facilitated when they: (a) treat their clients as adults and grown individuals regardless of the severity of their disability; (b) use age-appropriate language and techniques; (c) try to emphasize clients' strengths and assets; and (d) are willing to help clients share their feelings and emotions as well as their own experiences (Kierpiec et al., 2010). Clients might be more satisfied and be willing to maintain a strong WA when their counselors have the ability to listen to and understand them as well as commitment to the clients rather than show condescension, rudeness, discrimination, and ongoing criticism (Hein et al., 2005).

To sum up, counselor characteristics account for significant variation in the counseling outcome, along with client pre-existing factors (Hauser, 2009). Previous literature has been identified several counselor attributes and technical activities that can affect the WA between the counselor and the client in the counseling process (Ackerman & Hilsenroth, 2001, 2003; Baldwin et al., 2007; Nissen-Lie et al., 2010). However, it is a beginning stage of examining the effects of the counselor factors on the WA, and research has not made clear conclusion on what are the salient counselor attributes that develop and facilitate the WA in the counseling process, suggesting further comprehensive studies need to be conducted (Hauser, 2009).

**Other counselor factors.** Several studies have identified the relationship between counselor demographic characteristics or professional variables and the WA.

**Gender.** Previous research results on the effects of therapist gender or gender similarity to clients on outcomes, including the WA between counselors and clients, were inconclusive. For instance, Krippner and Hutchinson (1990) found that clients tended to favor female

therapists significantly than the counterpart. Nelson's (1993) review of literature showed that some female clients were more successful when working with the same sex counselor. On the other hand, Anderson's (2005) study showed that gender similarity was negatively related to the client rating of the WA. Beutler et al. (2004) examined the previous literature and found lack of the relationship between counselor sex and counseling outcomes, indicating counselor sex or sexual fit may not be a major contributor to counseling outcome.

**Age.** Research on counselor age is very little, and results showed contradictory findings (Beutler et al., 2004). Some studies identified that clients favored counselors of a similar age (Smith, 1974) but other studies reported that clients preferred working with older counselors (e.g., Simon, 1973). A study conducted by Hersoug et al. (2009), which examined the effects of counselor characteristics on the WA with their clients, indicated that older counselors tended to rate the quality of the WA higher than younger counselors.

**Race/Ethnicity.** Several studies were conducted to examine whether counselor race/ethnicity or counselor-client racial match influence the relationship. Coleman, Wampold, and Casali (1995) indicated that clients with racial minority backgrounds were more likely to show preference for counselors who have similar racial/ethnic similarity. Moreover, a study conducted by Fiorentine and Hilhouse (1999) showed that gender and ethnic similarity between counselors and clients were significantly associated with higher levels of perceived counselor empathy. On the other hand, some research has identified that counselor and client match with age, gender, and race/ethnicity was not significantly related to both counselor and client rating of the WA (Evans-Jones, Peters, & Barker, 2009).

**Counselor experience or training.** The relationship between counselor level of experience and the WA also showed mixed results. A study conducted by Mallinckrodt and

Nelson (1991) indicated that counselor experience level was a significant predictive of task and goal components of the WA. On the other hand, counselor experience was not significantly associated with client and counselor reporting of the WA (Dunkle & Friedlander, 1996). O'Sullivan's (2012) study also had a similar finding that the level of education and work experience among rehabilitation service providers were not significant predictors of psychiatric disability WA. A study by Hersoug, Høglend, Monsen, and Havik (2001) indicated that counselor experience, training, and skills were not significantly associated with client ratings of WA, but counselor training and skills were significant indicators of counselor ratings of WA. Later research done by Hersoug et al. (2009) showed that client ratings of WA were negatively associated with professional training, and experienced counselors tended to rate the alliance lower than novice counselors.

## **Mental Illness Stigma**

**Mental illness recovery.** Mental health has been a major concern throughout the world. According to Substance Abuse and Mental Health Services Administration (SAMHSA, 2014), about 44 million (18.5%) adults aged 18 or older in the United States (U.S.) had some types of mental illness in 2013, with about 6% of the U.S. population having a severe mental illness (National Institute of Mental Health, 2013). Although an increased attention has been paid to enhance services for individuals with mental illness, they still experience difficulties pursuing proper treatments or desired rehabilitation outcomes, such as employment, resulting in many end up being unemployed, underemployed, or living in poverty (Sanchez, Rosenthal, Chan, Brooks, & Bezyak, 2016). The president's New Freedom Commission on Mental Health (2003) argued that one challenge initiating effective service provision for people with mental illness is lack of a vision of recovery within mental health system.

Since emerged in the late 20th century, the concept of recovery has been recognized as a major and significant principle in the field of psychiatric rehabilitation (Anthony, 1993;

Russinova, Rogers, Ellison, & Lyass, 2011). Anthony (1993) defined recovery as:

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

Anthony also indicated that "major recovery may occur without complete symptom relief. That is, a person may still experience major episodes of symptom exacerbation, yet have significantly restored task and role performance and/or removed significant opportunity barriers" (p.16).

Throughout the recovery process, individuals with mental illness will not only improve their health and wellness but also live a self-fulfilling life, by trying to reach their full potential (SAMHSA, 2010).

Many mental health professionals try to adopt the concept of recovery in their service delivery. Consumers who recovered from mental illness have also raised their voices to share their live experiences (Drake & Whitley, 2014). Although the recovery process among individuals with mental illness could be different, efforts have been made to identify several common themes that could have an impact on the recovery for people with mental illness. The first key theme of the recovery paradigm is empowerment, which is related to taking control of one's recovery and life. People with mental illness may become independent and take responsibility on their own recovery process when they can make important decisions on their treatment options and meaningful activities (Compton et al., 2014). Social support is also central

construct in recovery process. Recovery cannot be accomplished alone, and can be facilitated when individuals with mental illness become interdependent in their community and develop supportive relationship with others such as family members, friends, and mental health professionals (Anthony & Mizock, 2014; Jacobson & Greenley, 2001; Ridgway, 2001; Young & Ensing, 1999).

Many people with mental illness are sometimes overwhelmed by their illness and negative effects of existing symptoms. Therefore, one crucial aspect of recovery is to help people with mental illness redefine the self separate from the illness, see their illness as just one part in their lives, and enhance their self-esteem and self-respect (Andresen, Oades, & Caputi, 2003; Ridgway, 2001; Schrank & Slade, 2007; Young & Ensing, 1999). It is also important to encourage people with mental illness to discover meaningful activities and purpose in their lives. This could actually make people with mental illness feel themselves as an active participants in their lives and a valid contributor to their community rather than a passive mental patient. By establishing significant goals that are valuable in their lives, people with mental illness can focus on their own recovery process (Andresen et al., 2003; Ridgway, 2001).

Hope, which is directly connected to an individual's belief that recovery is possible, is an essential ingredient in recovery. Having a sense of hope can enhance the individual's motivation to engage in his or her recovery process. Hope could be facilitated when the individual with mental illness accepts his or her illness and focuses on strengths rather than weaknesses (Andresen et al., 2003; Anthony & Mizock, 2014; Jacobson & Greenley, 2001; Schrank & Slade, 2007; Young & Ensing, 1999).

**Attitude and stigma.** One factor that can significantly influence an individual with mental illness both personally and environmentally is a negative and stigmatizing attitude toward

mental illness. Attitude is defined as the way an individual tends to react to an object, behavior, person, institution, or event (Ajzen, 1993). According to Ajzen (1993), attitude is composed of three components, namely cognitive, affective, and behavioral component. The cognitive component of attitude is related to ideas, beliefs, and opinions that an individual hold regarding the attitude referent. The affective component is directly related to the feeling or emotions, and the behavioral component of the attitude is an individual's intention or readiness to take an action in a certain manner (Grbevski, 2009).

Stigma is a discrediting mark toward certain group that affects their rights and privileges (Corrigan et al., 2008). Stigma is generally framed as four social-cognitive processes: cues, stereotypes, prejudices, and discrimination (Corrigan, 2004). The general public may infer mental illness through several cues, such as psychiatric symptoms, poor social skills deficits, physical appearance, and labels (Corrigan, 2000; Penn & Martin, 1998). These signals yield stereotypes and prejudice about persons with mental illness. Stereotypes are considered as “efficient means of categorizing information about social groups” (Corrigan, 2004, p. 616). An example of most common stereotype toward mental illness is “people with mental illness is dangerous.” When people approve these negative stereotypes, they may hold prejudice toward persons with mental illness, generating negative emotional reactions (Corrigan, 2004; Corrigan et al., 2008). For instance, an individual who accepts the negative stereotype of mental illness may express negative emotional reaction toward the group (e.g., “it is right, people with mental illness is dangerous, therefore they scare me!”). Finally, prejudice can lead to behavioral reactions, which may result in discrimination against persons with mental illness. An example of discrimination can be excluding people with disabilities from employment or housing (Corrigan et al., 2008).

Negative attitudes toward, stigma against people with mental illness can have direct or indirect impacts on their lives. Especially, there is a concept of “hierarchy of stigma” postulating people with different types of disabilities may be influenced by different amount of stigma against them (Smart, 2009). Individuals with physical disabilities will be the least likely to be affected by stigmatizing attitudes. On the other hand, people with mental illness will be placed on the top in the hierarchy of stigma, due to the beliefs created in our society that people with mental illness should be blamed for their illness, less pitied, and avoided because they are considered to be dangerous (Corrigan et al., 2000).

Previous literature has consistently demonstrated negative impacts of stigma against individuals with mental illness as a major barrier to their recovery (Corrigan et al., 2000; Corrigan, 2004; Corrigan et al., 2008; Watson, Corrigan, Larson, & Sells, 2007). As a consequence of the public stigma, many people with mental illness may develop self-stigma, accepting common stereotypes and prejudices toward mental illness that are endorsed within society and believing that they are less valued due to their disability. This may result in lower self-esteem, self-efficacy, and confidence in one’s recovery and future life (Corrigan, 2004; Corrigan et al., 2008). Moreover, people with mental illness who accept the existing stigma may not utilize positive coping strategies when they confront stressful social situations, and less likely to be motivated for engaging in treatment and intervention activities (Corrigan, 2004; Perlick et al., 2001).

**Attribution theory.** Attribution theory (AT) is a fundamental model of motivation and emotion, which assumes that individuals seek to understand causal relationships of everyday events (Weiner, 1985). This theory provides a useful framework to describe the relationship between stigmatizing attitudes and discriminatory behaviors (Weiner, 1995). According to the



AT, a cognitive-emotional process influence behavior, so that people create attributions about the cause and controllability of an illness a certain person has, which make inferences about responsibility (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003). As a result of these inferences, certain emotional reactions such as pity or anger can be provoked, which have an impact on the likelihood of helping or punishing behaviors (Corrigan, 2000; Corrigan et al., 2003).

There are two main constructs explained in the AT: controllability and stability. Controllability refers to the degree to which people feel that the cause and responsibility are placed to an individual who has a disability (Corrigan, 2000). Controllability can be further segmented into onset and offset controllability. Onset controllability is one's belief or perception of whether an individual is responsible for the cause of illness or disability, whereas offset controllability is related to the belief about whether the person can put forth efforts to cope with and deal with issues caused by illness or disability (Schwarzer & Weiner, 1991). There is a tendency to place more responsibility and blame if certain events, situations, or conditions are seen as personally controllable. Therefore, if a person with mental illness is perceived as having control over his or her illness and/or being incapable of coping with the illness due to lack of insight, he or she may be more likely to be stigmatized (Corrigan, 2000; Strauser, Ciftci, & O'Sullivan, 2008).

The second domain of the AT, stability is defined as the extent to which the condition of an illness or disability is stable or unchanging over time. Some causes may remain constant but others can fluctuate (Corrigan, 2000). Traditionally, conditions or symptoms of mental illness, such as schizophrenia are considered as a quite stable and rarely improving process. Therefore, an individual with mental illness with such stable conditions are more likely to be believed that

he or she may not respond to treatment interventions and have less chance to improve or change, and as a consequence, he or she is more likely to be stigmatized (Strauser et al., 2008).

The AT, especially the concepts of offset controllability and stability, can also work as a useful framework in understanding the formulation of service providers' stigmatizing attitudes toward their clients with mental illness and their actions (Charles, 2015). For instance, service providers may show more stigmatizing attitudes if they believe that clients have control over the cause of an illness and control over their ability to deal with difficulties. As a result, service providers may be more likely to place blame and responsibility to their clients about not "managing" their symptoms well or not actively participating in the treatment interventions. Such service providers may also utilize more coercive or paternalistic treatment interventions to clients since they believe that their clients are less capable of dealing with problems or pursuing life goals. Moreover, if service providers perceive their clients as having less potential to improve or change, therefore believe that their clients will have poor prognosis and be less likely to achieve recovery, their actions and behaviors in the counseling process or service delivery will be less effective by limiting their clients' life goals and discouraging independence and empowerment of the clients. On the other hand, if service providers believe the capability of recovery of their clients, they will put more efforts to help and support their clients in pursuing their meaningful goals (Charles, 2015).

**Professional stigma.** Previous literature has focused its attention more on the attitudes toward, and stigma against mental illness among the general public, namely, public stigma (Broussard et al., 2012; Corrigan et al., 2000; Corrigan, 2004; Crisp et al., 2000; Schulze, 2007). However, it will also be important to understand the perceptions of professionals who directly provide services to individuals with mental illness on their clients since they can play a

significant role as a key person in the lives of their clients with mental illness (Crowe & Averett, 2015). Mental health service providers, including rehabilitation counselors can not only provide information, services and resources to the individuals with mental illness, but also take a role as an active supporter when their clients strive to achieve their own meaningful, and successful recovery (Corrigan, 2002). Positive interaction with and supports by key persons can have a significant impact on pursuing important life goals and enhancing quality of life for those with mental illness. When service providers hold positive attitudes toward their clients with mental illness focusing on their recovery rather than poor prognosis and developing a collaborative relationship with their clients rather than utilizing coercive treatment, clients will be more empowered in the collaborative partnership, benefit more from treatment, and be more successful in managing their symptoms or other issues (Corrigan, 2002).

On the other hand, negative attitudes toward people with mental illness and their recovery held by service providers will have a significant impact on the quality of service delivery as well as treatment or rehabilitation outcomes (Shulze, 2007; Wahl & Aroesty-Cohen, 2010). Service providers may develop and maintain negative attitudes toward individuals with mental illness not only influenced by societal and professional stigma as well as lack of competent education, training and supervision, but also as a result of therapeutic barriers that are experienced when working with clients with mental illness (Grbevski, 2009). Mental health service providers may experience difficulties caused by lack of insight and understanding of clients with mental illness, hopelessness toward treatment or counseling outcomes, blaming the client for treatment pitfalls, feeling incompetent in providing effective services, and so on (Crowe & Averett, 2015; Grbevski, 2009). Developed from such experiences and existing values, professionals' negative attitudes can have internal and external consequences for clients with mental illness, resulting in losing

hope, taking a passive role in the treatment or counseling process, and withdrawal from treatment interventions (Cohen, 1990). Professionals who have negative attitudes toward their clients with mental illness may be more likely to take a coercive role and control clients with directions (Stull, McGrew, Salyers, & Ashburn-Nardo, 2013), which can become a major barrier to creating an effective and trusting therapeutic relationship between the two parties.

Numerous studies have been conducted to investigate the attitudes of mental health professionals toward people with mental illness. The literature review studies in regard to stigma and attitudes of mental health professionals conducted by Shulze (2007) and Wahl and Aroesty-Cohen (2010) indicated that studies examined have yielded inconsistent results. For instances, a number of studies conducted in several European countries as well as the U.S. showed that mental health professionals held more positive attitudes toward clients with mental illness than the general public (Kingdon, Sharma, & Hart, 2004; Lauber, Anthony, Ajdacic-Gross, & Rossler, 2004; Nordt et al., 2006; Peris, Teachman, & Nosek, 2008) and optimistic about recovery (Magliano et al., 2004). On the other hand, some other studies showed that mental health professionals were less optimistic about prognosis and long-term outcomes than the general public (Hugo, 2001), held negative attitude toward potential of individuals with mental illness for recovery (Tipper, Mountain, Lorimer, & McIntosh, 2006), and matched persons with mental illness to more negative characteristics or descriptors (Deans & Meocivic, 2006). Van Dorn et al. (2005) investigated differences between mental health stakeholder groups (i.e., mental health professionals, consumers, and family members) and the general public on stigmatizing attitudes toward persons with schizophrenia. The results indicated that mental health stakeholder groups did not differ from the general public in the perceived likelihood of violent behavior and the desire for social distance from persons with schizophrenia. In another Irish study, Cleary and

Dowling (2009) explored the knowledge and attitudes of mental health professionals (i.e., nurses, doctors, social workers, occupational therapists, and psychologists) to the concept of recovery in mental health. Their study results showed that respondents had less knowledge and discerning attitudes to the concepts of recovery, such as non-linearity of the recovery process, risk taking, and hope.

Although relatively little studies have been conducted in the field of counseling and rehabilitation counseling, the results also indicated mixed results. Thomas et al. (2011) examined whether there is a difference between perceptions of physical and mental disability among human service professionals. The results indicated that special education/rehabilitation providers reported more positive attitudes toward both physical and mental disability than counselors and general educators. Similarly, a study conducted by Smith and Cashwell (2010) showed that counselors-in-training students possessed more positive attitudes toward people with mental illness than those in other majors. In addition, Hoy and Holden (2014) indicated that licensed professional counselors reported positive attitudes toward individuals with schizophrenia and hope in recovery.

On the other hand, Wong, Chan, Cardoso, Lam, and Miller (2004) examined factors affecting rehabilitation counseling students' attitudes toward people with disabilities. The results indicated that disability type, education, age, and ethnicity significantly contribute to the attitude formation among rehabilitation counseling students who participated in the study. Students showed more positive attitude toward physical disability than psychiatric disability, in addition to showing preference for younger, educated, European American Women. A similar study conducted by Rosenthal, Chan, and Livneh (2006) also yielded consistent result that

undergraduate rehabilitation service students reported more preferable attitudes toward physical disability (e.g., multiple sclerosis) rather than psychiatric disability (e.g., schizophrenia).

### **Social Cognitive Theory**

Social Cognitive Theory (SCT) was developed based on the work of Miller and Dollard (1941) that was originally known as social learning theory (McAlister, Perry, & Parcel, 2008). Social learning theory posited that learning is a cognitive process that occur within the human context, indicating that people can learn new behaviors by observing others' behavior or observing consequences of the behavior (Bandura, 1977). Further expanded from social learning theory, Bandura (1986) conceptualized SCT, which is one of the most widely applied theories in understanding how an individual can learn and maintain certain behaviors (Wise, 2002).

According to SCT, human behaviors can be explained in the triadic reciprocal determinism, which is that behavior, cognitive and other personal factors, and environmental influences interact as determinants of each other (Bandura, 1986). First, personal factors (P) are related to individuals' psychological (e.g., self-efficacy, self-regulation) and biological constructs (e.g., hormone, height, weight, etc.) (Wise, 2002). For instance, a personal factor such as self-efficacy, an individual's belief that one can successfully perform a certain behavior, will lead the person to engage in the activity. Second, Environmental factors (E), physical surrounding or situations in which an individual is placed (e.g., weather condition, other people, etc.), can also influence the decision the individual make (Wise, 2002). For example, although the individual is confident to perform certain task, he or she is hardly to take an action if the environmental condition does not meet the needs for the action. The final component is related to the behavior (B) performed by an individual. Although those three factors interact with each

other, the strengths and direction of the relationships and contributions among factors can vary depending on situations, people, and activities (Wise, 2002).

SCT not only recognizes how environments influence behavior, but also emphasizes that people have potential to alter and construct environments that can be suitable for themselves, based on their purposes and plans (McAlister et al., 2008). Moreover, how an individual interprets the consequences of his or her behaviors can directly affect the environments as well as personal factors. That is, people are not only producers, but also products of their social systems. Bandura (2001) emphasized that people are proactive agents who have an ability to take control of their own behaviors as well as who can accomplish tasks and goals that provide meaning, direction, and satisfaction to their lives.

SCT postulates that human values and expectations are subjective, and the important thing is how an individual perceives certain phenomena rather than what is the objective reality (McAlister et al., 2008). Two key psychological determinants stressed in SCT are outcome expectations and self-efficacy belief. Outcome expectations refer to the belief that a specific behavior that an individual performs will lead to desired outcome, whereas self-efficacy is related to the belief that the individual can have an ability to perform necessary actions to achieve intended goals (Bandura, 1986). It is believed that individuals' behaviors are likely to be determined by both outcome expectation and self-efficacy (Bandura, 1997).

**Self-efficacy.** Self-efficacy belief is one of the most prominent concepts in SCT. Perception of self-efficacy will have huge influence on what activities an individual will pursue, how much efforts the individual would make, and how to deal with obstacles the individual may encounter to perform the behavior (Wise, 2002). There are four major sources that can facilitate or weaken self-efficacy belief (Bandura, 1977):

1. Mastery experience strongly influences self-efficacy belief. Strong efficacy expectations will be developed if one accumulates ongoing successful experiences about performance whereas experiences of repeated failures will lower efficacy expectations.
2. Vicarious experience, obtained through modeling, is another source of self-efficacy belief. Observing others performing challenging activities without adverse consequences can make observers develop expectations that they can also accomplish those tasks if they make an enormous effort.
3. Verbal or social persuasion with suggestion or encouragement will enhance confidence among people that they can make more efforts to successfully perform certain behaviors.
4. Emotional arousal caused by stressful and taxing situations can affect perceived self-efficacy. People are more likely to expect success and feel confident when they are not heavily influenced by aversive arousal. On the other hand, their level of anxiety will be elevated when they have fear-provoking thoughts about their ineptitude, which may result in negative results on task performance.

**Outcome expectancy.** Bandura (1977) defined outcome expectancy as an individual's judgment on the possibility that a given behavior will lead to certain outcomes. Bandura (1989) also postulated that "degree to which outcome expectations contribute to performance motivation, independently of self-efficacy beliefs, is partially determined by the structural relationship between actions and outcomes in a particular domain of function" (p. 1180). If an individual believes that a certain behavior seems to bring positive outcome, he or she might be more likely to engage in the behavior (McAlister et al., 2008). Outcome expectancy differs from efficacy



expectations. Although the individual may believe that the course of action can lead to a desired outcome, he or she may not initiate the behavior if he or she has doubts about their ability to perform such activities (Bandura, 1977). Furthermore, even if a person has strong competence of performing a certain activity, he or she may be reluctant to perform the behavior when he or she perceives that the outcome may not be desirable. Therefore, in order to successfully perform a behavior, it might be necessary to have not only knowledge and skills, but also the beliefs that one is capable of conducting the behavior (i.e., efficacy expectations) and expectations that one's behavior will lead to desirable outcomes (i.e., outcome expectations) (Bandura, 1986; Iannelli, 2000).

### **Counseling Self-Efficacy**

By applying SCT into the field of counselor training, Larson (1998) proposed the Social Cognitive Model of Counselor Training (SCMCT). Similar to SCT, the SCMCT emphasized that CSE is one of the most significant predictors of counselor performance (Larson et al., 1992). CSE refers to the beliefs or judgments counselors hold that they have an ability and confidence to work effectively with their clients in the near future counseling sessions (Larson et al., 1992). Larson (1998) also postulated that CSE can “affect the choice of counselor responses, effort expenditure and persistence in the face of failures, and risk-taking behavior” (p. 226).

CSE can play a role in the future counseling action by mediating influences of other self-generated processes such as affective, motivational, and cognitive processes. Counselors who have higher self-efficacy will see their anxiety as challenging, set realistic and challenging counseling goals, and have self-aiding thoughts in the counseling sessions (Larson, 1998). Therefore, those who possess stronger CSE may be more likely to show confidence interacting with clients, to utilize helpful counseling techniques, and to put efforts to find best solutions

when they encounter clinical impasses (Lent et al., 2006). Moreover, counselors who possess high self-efficacy may demonstrate better counseling skills such as showing empathy to clients, assessing client concerns and problems, working more collaboratively with clients, finding better counseling techniques when properly needed, and dealing effectively with conflicts within counseling sessions. (Halverson, 2006, as cited in Bruton, 2013). On the other hand, if counselors feel less confident, less motivated, and see themselves less effective in the counseling session when working with certain clients, they will be more likely to shy away from these clients (Dimeff & Linehan, 2001) and less likely to make effort to learn and acquire difficult counseling skills (Larson & Daniels, 1998).

Most of the previous literature on CSE have its attention more on the self-efficacy development or facilitation among pre-service counselors in counseling training programs since CSE is an important aspect of counselor training and development (Larson & Daniels, 1998; Lent et al., 2006; Spears, 2014). During pre-service training and education, counseling trainees obtain and practice specific counseling skills and knowledge. Through the accumulation of practice and experience as a counselor, students may develop a sense of mastery and competence when they work with clients, that can lead to increased CSE (Bruton, 2013).

A number of previous studies focused on examining factors influencing CSE as well as identifying the relationship of CSE to other related constructs. However, relatively little research has been conducted to examine the relationship between CSE and counseling performance or actual counseling outcomes. For example, Sipps et al. (1988) examined the relationship between level of graduate training and CSE and the study results indicated that counselor trainees in senior levels showed higher self-efficacy in using basic counseling skills as well as outcome expectation than those who are in their first or second year counseling program. Research done

by Leach, Stoltenberg, McNeill, and Eichenfield (1997) showed that more experienced counseling trainees reported greater self-efficacy of microskills than those with less experiences. Experienced trainees also showed higher efficacy to work with clients from diverse backgrounds as well as focused more on the interaction with their clients.

Larson and Daniels (1998) conducted an integrative review of CSE literature. They found that CSE was positively correlated with outcome expectations and negatively related with anxiety. In addition, counselors with stronger self-efficacy tended to see their success in counseling sessions as more stable and as more a result of their own abilities. High self-efficacy was also related to increased self-esteem and problem solving skills (Al-Darmaki, 2004). Heppner, Multon, Gysbers, Ellis, and Zook (1998) examined changes in CSE among counseling trainees through practicum experiences and the relationship between CSE and client outcome. The results indicated that CSE has been increased from pre-practicum to post-practicum, and clients reported significant growth in the WA with their counselor as well as goal attainment from pretest to posttest. However, their study did not reveal the significant relationship between CSE and client outcomes.

Lent and colleagues' (2003) study showed that students with more education and clinical experience showed higher CSE, reporting those who revealed more confidence in their basic counseling skills and dealing with challenging situation were more likely to express confidence at managing the overall and fundamental aspects of counseling. Moreover, Tang, Addison, LaSure-Bryant, and Norman (2004) examined the relationship between counselor education and/or training and CSE among counselor education students. The results indicated that level of education and training and clinical experience (e.g., length of internship and prior work experience) significantly affected self-efficacy of counselor skills. More recent study done by

Kozina et al. (2010) also indicated that counselors-in-training showed a significant growth in CSE over the years of counseling training, education, and supervision.

### **Counseling Outcome Expectancy**

In regard to the counseling process, COE is defined as “counselors’ judgments of the likely consequences of their counseling actions in the near future” (Larson, 1998, p. 231). COE may be related to the degree to which counselors believe their counseling performance provided to their clients will increase client competence in achieving client’s meaningful goals and eventually lead to successful counseling outcome. Although Larson (1998) mentioned that the impact of COE on the counselor actual performance might be minimal after CSE is accounted for, outcome expectancy might play a role as an additional mediating variables when given tasks are ambiguous, abstract, or complex (Bandura, 1997). Given complexity and uncertainty of the counseling process where a successful performance of the task may not always account for the achieved outcome, COE might influence counselor motivation and performance, independent of the self-efficacy beliefs (Schwartz, 2016). For instance, a counselor with high CSE will have a strong belief that he or she is capable of successfully working with a client in a counseling session utilizing appropriate counseling skills. However, if the counselor shows low outcome expectancy, therefore he or she may have doubts that the counseling session would lead to positive therapeutic change, the counselor might be hesitant to actively engage in the counseling task that can lead to successful or satisfying outcome (Schwartz, 2016).

Previous literature has focused much on examining the relationship between client outcome expectations or expectations about counselor performance on therapeutic change or actual treatment outcomes (Constantino, Ametrano, & Greenberg, 2012). Only a few studies have been identified which examined the relationship between COE and performance, including

the WA. For example, Al-Darmaki and Kivlighan (1993) indicated that there was a significant correlation between both counselor and client expectations and their perceived WA. Moreover, the congruence in expectations about relationship was most significantly associated with counselor and client WA ratings. A study conducted by Joyce and Piper (1998) found that COE after sessions (i.e., expectancy about usefulness and comfort) was significantly related to the counselor rating of WA. Katz and Hoyt (2014) study showed that counselors' perception of anticipated client outcome had a significant positive relationship with bond component of the WA. A study conducted by Iannelli (2000) indicated that CSE significantly predicted counselor performance of counseling related skills, knowledge, and therapeutic interpersonal relationship, but there was not a significant relationship between COE and counselor performance.

## **CHAPTER 3**

### **METHODS**

The purpose of the current study was to examine rehabilitation counselor attitudes toward individuals with mental illness and their recovery, counseling self-efficacy (CSE), and counseling outcome expectancy (COE) as constructs which influence the working alliance (WA) between rehabilitation counselors and clients with mental illness. Based on such purpose, the research questions and hypotheses in this study were as follows:

1. What are the relationships between rehabilitation counselor attitudes (toward individuals with mental illness and recovery), CSE, COE, and the WA among rehabilitation counselors and their clients with mental illness?
  - 1a. The attitude of rehabilitation counselors toward individuals with mental illness and recovery will be positively correlated with rehabilitation counselors' perceived WA.
  - 1b. The CSE and COE of rehabilitation counselors will be positively correlated with rehabilitation counselors' perceived WA.
2. How do rehabilitation counselor attitudes (toward individuals with mental illness and recovery), CSE, and COE interact and predict the WA among rehabilitation counselors and their clients with mental illness?
  - 2a. When controlling for rehabilitation counselor demographic characteristics such as gender, age, race/ethnicity, years of experiences as rehabilitation counselors, in-service training experiences, and caseload size as well as rehabilitation counselor social desirability bias, rehabilitation counselor attitudes (toward individuals with

mental illness and recovery), CSE and COE will account for a significant amount of variance in the WA among rehabilitation counselors and clients with mental illness. It was anticipated that study results would provide valuable information related to rehabilitation counselor roles in the development of the WA within the rehabilitation counseling process. The information obtained in the study can also be useful in both pre-service and in-service rehabilitation counselor education and training. This method chapter describes the research design, procedures, participants, instrumentation, variables, and data analysis.

### **Research Design**

A cross-sectional, correlational, and quantitative design via an Internet-based survey was used to investigate the effects of rehabilitation counselor attitudes toward individuals with mental illness and their recovery, CSE, and COE on the WA between rehabilitation counselors and their clients with mental illness. The quantitative data was used to conduct descriptive as well as ex post facto analyses utilizing correlation and multiple regression analyses.

### **Data Collection Procedure**

Prior to the data collection, approval was obtained from the Michigan State University Institutional Review Board (IRB) to conduct research involving human subjects. After receiving approval from the IRB, the researcher contacted the Commission on Rehabilitation Counselor Certification (CRCC) in order to request the use of CRCC's database, sending the following documents required by CRCC: a written research proposal, CRCC mail list rental request form, a copy of written IRB approval, and a copy of instruments being used in the study. An email list of 10% of the random sample for its approximately 17,000 members who work in specific employment settings (i.e., Center for Individuals with Developmental Disabilities, College or University; Corrections Facility, Independent Living Facility, K-12 School, Mental Health

Center/Psychiatric Facility, Private Not-For-Profit Rehabilitation, State/Provincial Rehabilitation Agency, Veterans Benefits Administration and Veterans Health Administration) was requested.

After receiving approval from the CRCC and obtaining the email list of rehabilitation counselors, potential participants were contacted through email to invite them to participate in the study. The email contained a consent form, an invitation to participate in the study, and a link to access to the survey. The consent form included information such as the purpose of the study, voluntary nature of the study participation, confidentiality, and potential harm. One week after sending the initial invitation email, a reminder email was sent to rehabilitation counselors in order to ask participation to this study. A final reminder email was sent one week following the first reminder email. The email announcement and the consent form are presented in Appendix A and B, respectively.

The present study was administered using an online survey platform “Qualtrics” (Qualtrics.com) to collect data from participants. The survey was available for a four week period and was designed to avoid multiple responses from the same participant. Participants had access to the survey through the link that was included in the email being sent to potential participants. Survey completion took approximately 20 to 25 minutes. Although demographic information was gathered, no personal identifiable information was included in the demographic questionnaire. Once participants fully completed the survey, they were given the opportunity to receive one continuing education credit from the CRCC.

## **Participants**

The population of interest in this study was rehabilitation counselors. The current study comprised a convenience sample of rehabilitation counselors certified by the CRCC. According to the CRCC (2015), there are approximately 17,000 certified rehabilitation counselors serving



people with disabilities across the United States. Rehabilitation counselors were selected as the population of interest in this study because rehabilitation counselors are uniquely qualified professionals to provide rehabilitation counseling and vocational rehabilitation services to individuals with disabilities including those with mental illness. Rehabilitation counselors work in a variety of settings such as private sector, state/federal agencies, profit/non-profit organization, college and universities, and medical and mental health facilities (Saunders, Barros-Bailey, Chapman, & Nunez, 2009). In order to avoid study participation by rehabilitation counselors who work in a setting which does not primarily serve clients with mental illness, those counselors who work in the following employment settings were selected as potential study participants: (a) Center for Individuals with Developmental Disabilities; (b) College or University; (c) Corrections Facility; (d) Independent Living Facility; (e) K-12 School (f) Mental Health Center/Psychiatric Facility; (g) Private Not-For-Profit Rehabilitation; (h) State/Provincial Rehabilitation Agency; (i) Veterans Benefits Administration; and (j) Veterans Health Administration.

An invitation to participate in the study was sent to a total of 1,700 email addresses obtained from CRCC. Of the 1,700 emails, 13 individuals declined to participate in the survey. Based on previous studies that used a sample of certified rehabilitation counselors, it was expected to have an approximately 20% response rate (Kuo, 2013; Landon, 2016). While 348 participants started the survey (20.5%), 54 did not respond to any survey items (3.2%). This left 294 individuals who provided at least some information (17.3%). Of those, only participants who fully completed the survey items for all of the study variables were considered for further analyses ( $n = 227$ ), resulting in a final response rate of 13.4%.

A review of the 348 surveys that were started by participants showed that the majority of the participants responded to the first two questionnaires, Recovery Scale ( $n = 292$ , 83.9%) and Expectation for Counseling Success ( $n = 290$ , 83.4%). However, a decreased response pattern across the following four scales was noticed: Counseling Self-Estimate Inventory, 76.7% ( $n = 267$ ); Working Alliance Inventory, 67.5% ( $n = 235$ ); Error Choice Test, 66.4% ( $n = 231$ ); and Social Desirability Scale, 66.1% ( $n = 230$ ). In regards to dealing with missing data, it was decided to exclude the participants who provided only partial information on the survey instruments ( $n = 67$ ). This procedure resulted in the use of 227 fully completed surveys for sample and data analysis purposes.

### **Participant Demographics**

Table 2 shows the demographic information of the study participants ( $n = 226$  with missing  $n = 1$ ). The majority of the certified rehabilitation counselors who responded to the survey were female (80.1%,  $n = 181$ ). Regarding participant race/ethnicity, 75.7% ( $n = 171$ ) were White, 8.8% ( $n = 20$ ) were African American, 8.0% ( $n = 20$ ) were Hispanic or Latino, 2.2% ( $n = 5$ ) were Asian American, and 4.9% ( $n = 11$ ) were multiracial. Regarding age, the mean age of the participants was 44.83 years ( $SD = 12.23$ ) with a range of 23 years old to 78 years old. Regarding the level of education, the majority of the study participants had master's degree (88.5%,  $n = 200$ ), with 24 participants having Ph.D degree (10.6%) and two participants having bachelor's degree (0.9%). Regarding current employment setting, 37.2% ( $n = 84$ ) of the participants were working in a state rehabilitation agency, 18.1% ( $n = 41$ ) in a college/university, 13.7% ( $n = 31$ ) in a private not-for-profit rehabilitation agency, 9.7% ( $n = 22$ ) in a community mental health center/psychiatric facility, and 21.2% ( $n = 48$ ) in other settings.

Table 2

*Demographic Characteristics*

<b>Variables</b>	<b>N</b>	<b>%</b>	<b>Mean</b>	<b>SD</b>
Gender				
Male	44	19.5		
Female	181	80.1		
Age			44.83	12.231
<30	24	10.6		
30-39	62	27.4		
40-49	59	26.1		
50-59	43	19.0		
>60	38	16.8		
Race/Ethnicity				
White	171	75.7		
African American	20	8.8		
Hispanic or Latino	18	8.0		
Asian American	5	2.2		
Multiracial	11	4.9		
Level of Education				
Bachelors	2	0.9		
Masters	200	88.5		
Doctorate	24	10.6		
Current Employment Setting				
State Rehabilitation Agency	84	37.2		
College/University	41	18.1		
CMH/Psychiatric Facility	22	9.7		
Private Not-For-Profit Rehabilitation	31	13.7		
Other Practice Setting	48	21.2		

*Note.* Missing  $n = 1$  for demographic information.

For gender, one participant preferred not to answer therefore  $n = 225$ .

CMH = Community Mental Health.

The study participants had a mean of 14.01 years ( $SD = 10.42$ ) of work experience in the rehabilitation counseling field, with a mean of 13.60 years ( $SD = 9.89$ ) of work experience with individuals with mental illness. The mean caseload size was 80.30 ( $SD = 96.40$ ) with a mean of 36.5% ( $SD = 34.25$ ) of clients with mental illness on their caseload. In regards to in-service training experience, 81.4% ( $n = 184$ ) of the rehabilitation counselor responded that they had experience receiving in-service psychiatric rehabilitation training (See Table 3).

Table 3

*Participants Experiences and Caseload Size*

<b>Variables</b>	<b>N</b>	<b>%</b>	<b>Mean</b>	<b>SD</b>
Years of RC Experience			14.01	10.421
0-5 Years	56	25.0		
6-10 Years	56	25.0		
11-15 Years	27	12.1		
16-20 Years	35	15.6		
Over 20 Years	50	22.3		
Years of MI Experience			13.60	9.887
0-5 Years	47	26.3		
6-10 Years	40	22.3		
11-15 Years	27	15.1		
16-20 Years	31	17.3		
Over 20 Years	34	19.0		
In-Service Training Experience	184	81.4		
Caseload Size			80.30	96.399
0-30	85	41.1		
31-60	26	12.6		
61-90	26	12.6		
91-120	22	10.6		
Over 120	48	23.1		

*Note.* Missing  $n = 1$  for in-service training experience; missing  $n = 3$  for years of RC experience; missing  $n = 19$  for caseload size; missing  $n = 48$  for years of MI experience. For caseload size, one participant was excluded due to an outlier amount (1,500). RC = Rehabilitation Counseling; MI = Mental Illness.

Table 4 illustrates the degree of perceived preparation and satisfaction of working with individuals with mental illness among the study participants which participants rated on a scale of zero (No preparation or satisfaction) to four (Very high degree of preparation or satisfaction). The majority of the participants reported that they perceived a moderate to very high degree of preparation to work with their clients with mental illness (Mean = 3.66;  $SD = .83$ ). Similarly, approximately 97% of the study participants were moderately to very highly satisfied with working with their clients with mental illness (Mean = 3.72;  $SD = .79$ ).

Table 4

*Perceived Preparation and Satisfaction*

<b>Variables</b>	<b>N</b>	<b>%</b>	<b>Mean</b>	<b>SD</b>
Degree of Preparation			3.66	0.828
No Preparation	1	0.4		
Little Preparation	15	6.6		
Moderate Preparation	77	34.1		
High Preparation	99	43.8		
Very High Preparation	34	15.0		
Degree of Satisfaction			3.72	0.794
No Satisfaction	1	0.4		
Little Satisfaction	6	2.7		
Moderate Satisfaction	88	38.9		
High Satisfaction	92	40.7		
Very High Satisfaction	39	17.3		

*Note.* missing  $n = 1$ .

**Instrumentation and Variables**

Predictor variables used in this study were rehabilitation counselors attitudes toward individuals with mental illness, attitudes toward recovery of their clients with mental illness, CSE, and COE, and the outcome variable was rehabilitation counselors' perceived WA with their clients with mental illness. The control variables were rehabilitation counselors' demographic characteristics, such as gender, age, race/ethnicity, years of experiences, in-service training experience, and the caseload size, and rehabilitation counselor social desirability bias. To measure such variables, this study utilized following questionnaires: (a) demographic information, (b) Recovery Scale, (c) Error Choice Test, (d) Counseling Self-Estimate Inventory, (e) Expectation for Counseling Success, (f) Working Alliance Inventory-Short form, Therapist, and (g) Social Desirability Scale.

**Demographic information.** Participants were asked to complete a demographic information sheet developed by the researcher based on the purpose of this study. In order to provide the description of the sample, demographic information was collected for the following

areas: age, gender, race/ethnicity, level of education (i.e., highest degree earned), licensure/certification status, years of work experience as a rehabilitation counselor, current work status with clients with mental illness, years of work experience with clients with mental illness, caseload size, client primary disability type, current work setting, in-service training experience to serve clients with mental illness, the degree of preparation to work with clients with mental illness, and the degree of satisfaction with working with clients with mental illness. The study Demographic Information Sheet is presented in Appendix C.

**Error Choice Test.** The Error Choice Test, titled as Knowledge of Test of Mental Illness, was selected in the current study to measure rehabilitation counselors' stigmatizing attitudes toward individuals with mental illness (See Appendix D). One issue in the mental illness stigma research is social desirability effects, in that social desirability is "the tendency for people's responses to conform to cultural mores, rather than their true belief" (Michaels & Corrigan, 2013, p. 219), which could result in study results being biased. The Error Choice Test (EC; Michaels & Corrigan, 2013) was developed to examine the general public's stigmatizing attitudes toward people with mental illness as a less susceptible measure to social desirability effects. Being presented to research participants as a test of knowledge about mental illness to reduce the bias, this measure consists of 14 items with two answer choices, one of which is a more stigmatized answer (Wassel, 2014). For example, one of the questions is "people with schizophrenia make up what percent of the homeless population" with the choices of either "5%" or "25%". Each question is coded into "0" or "1", with zero representing a less stigmatizing perspective and one indicating a more stigmatizing perspective. The scores were summed up, with total scores range from zero to 14. The total scores represent overall prejudice, that is, higher scores are related to more stigmatizing attitudes toward people with mental illness. In the

current study it was hypothesized that rehabilitation counselors who show more positive attitudes toward individuals with mental illness will have a stronger WA when working with clients with mental illness. Since higher scores indicate greater stigmatizing and negative attitudes, the total scores of EC in the current study were summed up with reversed scores to examine the hypothesis correctly.

When examining the psychometrics of the EC, Michaels and Corrigan (2013) reported the test-retest reliability of EC as .70 for the samples of mental health service providers. In addition, construct validity analyses indicated that the EC had a positive relationship with the *Attribution Questionnaire* and was negatively correlated with *Self-Determination* and *Empowerment Scales* (Michaels & Corrigan, 2013). In the current study, Cronbach's alpha of the EC was .53.

**Recovery Scale.** Rather than focusing only on reducing prejudice and discrimination toward people with mental illness, current stigma research emphasizes the importance of increasing affirming attitudes toward individuals with mental illness, such as beliefs that people with mental illness can recover and are capable individuals with values and worth (Kosyluk, 2014). The Recovery Assessment Scale (RAS), one of the most common measures used in recovery-oriented research, was originally developed to examine consumers' perception of recovery (Corrigan, Salzer, Ralph, Sangster, & Keck, 2004). The RAS consists of 24 items that measure individuals' with mental illness personal confidence and hope, willingness to ask for help, goal and success orientation, reliance on others, and life view beyond symptoms (Corrigan et al., 2004). The Recovery Scale (RS) is adapted from the RAS in order to measure public perception of recovery (Corrigan, Powell, & Michaels, 2014).

The RS consists of 13 items, which ask several aspects of recovery such as purpose and goals (e.g., People with mental illness believe that they can meet their current personal goals), symptoms (e.g., The symptoms that people with mental illness experience interfere less and less with their life), and relationships (e.g., People with mental illness have people they can count on) (Wassel, 2014). Research participants are asked to respond to the items using a 9-point Likert scale, ranging from 1 = *strongly disagree* to 9 = *strongly agree* (rating scale was reversed based on the purpose of this study). Total scores range from 13 to 117, with higher scores indicating greater agreement that people with mental illness can recover and are capable individuals with values and worth.

Corrigan et al. (2013) conducted research to evaluate the psychometrics of several mental health stigma measures including the RS, using four samples of research participants (i.e., college students, adult community members, health care providers, and mental health service providers). The results showed that the RS had good internal consistency, with Cronbach's alphas ranging from .73 to .94. They also reported test-retest reliability, ranging from .58 to .77. In addition, Corrigan et al. (2013) examined validity by looking at the association between the RS and other constructs (i.e., *Empowerment Scale*, *Attribution Questionnaire*, and *Self-determination Scale*). Results of Pearson Product Moment Correlations showed that the *Empowerment Scale* was positively correlated with the RS in all four groups of the sample. The *Attribution Questionnaire* had significant negative correlations with the RS in the sample of health care providers and adult community members. In regards to the reliability of this scale in the current study, Cronbach's alpha was found as .79. See the RS in Appendix E.

**Counseling Self-Estimate Inventory.** Larson et al. (1992) developed the Counseling Self-Estimate Inventory (COSE) to examine counselors' perceived self-efficacy. The COSE



consists of 37 items on a 6-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (6). The items are randomly ordered and have both positive and negative statements about CSE. The total score represents counselors' level of self-efficacy belief, with higher scores indicating greater self-efficacy (Kozina et al., 2010). The total scores for the whole scale range from 37 to 222, with the ranges of the following subscales: Microskills ranging from 12 to 72; Process ranging from 10 to 60; Difficult Client Behaviors ranging from seven to 42; Cultural Competence ranging from four to 24; and Awareness of Values ranging from four to 24.

Questions presented in the COSE are divided into five domains, based on a principal-factors extraction with varimax rotation (Larson et al., 1992). The first domain is Microskills, which contains 12 items with factor loadings ranging from .41 to .64. This domain indicates microcounseling skills in regards to the quality of the counselors' responses (e.g., "I am confident that the wording of my interpretation and confrontation responses will be clear and easy to understand"). The second domain, Process domain contains 10 items with factor loadings from .43 to .58, and is focused on the integrated set of counselor responses when working with a client (e.g., "I am worried that my interpretation and confrontation responses may over time assist the client to be more specific in defining and clarifying the problem"). The third domain, Difficult Client Behaviors, has seven items and factor loadings ranging from .46 to .63. This domain is related to the possession of knowledge and techniques to deal with problems that a client has such as lack of motivation, suicidal thoughts, substance abuse, and silence (e.g., "I do not feel I possess a large enough repertoire of techniques to deal with the different problems my client may present"). The Cultural Competence domain consists of four items with factor loadings ranging from .51 to .66, representing counselors' competency to work with clients from different cultural backgrounds (e.g., "I will be an effective counselor with

clients of a different social class”). The last domain is Awareness of Values, with four items and factor loadings ranging from .42 to .64. The items in this domain concern the counselors’ biases or values (e.g., “I am likely to impose my values on the client during the interview”).

The COSE seems to have sound psychometric properties. Larson et al. (1992) reported the internal consistency for the total score was .93, and estimates of reliability for five subscales ranging from .62 to .88. The test-retest reliability after three-week periods was ranging from .68 to .87. In regards to convergent validity, Larson et al. reported that the COSE was positively related to the *Tennessee Self Concept Scale* and the *Problem Solving Inventory*, and had a negative relationship with the *State Trait Anxiety Inventory*. When examining the reliability of the COSE for the current sample, Cronbach’s alpha for the total score was .92, followed by .88 for Microskills, .85 for Process, .84 for Difficult Client Behavior, .74 for Cultural Competence, and .38 for Awareness of Values.

Based on the purpose of the current study, which examines CSE specific to clients with mental illness, each item asks participants to answer the question thinking of counseling situations when working with their clients with mental illness. The COSE is presented in Appendix F.

**Expectation for Counseling Success.** Kim, Ng, and Ahn (2005) developed Expectation for Counseling Success (ECS) to examine clients’ perceived expectation about counseling success. ECS is a five-item self-report measure, rated on a four-point Likert scale (i.e., 1 = *strongly disagree*, 4 = *strongly agree*). The total scores range from five to 20, with higher scores indicating more positive outcome expectations about counseling success. Kim et al. (2005) reported that the internal consistency for this measure was .84. In regard to the validity of this

instrument, authors reported that ECS was positively related to the perception of counselor empathy ( $r = .20$ ).

Based on the purpose of the current study, this measure was used to examine rehabilitation counselors' perceived expectation about counseling outcome of clients with mental illness. Therefore, the items were modified in order to ask questions from the perspectives of rehabilitation counselors, instead of clients. For example, the item "I expect counseling will be helpful for me" was changed to "I expect counseling will be helpful for individuals with mental illness." The internal consistency reliability (i.e., Cronbach's alpha) of the ECS in the current study was .74. The modified version of ECS is presented in Appendix G.

**Working Alliance Inventory –Short Form, Therapist.** Horvath and Greenberg (1989) developed the Working Alliance Inventory (WAI) based on Bordin's (1979) pantheoretical conceptualization of the WA to assess three dimensions: bonds, tasks, and goals. The original version of the WAI is a 36-item questionnaire on a seven-point Likert-type scale ranging from 1 = *never* to 7 = *always*, which can be administered to both clients and therapists. Confirmatory factor analysis yielded abbreviated version of the original WAI (WAI-S; Tracey & Kokotovic, 1989), and the WAI-S therapist form was used in the present study (See Appendix H).

The WAI-S consists of 12 items, with four items per each subscale. The three subscales are Task, which is counselor-client agreement on task, Goal, which is counselor-client agreement on goals, and Bond, which is the development of a personal bond between the counselor and the client (Tracey & Kokotovic, 1989). The individual item responses are summed for a total score, ranging from 12 to 84 with higher number indicating a greater WA. Respondents are asked to fill in the blank with one client's name and answer the items. In the present study, each item asked participants to think of clients with mental illness in general who they provide services for,

instead of asking them to think of one particular client. For example, the description of the item was changed from “\_\_\_\_\_ and I agree about the steps to be taken to improve his/her situation” to “clients with mental illness and I agree about the steps to be taken to improve their situation.”

Tracey and Kokotovic (1989) reported that the internal consistency for the total score of the WAI-S therapist form was .95, and estimates of reliability for three subscales ranging from .83 to .91. In addition, Busseri and Tyler (2003) reported the interchangeability of total and subscale scores on both short and the original version of the WAI. They found that the WAI-S and the original WAI scores were positively correlated and similar in descriptive statistics and internal consistencies. Cronbach’s alpha for the total score in the current study was .86.

**Social Desirability Scale.** To control for rehabilitation counselors’ social desirability biases, the Social Desirability Scale (SDS; Shultz & Chavez, 1994) was used in the current study. The SDS consists of 11 items on a 5-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree* (total scores ranging from 11 to 55). The SDS has two subscale, Impression Management with five items (e.g., I never jaywalk.) and Self-Deceptive Enhancement with six items (e.g., I’ve never envied anyone.). Specifically, based on the purpose of the study that focuses on rehabilitation counselors’ social cognitive perception, the current study only used the Self-Deceptive Enhancement subscale to examine whether rehabilitation counselors believe themselves to be better than they actually are. Shultz and Chavez reported Cronbach’s alpha coefficient for the English version of this subscale as .69. In the current study, Cronbach’s alpha of .71 was found on this scale (See Appendix I).

### **Sample Size**

An appropriate sample size determination prior to conduct the research was needed for this study. A priori analysis was conducted using G\*Power, which is a stand-alone power

analysis program for many statistical tests (Faul, Erdfelder, Lang, & Buchner, 2007). The medium effect size ( $f^2 = .15$ ) at power  $(1 - \beta) = .80$ , with an alpha level of .05 was used to calculate the minimum sample size (Cohen, 1992) for the eight predictor variables (i.e., attitudes toward individuals with mental illness, attitudes toward recovery, and five sub-scales on the measure of CSE, and COE) and seven covariates (i.e., counselor demographic characteristics such as gender, age, race/ethnicity, years of experiences, in-service training experiences, and caseload size, and counselor social desirability bias). The analysis indicated that a minimum sample of 139 participants was needed to examine the relationships between rehabilitation counselors attitudes toward individuals with mental illness, attitudes about recovery of their clients with mental illness, CSE, and COE and the WA in a reliable, valid, and stable manner.

### **Data Analysis Procedure**

Once the survey was completed, the data was imported from the Qualtrics database into the IBM Statistics Package for the Social Sciences (SPSS) Statistics version 23.0. Descriptive statistics, a Pearson correlation analysis, and a multiple regression analysis were used for the data analyses in the current study. Prior to the data analyses, the researcher worked on the data cleaning process by properly naming and coding each variable and identifying any errors or missing values. Total scores as well as sum of each subscale were used for measured variables. In order to answer the research questions and hypotheses, the following statistical data analysis procedure were utilized.

Descriptive statistics and frequencies were computed to summarize participant demographic information. Descriptive statistics were also presented for each of the study variables. Cronbach's alphas were used to provide an estimate of the internal consistency reliability of each study variable. To answer research question one and test hypotheses 1a and 1b,

a correlation matrix was developed among all study variables using a two-tailed Pearson correlation analysis. To answer research question two and test hypothesis 2a, a multiple regression analysis was conducted. Multiple regression is a commonly used analysis to examine how a dependent variable is affected by more than one independent variable (Babbie, 1990). In order to conduct a regression analysis, the following assumptions should be met: independence of the observations, homogeneity of variance, normality, linearity, and noncollinearity (Lomax & Hahs-Vaughn, 2012). The researcher examined scatter plots for linearity, homogeneity of variance, and independence, a box plot, skewness, kurtosis, and Shapiro-Wilk test for normality, and tolerance and a variance inflation factor (VIF) values for multicollinearity to determine whether the data meet the assumptions necessary for a stable multiple regression analysis.

## **CHAPTER 4**

### **RESULTS**

The purpose of the current study was to explore the relationship between rehabilitation counselors' cognitive factors, that is, rehabilitation counselors' attitudes toward individuals with mental illness and their recovery, counseling self-efficacy (CSE), and counseling outcome expectancy (COE), and the working alliance (WA) between rehabilitation counselors and clients with mental illness. A web-based survey was distributed to certified rehabilitation counselors who were in the Commission on Rehabilitation Counselor Certification (CRCC) database in January and February of 2017. A total of 227 certified rehabilitation counselors were selected as a sample for further analyses in the present study. The following research questions and hypotheses were examined:

1. What are the relationships between rehabilitation counselor attitudes (toward individuals with mental illness and recovery), CSE, COE, and the WA among rehabilitation counselors and their clients with mental illness?
  - 1a. The attitude of rehabilitation counselors toward individuals with mental illness and recovery will be positively correlated with rehabilitation counselors' perceived WA.
  - 1b. The CSE and COE of rehabilitation counselors will be positively correlated with rehabilitation counselors' perceived WA.
2. How do rehabilitation counselor attitudes (toward individuals with mental illness and recovery), CSE, and COE interact and predict the WA among rehabilitation counselors and their clients with mental illness?

2a. When controlling for rehabilitation counselor demographic characteristics such as gender, age, race/ethnicity, years of experiences as rehabilitation counselors, in-service training experiences, and caseload size as well as rehabilitation counselor social desirability bias, rehabilitation counselor attitudes (toward individuals with mental illness and recovery), CSE and COE will account for a significant amount of variance in the WA among rehabilitation counselors and clients with mental illness.

This Results chapter presents the descriptive statistics of each variable used in the current study (i.e., mean, *SD*) and results of Pearson correlation and multiple regression analyses to answer the research questions and test the research hypotheses. The IBM Statistical Package for the Social Sciences (SPSS) version 23.0 and Microsoft Excel were used to conduct data analyses in the current study.

### **Data Recoding**

Once data were obtained and exported to SPSS, data clean-up and recoding procedures were conducted prior to the actual data analyses. The current study included the following five measures to examine both predictor variables and outcome variable: Error Choice Test (EC), Recovery Scale (RS), Expectation for Counseling Success (ECS), Counseling Self-Estimate Inventory (COSE), and Working Alliance Inventory –Short Form, Therapist (WAI-S).

The EC was used to examine rehabilitation counselors' attitudes toward individuals with mental illness. The respondents were asked to respond to the question from two answer choices, and the answers coded into '0' or '1'. Based on the study question, the answer was reverse coded as needed. The total scores were computed by summing all 14 items, ranging from zero to 14.



In order to examine rehabilitation counselors' attitudes toward recovery among individuals with mental illness, the RS was utilized in the current study. A nine-point Likert scale was used for this questionnaire, with one means '*strongly disagree*' and nine means '*strongly agree*'. The sum scores of a total of 13 items were calculated to be used in the analyses. Total scores ranged from 13 and 117.

The ECS examines the rehabilitation counselors' COE, using a four-point Likert scale. A response to '*strongly disagree*' was coded into one, and '*strongly agree*' was coded into four. Item two and five were reverse coded due to negative wording used in the items. Total scores (ranging from five to 20) were summed with all five items and were used for the analyses.

The COSE was used to examine CSE. Responses on a 6-point Likert scale were coded with one indicating '*strongly disagree*' and six indicating '*strongly agree*'. Before summing up, the items with negative wording were reverse coded. Five subdomains of the COSE were scored individually, and total scores of each subscale were computed for the use in the correlation and regression analyses. The lowest score possible for each subdomain is: 12 for Microskills; 10 for Process; seven for Difficult Client Behaviors; and four for both Cultural Competence and Awareness of Values. The highest score possible for each subdomain is: 72 for Microskills; 60 for Process; 42 for Difficult Client Behaviors; and 24 for both Cultural Competence and Awareness of Values.

Finally, the outcome variable, the WA between rehabilitation counselors and clients with mental illness was examined using the WAI-S. This scale uses a seven-point Likert scale with one means '*never*' and seven means '*always*'. Item four and six were reverse coded before the analyses. Total sum scores were used, ranging from 12 to 84.

## Descriptive Statistics of Scales

The following section examined the descriptive statistics on the responses to study variables. More specifically, Table 5 shows the mean, *SD*, minimum, maximum, and Cronbach's alpha of each study variable. The mean of EC of the current sample was 9.10 (*SD* = 2.14), with minimum total scores of two and maximum total scores of 14. It seems that the study participants responded to the items showing slightly positive attitudes. The internal consistency (Cronbach's alpha) of the EC was .53. The mean of RS was 75.20 (*SD* = 12.75), with minimum scores of 31 and maximum total scores of 111 indicating study participants having slightly positive attitudes toward recovery for individuals with mental illness. The internal consistency (Cronbach's alpha) of the RS was .79.

When examining the ECS, the mean was 17.82 (*SD* = 2.22), indicating that the rehabilitation counselors who participated in the survey responded to the survey closer to the right end (positive) of the scale. Cronbach's alpha of this scale was .74. The means of each subscale of the COSE were: 60.15 for Microskills (*SD* = 7.13), 46.02 for Process (*SD* = 8.32), 32.89 for Difficult Client Behaviors (*SD* = 6.12), 20.25 for Cultural Competence (*SD* = 3.19), and 18.86 for Awareness of Values (*SD* = 3.04), indicating slightly high level of confidence in their counseling with their clients with mental illness. Lastly, the WAI-S had the mean of 65.16 and *SD* of 7.77, showing high level of perceived WA. The Cronbach's alpha of .86 suggests good internal consistency for this scale with the current sample.

Table 5

*Descriptive Statistics of Study Variables*

<b>Variables</b>	<b><i>M</i></b>	<b><i>SD</i></b>	<b>Min.</b>	<b>Max.</b>	<b>Cronbach's Alpha</b>
EC	9.10	2.14	2	14	.53
RS	75.20	12.75	31	111	.79
ECS	17.82	2.22	9	20	.74
COSE					
Microskills	60.15	7.13	35	72	.88
Process	46.02	8.32	14	60	.85
Difficult Client Behaviors	32.89	6.12	7	42	.84
Cultural Competence	20.25	3.19	10	24	.74
Awareness of Value	18.86	3.04	11	24	.38
WAI-S	65.16	7.77	36	84	.86

*Note.* EC = Error Choice. RS = Recovery Scale. ECS = Expectation for Counseling Success. COSE = Counselor Self-Estimate Inventory. WAI-S = Working Alliance Inventory –Short Form.

**Research Question 1: What are the relationships between rehabilitation counselor attitudes, CSE, COE, and the WA among rehabilitation counselors and their clients with mental illness?**

A two-tailed Pearson correlation analysis was conducted to examine the correlations among the study variables. Statistically significant correlations were identified between multiple predictor variables and the outcome variable. Rehabilitation counselors' attitudes toward individuals with mental illness (EC) was positively correlated with rehabilitation counselors' perceived WA ( $r = .16, n = 227, p = .02$ ), indicating that counselors who had more positive attitudes toward individuals with mental illness had higher level of the WA with their clients with mental illness. Rehabilitation counselors' attitudes toward recovery among individuals with mental illness (RS) was also positively correlated with the WA ( $r = .20, n = 227, p = .002$ ),

suggesting that counselors who are more likely to believe the recovery possibility for individuals with mental illness perceived a more positive WA with their clients with mental illness.

There was also a moderate, positive correlation between the COE and the WA ( $r = .38, n = 227, p < .001$ ), indicating that counselors who had more positive expectation about counseling outcome showed a higher WA with their clients with mental illness. Moreover, all five subscales of the COSE that measure CSE had significant positive correlations with the WA (Microskills:  $r = .64, n = 227, p < .001$ ; Process:  $r = .59, n = 227, p < .001$ ; Difficult Client Behavior:  $r = .59, n = 227, p < .001$ ; Cultural Competence:  $r = .47, n = 227, p < .001$ ; Awareness of Values:  $r = .37, n = 227, p < .001$ ). This result indicates that counselors who were more confident in utilizing counseling skills, integrating responses when working with clients, dealing with difficult client situations, working with clients from different cultural backgrounds, and understanding their own biases or values perceived better WA with their clients with mental illness.

In addition to the relationships between predictor variables and the outcome variable, significant correlations were identified between predictor variables. A positive correlation was observed between the rehabilitation counselors' general attitudes toward individuals with mental illness and their attitudes toward mental illness recovery ( $r = .28, n = 227, p < .001$ ), indicating the counselors who had general positive attitudes toward individuals with mental illness were also more likely to believe the recovery possibility for this population. Rehabilitation counselors' general attitudes were also positively correlated with two subscales of CSE measure (i.e., COSE), Process ( $r = .16, n = 227, p = .02$ ) and Difficult Client Behavior subscales ( $r = .20, n = 227, p = .003$ ), respectively. This suggests that counselors who had general positive attitudes toward individuals with mental illness were more confident integrating counselor responses when working with clients as well as dealing with difficult client situations.

Rehabilitation counselors' attitudes toward recovery were also positively correlated with the COE ( $r = .28, n = 227, p < .001$ ), indicating that counselors who were more likely to believe in the recovery possibility for individuals with mental illness showed a more positive outlook for the counseling outcome for their clients with mental illness. Moreover, there were significant positive correlations between attitudes toward recovery and Microskills ( $r = .30, n = 227, p < .001$ ) and Difficult Client Behavior subscales ( $r = .15, n = 227, p = .02$ ) of the CSE, suggesting that counselors who were more likely to believe in the recovery possibility for individuals with mental illness had more confidence utilizing counseling skills and dealing with difficult client situations.

The COE had the significant positive correlations with all five subscales of COSE, which was used to measure the CSE (Microskills:  $r = .30, n = 227, p < .001$ ; Process:  $r = .33, n = 227, p < .001$ ; Difficult Client Behavior:  $r = .26, n = 227, p < .001$ ; Cultural Competence:  $r = .26, n = 227, p < .001$ ; Awareness of Values:  $r = .19, n = 227, p = .004$ ). This result indicates that counselors with a more positive outlook for the counseling outcome for their clients with mental illness had more confidence in their ability to work with clients with mental illness. In addition, the subscales of the COSE had positive correlations with each other, ranging from  $r = .34, p < .001$  (the correlation between Cultural Competence and Awareness of Values) to  $r = .77, p < .001$  (the correlation between Process and Difficult Client Behavior). Table 6 shows the complete correlation matrix.

Table 6

*Two-tailed Pearson Correlations among Variables*

<b>Variables</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
1. General Attitudes	-								
2. Recovery Attitudes	.280**	-							
3. COE	.066	.275**	-						
4. CSE Microskills	.122	.300**	.298**	-					
5. CSE Process	.156*	.118	.330**	.655**	-				
6. CSE Difficult Client Behavior	.196**	.150*	.261**	.624**	.766**	-			
7. CSE Cultural Competence	.033	.096	.255**	.559**	.556**	.493**	-		
8. CSE Awareness of Value	.050	.116	.190**	.405**	.472**	.423**	.342**	-	
9. WA	.159*	.204**	.377**	.635**	.589**	.594**	.471**	.367**	-

*Note.* COE = Counseling Outcome Expectancy; CSE = Counseling Self-Efficacy; WA = Working Alliance.

\* $p \leq .05$ . \*\* $p \leq .01$ .

**Research Question 2: How do rehabilitation counselor attitudes, CSE, and COE interact and predict the WA among rehabilitation counselors and their clients with mental illness?**

To answer research question two, the multiple regression analysis was conducted. To conduct the multiple regression analysis, several assumptions should be met: linearity, normality, independence, homogeneity of variance, and noncollinearity (Lomax & Hahs-Vaughn, 2012). First, when examining linearity, the review of the partial scatterplot of the predictor variables (rehabilitation counselors' attitudes toward individuals with mental illness, attitudes toward recovery, COE, and CSE) indicates the possibility of linearity. Additionally, a scatterplot of unstandardized residuals to predicted values showed a random display of points mostly falling within an absolute value of two (See Appendix J).

The normality was tested through examining the unstandardized residuals. The result of the Shapiro-Wilk (S-W) test showed that the sample distribution of the current study was not statistically significantly different from a normal distribution ( $SW = .995, n = 226, p = .699$ ). In addition, the review of skewness (-.128) and kurtosis (.273) statistics, which were both within the range of an absolute value of 2.0, suggested that normality was a reasonable assumption. The boxplot, Q-Q plot, and histogram also indicated that normality was reasonable (Lomax & Hahs-Vaughn, 2012; See Appendix J).

The Durbin-Watson statistic was computed to test the assumption of independent errors, and showed the value of 2.07, suggesting that it was close to the value of two and, therefore, the assumption of independence of error could be met. Moreover, the examination of the scatterplot of standardized residuals against standardized predicted values showed that points are randomly distributed, suggesting the evidence of meeting the assumption of homogeneity of variance (Field, 2009; See Appendix J).

Issues with multicollinearity can be determined by examining tolerance and the variance inflation factor (VIF). Tolerance less than .10 or VIF greater than the value of 10 may cause a serious problem (Lomax & Hahs-Vaughn, 2012; Field, 2009). In the current study, tolerance values were greater than .10 (ranging from .32 to .91) and the highest value of the VIF was 3.14, suggesting that multicollinearity was not an issue. In addition, when examining the correlation matrix of the predictor variables, there were no correlation coefficients exceeding .80: the highest correlation was .766 (i.e., correlation between Process and Difficult Client Behavior subscales). This indicates that no potential multicollinearity was noted among predictor variables (Field, 2009).

Prior to conducting the multiple regression analysis, two-tailed Pearson and Spearman correlation analyses were conducted to examine if there were any significant correlations between rehabilitation counselors' demographic characteristics and the WA. The results showed that in-service psychiatric rehabilitation training experience was the only demographic variable that has a significant correlation with the WA (Spearman's  $\rho = .168$ ,  $n = 226$ ,  $p = .011$ ). In addition, there was also a significant correlation between rehabilitation counselors' social desirability bias and the WA ( $r = .141$ ,  $n = 227$ ,  $p = .034$ ). Therefore, only in-service psychiatric rehabilitation training experiences and social desirability biases were included in the final regression analysis as control variables (See Table 7).



Table 7

*Correlations between Demographic Information and the WA*

Variables	WA
Pearson Correlations	
Age	-.025
Years of RC Experience	.006
Years of MH Experience	.015
Caseload Size	-.061
Social Desirability Bias	<b>.141*</b>
Spearman's Rho	
Race	-.053
Gender	-.017
Education Level	-.079
Work Setting	.096
In-service Training	<b>.168*</b>

Note. WA = Working Alliance.

\* $p \leq .05$ .

The model summary for the regression analysis indicated that the regression model was statistically significant,  $F(10, 215) = 24.184, p < .001$ . Multiple  $R^2$  indicates that the model accounted for approximately 53% of the variation in the WA between rehabilitation counselors and clients with mental illness. It was found that of those predictor variables and control variables included in the model, four variables statistically significantly predicted the outcome variable (i.e., the WA). Social desirability bias significantly predicted the WA,  $B = .26, t(225) = 2.36, p = .020$ ; with every one-point increase in the social desirability bias, the WA will increase by .26 unit. COE was significant predictor of the WA,  $B = .67, t(225) = 3.60, p < .001$ ; with every one-point increase in COE, the WA will increase by .67 units when controlling for all other predictor variables and covariates. Microskills subscale of CSE measure (i.e., COSE)

significantly predicted the WA,  $B = .36$ ,  $t(225) = 4.75$ ,  $p < .001$ ; as Microskills increase one unit, the WA increases by .36 units when controlling for all other predictor variables and covariates. Difficult Client Behaviors subscale also significantly predicted the WA,  $B = .24$ ,  $t(225) = 2.41$ ,  $p = .017$ ; with every one-unit increase in the Difficult Client Behaviors subscale, the WA will increase about .24 units when controlling for all other predictor variables and covariates.

On the other hand, rehabilitation counselors' attitudes toward individuals with mental illness and rehabilitation counselor attitudes toward recovery did not significantly predict the WA between rehabilitation counselors and clients with mental illness:  $B = .22$ ,  $t(225) = 1.19$ ,  $p = .236$ ; and  $B = -.01$ ,  $t(225) = -.41$ ,  $p = .682$ , respectively. In addition, the WA was not significantly predicted by the three subscales of CSE measure: Process subdomain with  $B = .06$ ,  $t(225) = .80$ ,  $p = .427$ ; Cultural Competence subdomain with  $B = .19$ ,  $t(225) = 1.27$ ,  $p = .205$ ; and Awareness of Value subdomain with  $B = .14$ ,  $t(225) = 1.01$ ,  $p = .312$ . Table 8 illustrates the details of the result of the multiple regression analysis.

Table 8

*Multiple Regression Model*

<b>Model</b>	<b><i>B</i></b>	<b><i>SE</i></b>	<b><math>\beta</math></b>	<b><i>t</i></b>	<b>Sig.</b>
(Constant)	8.937	4.458		2.013	.045
In-service Training	1.716	.982	.086	1.748	.082
Social Desirability	.259	.111	.114	2.336	.020
General Attitudes	.216	.181	.059	1.189	.236
Recovery Attitudes	-.013	.032	-.022	-.411	.682
COE	.667	.185	.190	3.599	.000
CSE					
Microskills	.363	.076	.333	4.747	.000
Process	.062	.077	.066	.796	.427
Difficult Client Behaviors	.239	.099	.188	2.409	.017
Cultural Competence	.189	.149	.077	1.272	.205
Awareness of Value	.140	.138	.055	1.014	.312

*Note.*  $R^2 = .529$ ,  $F(10, 215) = 24.184$ ,  $p < .001$  for the model.

COE = Counseling Outcome Expectancy; CSE = Counseling Self-Efficacy.

## **Supplementary Analyses**

Further supplementary analyses were conducted to examine whether using composite scores (weighted measures) identified based on the factor structures for each predictor variable influence the study results in the relationship between rehabilitation counselors' cognitive factors and the WA, compared to the results that used original (unweighted) total scores for each variable. A series of Exploratory Factor Analysis (EFA) were conducted for the predictor variable measures to identify factor structures and factor scores. The multiple regression analysis was then conducted using factor scores generated by a series of factor analyses. The results of EFAs and the multiple regression analysis were presented in Appendix K.

## **Summary of Results**

The purpose of this study was to examine the relationships between rehabilitation counselors' attitudes toward individuals with mental illness and their recovery, COE, and CSE, and the WA between rehabilitation counselors and their clients with mental illness. Two research questions were identified to explore the study purpose. Two-tailed Pearson correlation coefficients indicated that rehabilitation counselors' attitudes toward individuals with mental illness, rehabilitation counselors' attitudes toward recovery among individuals with mental illness, COE, and CSE were positively correlated with the WA between rehabilitation counselors and their clients with mental illness. In addition, the result of the multiple regression analysis showed that COE and two subdomains of CSE measures (i.e., Microskills and Difficult Client Behaviors) statistically significantly predicted the WA between rehabilitation counselors and clients with mental illness, when controlling for demographic covariates and other predictor variables.

## **CHAPTER 5**

### **DISCUSSION**

The purpose of the current study was to explore rehabilitation counselors' cognitive factors, that is, rehabilitation counselor attitudes toward individuals with mental illness and their recovery, rehabilitation counselor counseling self-efficacy (CSE), and counseling outcome expectancy (COE), that can affect the working alliance (WA) between rehabilitation counselors and clients with mental illness. Based on such research purpose, a cross-sectional, and quantitative research design was utilized via an Internet based survey (i.e., Qualtrics). Data obtained from certified rehabilitation counselors were analyzed using the IBM Statistical Package for the Social Sciences (SPSS) version 23.0. Two-tailed Pearson correlations and multiple regression analyses were conducted to address the research questions.

This Discussion chapter summarizes the findings from the current study and provides discussions of such findings. Implications for rehabilitation counseling education, practice, and research as well as limitations of the study are also addressed.

#### **Summary of the Findings**

Research Question one pertained to the relationships between rehabilitation counselor attitudes (toward individuals with mental illness and recovery), CSE, COE, and the WA among rehabilitation counselors and their clients with mental illness. It was hypothesized that rehabilitation counselor attitudes, CSE, and COE would be positively correlated with rehabilitation counselors' perceived WA. The findings demonstrated that although weak to moderate, there were significant positive correlations between rehabilitation counselors' attitudes toward individuals with mental illness and their recovery, and the WA. That is, counselors who reported positive and less stigmatizing attitudes toward individuals with mental illness in general,

as well as counselors who believe in the recovery possibility among this population perceived that they could develop or maintain a more positive WA with their clients with mental illness. Moreover, there were moderate to strong positive correlations between CSE, COE and the WA. This result means that counselors with higher expectations about achieving successful counseling outcomes and stronger beliefs that they possess the ability to work effectively with their clients with mental illness showed a more positive WA with their clients.

Research Question two examined how rehabilitation counselor attitudes, CSE, and COE interact and predict the WA among rehabilitation counselors and their clients with mental illness. It was hypothesized that rehabilitation counselor attitudes, CSE, and COE would account for a significant amount of variance in the WA among rehabilitation counselors and clients with mental illness, when controlling for rehabilitation counselor demographic covariates and counselor social desirability bias. The results from the current study illustrated that COE and Microskills and Difficult Client Behaviors subscales of CSE significantly predicted the WA when controlling for rehabilitation counselors' in-service psychiatric rehabilitation training experience and social desirability bias. On the other hand, rehabilitation counselors' attitudes toward individuals with mental illness and their recovery were not significantly associated with the WA.

### **Discussion of the Findings**

The current study detected positive correlations between rehabilitation counselor attitudes and the WA. Such findings are not surprising, given evidence from previous literature that provider stigma or attitudes toward individuals with mental illness can be significantly related to establishing or maintaining a therapeutic relationship with their clients with mental illness. Counselors who believe in the recovery possibility and potential for individuals with mental

illness not only encourage their clients with mental illness to deal actively with challenges and difficulties, but also help them develop confidence and hope (Deane, Crowe, & Oades, 2010). Counselors with positive attitudes and hopefulness regarding the possibility of recovery among individuals with mental illness are likely to adopt recovery-oriented principles and practices in their actual service delivery to their clients with mental illness (Corrigan, 2002; Crowe, Deane, Oades, Caputi, & Morland, 2006). The working relationship built upon a strength-focused, recovery-oriented service approach can facilitate productive, therapeutic work between the counselor and the client (Deane et al., 2010). Clients who develop a strong WA and partnership with their counselors will be most likely to benefit from treatment and be successful, since such client-counselor relationships are built upon promoting empowerment of the client (Corrigan, 2002).

Moreover, Russinova (1999) stressed that counselors who have positive attitudes toward their clients with mental illness and who believe in their recovery are more willing to promote hope in the recovery process by actively providing resources and supports. Counselors' encouragement and optimism for client prospects, accepting clients unconditionally and genuinely, and seeing clients as a person rather than an illness can facilitate the development of strong and trusting relationships, which can also positively influence treatment outcomes (Green et al., 2008; Kirsh & Tate, 2006). Clients who build strong therapeutic relationships with their counselors based on counselor encouragement to maintain hope are more willing to explore new opportunities and take risks to achieve their goals (Russinova, 1999).

However, counselors sometimes experience barriers to providing effective services when working with clients with serious mental illness, which may result in developing negative attitudes toward this population (Grbevski, 2009; Russinova, 1999). Mental illness symptoms

such as inappropriate affect, bizarre behavior, language irregularity, and talking to themselves out loud, as well as lack of interpersonal, self-care skills and cognitive deficits can bring negative stereotypes and biases against this population (Corrigan, 2000). With ongoing exposure to clients who experience chronic and recurring symptoms and challenges, counselors may become more pessimistic about prognosis and long-term outcomes for individuals with mental illness (Crowe et al., 2006). Corrigan (2000) argued that counselors who approve such stigma and develop negative attitudes toward mental illness would hold authoritarian attitudes toward their clients with mental illness and provide coercive interventions since they are less likely to believe that their clients have the capability to make important life decisions. Charles (2015) also stressed that if service providers hold stigmatizing attitudes toward individuals with mental illness they may believe that persons with mental illness are dangerous, child-like, need constant care, should be blamed for their illness, and are less likely to recover. As a result, the development of the strong, positive WA would be less likely to occur. When the therapeutic relationship is threatened and interventions do not focus on recovery or empower clients, it is difficult to expect that the clients will achieve positive and successful treatment outcomes.

The findings from the multiple regression analysis showed that rehabilitation counselors' attitudes toward individuals with mental illness and their recovery were not significantly associated with the WA. Various explanations are possible regarding the detection of non-statistically significant results. The measures used to examine stigmatizing attitudes toward individuals with mental illness and attitudes toward recovery possibility may not adequately capture rehabilitation counselors' attitudes for the current sample. For example, the Error Choice Test (EC) was developed recently (Michaels & Corrigan, 2013), and therefore relatively few studies have been conducted to identify the psychometric properties of this instrument. In

the current study, internal consistency of the EC was .533, which was considered poor and, therefore, it is questionable whether the EC in the current study was a reliable measure to examine rehabilitation counselors' attitudes toward individuals with mental illness. In addition, the Recovery Scale (RS) was modified from the Recovery Assessment Scale (RAS) that was originally developed to assess recovery from consumer perspectives based on their lived experiences (Corrigan et al., 2004). Therefore, rehabilitation counselors may have different perspectives on recovery for individuals with mental illness that were not addressed in the RS used in the current study.

Moreover, examining attitudes toward individuals with mental illness can be a sensitive topic. As such, rehabilitation counselors may not be willing to express their true and honest thoughts and feelings about their attitudes. Corrigan and Shapiro (2010) noted that attitude measures could be easily influenced by social desirability biases. Although the current study utilized the EC to account for social desirability and added a social desirability measure as a covariate to control for rehabilitation counselors' social desirability biases, the possibility exists that such biases were not controlled effectively in the current study.

The results of this study suggested that CSE and COE were positively correlated with the WA between rehabilitation counselors and their clients with mental illness. In addition, the results of the study demonstrated that CSE and COE accounted for a significant amount of variance in the WA. Such results are supported by both Bandura's social cognitive theory (1977, 1986) and the social cognitive model of counselor training (SCMCT) proposed by Larson (1998) which purports that counselors or counselor trainees' personal and cognitive factors including CSE and COE can be significantly related to actual counselor performance. Bandura (1986) posited that to successfully perform certain behaviors, individuals are required to possess not



only adequate knowledge and skills, but also beliefs that they are capable of performing certain behaviors effectively and that their performance will lead to positive outcomes. Such individuals with higher efficacy and outcome expectancy will make choices to maximize satisfaction and more efforts to succeed, and will be less frustrated with failure. Therefore, counselors with higher efficacy and expectancy will show more confidence in engaging counseling tasks, put more effort into dealing with obstacles that are encountered, and have less negative thought patterns in the counseling process (Bandura, 1986; Fall, 1991; Larson, 1998).

While the direct relationship between CSE and the WA was not examined, previous studies on CSE supported the findings in the current study by identifying the relationship between CSE and counseling performance. For example, Barns (2004) showed that counselors in training with higher self-efficacy were more likely to actively engage in and deal with difficult counseling tasks. CSE was negatively related to counselor anxiety, which can significantly affect counselor judgment and performance (Larson et al., 1992; Urbani et al., 2002). CSE was also positively related to counselors demonstrating better attitudes, knowledge, and performance in counseling sessions (Hanson, 2006; Iannelli, 2000; Kocarek, 2001).

Regarding the association between CSE or COE and the WA, a study by Al-Darmaki and Kivlighan (1993) showed that counselor expectations for better relationships with their clients in the counseling process were significantly related to their perceived WA. A study conducted by Joyce and Pipe (1998) illustrated that counselor expectations or beliefs that they will be more comfortable with their clients in the counseling sessions (session comfort) were significantly associated with the counselor perceived WA. Counselors who believed that sessions they provided would be useful to their clients reported greater WA with their clients. Further, Katz and Hoyt (2014) also found that there was a significant correlation between counselor

expectations about their client development from receiving interventions they provided and the WA bond. Finally, an investigation by McGuire et al. (2015) identified that service provider competence in establishing therapeutic relationships with their clients as well as utilizing recovery oriented service approaches were positively related to the client perceived WA.

Specifically in the current study, only Microskills and Difficult Client Behaviors subdomains of the CSE instrument were significantly associated with the WA. Halverson et al. (2006) stressed that counselors with higher CSE are more likely to approach clients, become empathetic and understanding, and have more confidence dealing with difficult client situations. Russinova et al. (2011) also emphasized that counselor competencies related to their abilities to express respect and trust, listen without judgment, and believe in client potential to recover are significant ingredients necessary for forming positive working relationships with clients.

McCarthy (2014) emphasized that rehabilitation counselors who believe in their ability to utilize microcounseling skills, such as reflection, paraphrasing, and probing questions as well as their ability to negotiate difficult client behaviors such as crisis situations or lack of motivation tend to utilize more effective counseling skills and actively handle issues with their clients. On the other hand, counselors with little or no efficacy may be hesitant to utilize such skills and want to avoid challenging situations where advanced counseling skills are required. Since the successful WA can be developed based on the counselor showing warmth for, respect for, and interest in their clients, rehabilitation counselor confidence about using basic counseling skills will lead to actual utilization of such skills and eventually will facilitate the development of effective working relationships between counselors and their clients (Safron & Muran, 1988).

## **Limitations of the Study**

There are several limitations of the current study that should be noted. First, the current study used a convenience sample of certified rehabilitation counselors. However, many counselors who work in the public vocational rehabilitation agencies or community mental health may not be certified rehabilitation counselors and may possess only a Bachelor's degree. Therefore, the sample in the current study does not represent the entire population of rehabilitation counselors who work with individuals with mental illness, which limits the generalization of the study results. In addition, the current study included rehabilitation counselors who do not currently serve individuals with mental illness or have experience working with individuals with mental illness ( $n = 45$ ), which may have impacted the study results. Second, the response rate for this study was 13.4 %. As a result, data could not provide information of the remaining 87% of the survey sample, which limits sample representativeness. Such a limitation again may influence the generalizability of the study findings.

Third, the current study relied on self-report measures utilizing an Internet based survey. Such a methodology makes it difficult to verify or validate the data provided by study participants. Moreover, the current study asked participants to answer questions related to their attitudes toward individuals with mental illness and recovery, CSE, COE, and the WA. Asking rehabilitation counselors their perceptions on such topics can be quite sensitive and, therefore, there is a possibility that rehabilitation counselors may have responded in a socially desirable manner. While the current study included the Social Desirability Scale as a covariate to capture study participant social desirability biases, it may not completely eliminate participant response biases. Lastly, while adequate psychometric properties of the majority of the measures were identified in previous literature, the EC that examined rehabilitation counselor attitudes toward

individuals with mental illness and the Awareness of the Value subscale of the COSE that examined CSE had very low internal consistency in the current study (i.e., Cronbach's alpha = .53 for the EC; Cronbach's alpha = .38 for the Awareness of the Value subscale). Therefore, based on sample data, the reliability and validity of these instruments is questionable.

### **Implications for Rehabilitation Counseling Education and Practice**

The results of the current study provide valuable information for rehabilitation counseling education and practice regarding the significance of the WA in the rehabilitation counseling process. Results indicated that rehabilitation counselor cognitive factors were significantly associated with the WA. Such findings emphasize the importance of providing quality education and training to students and rehabilitation counselors regarding how they think about themselves, the counseling process, and their clients. The Council on Rehabilitation Education (CORE, 2012) stresses that counseling skill and technique development is a requisite knowledge and skill for competent rehabilitation counselors. Further, CORE addresses the importance of developing and maintaining therapeutic relationships with clients and working collaboratively with clients in the rehabilitation counseling process (Section C.5.3). Moreover, the Council for Accreditation of Counseling and Related Educational Programs (CACREP, 2016) indicates that counselor education programs should train students to develop the knowledge and skills necessary to utilize ethical and culturally relevant strategies for establishing and maintaining relationships with their clients.

To facilitate a strong WA and provide quality services to their clients, rehabilitation counselors need to not only be aware of their own beliefs, thoughts, values, and attitudes, but also recognize how such factors can influence clients with mental illness and their relationships with clients (Middleton et al., 2000). Therefore, during pre- and in-service education and

training, students and rehabilitation counselors need to have ongoing opportunities to explore and understand their own thoughts, emotions, and attitudes toward individuals with mental illness that eventually impact the WA with their clients. Such opportunities need to be provided throughout the rehabilitation counseling curriculum during pre-service education. It is also important to provide continuing education, workshops, and support groups as effective in-service training strategies to help reduce rehabilitation counselor stigma against and negative attitudes toward their clients with mental illness (O'Sullivan, 2012).

In addition, rehabilitation counseling educators and supervisors need to make efforts to help students and practicing rehabilitation counselors have a better understanding of and knowledge about mental illness and recovery-focused intervention approaches. Individuals who are well informed about both the characteristics of mental illness and recovery process may work more effectively with their clients by exploring client strengths, bringing hope, and encouraging clients to actively engage in and take ownership of the recovery plan (Deane et al., 2010).

Therefore, knowledge and skills in mental health counseling need to be educated and trained throughout rehabilitation counselor education curriculum. For example, basic knowledge about mental illness such as symptoms, etiology, prognosis, psychotropic medications, and treatment etc. can be taught in detail during the medical aspects of the disability course. Stigma against individuals with mental illness, effects of stigma on the individuals and their families, and strategies to prevent stigma are the significant topics that can be informed and discussed during the psychosocial aspect of the disability course. Moreover, students and practitioners need to be equipped with proper counseling skills and knowledge so they can develop confidence to utilize proper microcounseling skills and work effectively with challenging client issues. Counseling skill development will enable students and counselors to develop higher efficacy in their ability

to be effective with individuals with mental illness, conceptualize positive prospects for successful outcome achievement among their clients, both which in turn will lead to a positive WA. During the counseling theory or technique courses, students can learn more about proper counseling skills and techniques to work effectively with individuals with mental illness and to deal with difficult life events that those with mental illness may experience. Ongoing supervision may also help students and counselors gain and maintain these skills (McCarthy, 2014).

Previous literature has also identified that quality contact combined with education can significantly influence attitudes toward individuals with mental illness (Corrigan, 2004; Corrigan & Shapiro, 2010; Couture & Penn, 2003). Considering that, rehabilitation counselor educators need to give students opportunities to increase interpersonal contact with individuals with mental illness. During the practicum and internship experiences, students may visit community mental health facilities, clubhouses, and other recovery facilities and be exposed to successful stories of individuals who recovered and achieved their meaningful goals. Those who have ongoing positive experiences with individuals with mental illness may develop more positive attitudes toward this population as well as positive expectations about successful outcome achievement for their clients with mental illness. It will also be important to encourage students to actively engage in the community mental health organization such as National Alliance on Mental Illness (NAMI) so that they are better informed about community resources as well as have more opportunities to interact with and to advocate individuals with mental illness and their families.

### **Implications for Future Research**

Several implications for future research were identified based on the results of the current study. Findings from current study demonstrated that certain rehabilitation counselor factors (i.e.,

attitudes, CSE, and COE) were significantly correlated with the WA. However, studies that include client outcome variables such as successful employment outcome or recovery would provide valuable information and evidence regarding counselor influences on the WA in the rehabilitation counseling process. Previous literature has identified that the development of a strong, positive WA can lead to successful client outcomes (Donnell et al., 2004; Horvath et al., 2011; Horvath & Symonds, 1991; Lustig et al., 2002; Martin et al., 2000). Therefore, future studies need to be conducted to examine and confirm all the relationships among counselor factors such as attitudes, CSE, and COE, counselor performance, the WA, and client outcomes. In addition, given the fact that the WA is the collaboration between counselors and clients, input from clients in addition to the counselors can help understand the effects of the WA in the rehabilitation counseling process. Future research needs to make efforts to include clients with mental illness as study participants, in order to examine their perceptions of the WA when working with rehabilitation counselors as well as how these are similar to or different from the rehabilitation counselors' perceived WA. Including clients' expectations about rehabilitation counseling outcomes or their perceived CSE among rehabilitation counselors during the counseling sessions as study variables will also provide valuable information to the rehabilitation counseling education and practice.

The current study included a sample of certified rehabilitation counselors across the country. However, conducting a study with more controlled design and participants by including only rehabilitation counselors who work directly with individuals with mental illness or work in the specific settings (e.g., state-federal vocational rehabilitation agencies, community mental health, clubhouse, etc.) may provide more detailed, and in-depth information about rehabilitation counselors' perceived WA, CSE, and COE. Moreover, counselors in training, novice counselors,

and counselors with no certification or licensure may have differing perceptions regarding their attitudes, CSE, COE, and the WA with their clients with mental illness. Future research should include rehabilitation counselors with different levels of education, training, and work experiences and examine how such groups differ in their attitudes toward individuals with mental illness, self-efficacy, expectations for counseling success, and the WA.

One of the limitations of the present study was utilizing self-report measures that can be affected by counselor social desirability biases. To effectively examine counselor affective and cognitive factors such as perceptions about their attitudes, ability, and confidence, future research should make an effort to develop or identify high fidelity measures. It would be helpful to include measures that can objectively examine counselor behaviors (e.g., observer rating of the WA, supervisor rating of counselor performance, etc.).

The need for conducting intervention studies that generate higher levels of empirical evidence has been emphasized in the rehabilitation counseling literature (Chan et al., 2012). Future research should focus on developing pre- and in-service education and training to enhance rehabilitation counselor knowledge, skills, and competencies in working collaboratively with diverse clients, including clients with mental illness.

## **Conclusions**

The WA between rehabilitation counselors and clients is a significant component that needs to be developed and maintained during the rehabilitation counseling process. More specifically, individuals with mental illness benefit from establishing positive and collaborative alliances with their counselors to achieve meaningful goals and actively engage in the recovery process. Given the significance of rehabilitation counselors who play an important role in the therapeutic relationship, findings from the current study provide useful information to the field of



rehabilitation counseling by emphasizing the counselor cognitive factors that can significantly affect the WA.

Results showed that rehabilitation counselor cognitive factors (i.e., rehabilitation counselor attitudes toward individuals with mental illness and their recovery, CSE, and COE) were positively correlated with the WA between rehabilitation counselors and clients with mental illness. In addition, CSE and COE significantly predicted the WA. Such findings suggest that rehabilitation counselors should possess requisite knowledge, skills, and attitudes to work effectively with persons with mental illness and also inform significant implications for rehabilitation counseling education, practice, and research.

## APPENDICES

## APPENDIX A

### Recruitment Letter

Dear Rehabilitation Counselor,

Hello, this is Jinhee Park, a doctoral candidate in rehabilitation counselor education program at Michigan State University. You have been selected from the CRCC database as a potential participant in my dissertation study.

The purpose of this study is to explore how rehabilitation counselor perceptions might influence the working alliance between rehabilitation counselors and their clients with mental illness. Specifically, I am seeking your input on your perceptions of individuals with mental illness and their recovery and your belief about your counseling performance capability and outcome expectation when working with clients with mental illness. Your participation in the study will provide valuable information regarding the professional development of rehabilitation counselors working with mental illness populations.

Below is the link to the online survey. It will be estimated that you may take approximately 20 to 25 minutes to complete the survey. Your participation in the survey is voluntary, and responses you provided will be kept completely confidential. **Upon your completion of the study, you are eligible for earning one (1.0) continuing education unit (CEU).**

Survey Link:

You will receive a reminder email invitation in one week and another in two weeks. If you already completed the survey, please disregard the reminder emails. Thank you so much in advance for your participation in this project. I believe your input will provide valuable information to rehabilitation counseling researchers and educators.

If you have any questions about this study, please contact Jinhee Park, Office of Rehabilitation and Disability Studies at Michigan State University at 517-433-2952 or parkji39@msu.edu.

Thank you!

Sincerely,

Jinhee Park

## APPENDIX B

### Informed Consent

#### 1. Purpose of Research

You are being asked to participate as a research participant in an Internet-based survey study of certified rehabilitation counselor (CRC) perceptions on individuals with mental illness and their recovery, and their work with clients with mental illness, and how these can influence the working alliance between CRCs and clients with mental illness. You have been selected as a participant in this study because you have been identified as a CRC. Your participation in this study will take about 20-25 minutes of your time.

#### 2. Type of participant involvement

You are being asked to complete the online based survey by answering a total of 102 survey items. You can save your answer choices by clicking the next button. In addition, you have the option to save your responses and log out and resume the survey later to complete it. However, you cannot go back to the previous questions and change your answers once you have submitted them since no identifying information will be included with your responses.

#### 3. Potential benefits

Your participation in the current study may help obtain data useful for better understanding CRCs attitudes toward the individuals with mental illness and their recovery, CRCs perceptions on performance capability and outcome expectations, and attitudes toward therapeutic relationship when working with clients with mental illness. Further, it is expected that the findings from this study may provide valuable information regarding the professional development of rehabilitation counselors working with mental illness populations.

#### 4. Potential risks

There no risks posed in the questions being asked in the current study, since no identifying information is included and collected, and you will remain anonymous within the aggregated data.

#### 5. Privacy and confidentiality

You are aware that your information will be kept confidential. Data will be collected from an online survey platform “Qualtrics”. Only the responsible researchers (Dr. John Kosciulek and Jinhee Park) will have access to the data. The researchers will maintain your privacy throughout the research process by ensuring that you are automatically given the ID number so that you are unknown to the researchers. The only identifying information is your email address that is linked to your survey on Qualtrics and it will be only used to send you reminder emails to complete the

survey. The data obtained will be securely stored on one of the researchers' personal computer and software programs for the data analysis. The personal computer used and data files created will be encrypted for the protection of all participant data. It will not be accessible to anyone other than the responsible researchers and Michigan State University Institutional Review Board. The results of the study may be published in professional journals or presented at professional conferences, but the identities of all research participants will stay anonymous.

#### 6. Your right to participate, decline, or withdraw

Participation in this study is completely voluntary. You have the right to say no. You may change your mind at any time and withdraw. You may choose not to answer specific questions or to stop participating at any time.

#### 7. Costs and compensation for the participation in the study

There are no costs to you to participate in this study. You will not receive any form of compensation for participating in this study. However, by fully completing the survey, you will be eligible for earning one (1.0) continuing education credit from the Commission on Rehabilitation Counselor Certification (CRCC) for participation in this study. After responding all the survey questions, you may choose to provide identifying information necessary for awarding the CEU. However, this information will not be associated with the responses of this primary survey.

#### 8. Contact persons for the study

If you have any questions about this study, or would like to use an alternative method to participate in this survey (e.g., by phone or hard copy), please contact the researcher, Jinhee Park, Michigan State University, 455 Erickson Hall, East Lansing, MI 48824, email: [parkji39@msu.edu](mailto:parkji39@msu.edu).

Any further questions about the research and your rights as a participant will also be answered if you contact the responsible project investigator, Dr. John Kosciulek, Michigan State University, 438 Erickson Hall, East Lansing, MI 48824, phone: 517-353-9443, or e-mail: [jkosciul@msu.edu](mailto:jkosciul@msu.edu).

If you like to have further information or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail [irb@msu.edu](mailto:irb@msu.edu) or regular mail at 207 Olds Hall, MSU, East Lansing, MI 48824.

Thank you.

Clicking the "NEXT" button below means that you voluntarily agree to participate in this research study.

## APPENDIX C

### Demographic Information

1. What is your gender?
  - a. Male
  - b. Female
  - c. Prefer not to answer
2. What is your age?
3. What is your race/ethnicity? (Please circle all applicable categories)
  - a. White or Caucasian
  - b. Black or African American
  - c. American Indian or Alaska Native
  - d. Asian
  - e. Native Hawaiian or Other Pacific Islander
  - f. Other: \_\_\_\_\_
4. Are you Hispanic/Latino? (Circle one) Yes or No
5. What is your highest education level?
  - a. Bachelor's degree
  - b. Master's degree in Rehabilitation Counseling
  - c. Master's degree in related field
  - d. Master's degree in other
  - e. PhD in Rehabilitation Counseling
  - f. PhD in related field
  - g. PhD in other
6. Any Certification/Licensure Credentials:
  - a. CCM – Certified Case Manager
  - b. CDMS – Certified Disability Management Specialist
  - c. CMHC – Certified Mental Health Counselor
  - d. CRC – Certified Rehabilitation Counselor
  - e. NCC – National Certified Counselor
  - f. NCMHC or LMHC – Licensed Clinical Mental Health Counselor or Licensed Mental Health Counselor
  - g. LCPC or LPCC – Licensed Clinical Professional Counselor or Licensed Professional Clinical Counselor
  - h. LPC – Licensed Professional Counselor
  - i. LRC – Licensed Rehabilitation Counselor
  - j. Other: \_\_\_\_\_
  - k. None

7. What is your current work setting?

- a. State Rehabilitation Agency
- b. Private Not-For-Profit Rehabilitation
- c. Center for Individuals with Developmental Disabilities
- d. Community Mental Health Center
- e. Inpatient Psychiatric Facility
- f. Corrections Facility/Program
- g. Independent Living Facility
- h. K-12 Education
- i. Substance Abuse Treatment Facility
- j. Halfway House
- k. Veterans Benefits Administration (VBA)
- l. Veterans Health Administration (VHA)
- m. Client Advocacy Organization
- n. College/University
- o. Other (Please specify)

8. How many years of experience in the rehabilitation counseling field do you have?

9. Are you CURRENTLY working with clients with mental illness? Yes/No

10. If Yes, how many years of experience do you have working with clients with mental illness?

11. Have you attended in-service training related to psychiatric rehabilitation or working with clients with mental illness? Yes/No

12. Please rate the degree of your preparation to work with clients with mental illness. How well prepared are you to work with clients with mental illness?

0	1	2	3	4
No Preparation	Little Preparation	Moderate Preparation	High Degree of Preparation	Very High Degree of Preparation

13. Please rate the degree of your satisfaction with working with clients with mental illness. How satisfied are you when you work with clients with mental illness?

0	1	2	3	4
No Satisfaction	Little Satisfaction	Moderate Satisfaction	High Degree of Satisfaction	Very High Degree of Satisfaction

14. Caseload Size (number of clients you are currently serving): \_\_\_\_\_

15. Please indicate the percentage of each disability group on your caseload:

Sensory Disabilities \_\_\_\_\_%

Physical Disabilities \_\_\_\_\_%

Intellectual/Developmental Disabilities \_\_\_\_\_%

Psychiatric Disabilities (Mental Illness) \_\_\_\_\_%

Other \_\_\_\_\_%



## APPENDIX D

### Error Choice Test

Direction: This is a test of your knowledge about mental illness. The questions on the test are taken from findings of scientific research. You are not expected to have read the research reports, but by using your experience and general knowledge you should be able to pick the correct answer. Some people will do much better than others because of their experience or because of their training in medicine, rehabilitation, or psychology. Read each question carefully and select the response that you consider to be the correct answer. **THERE IS NO PENALTY FOR GUESSING.** There is no time limit for the completion of this test, but you should work as rapidly as you can.

1. One type of psychotherapy, cognitive-behavioral therapy, has been shown to reduce the psychotic symptoms of schizophrenia.
  - a. True
  - b. False
2. Considering people with schizophrenia, what is the average number of separate hospitalizations for their mental illness over a one-year period of time?
  - a. 4 or more
  - b. 2 or less
3. People with severe mental illness cannot maintain private residences.
  - a. True
  - b. False
4. People with schizophrenia should be allowed to use an online dating service.
  - a. True
  - b. False
5. People with schizophrenia make up what percent of the homeless population?
  - a. 5%
  - b. 25%
6. Adolescents with schizophrenia are frequently truant from school.
  - a. True
  - b. False
7. People with severe mental illness are capable of establishing an intimate long-term relationship of a sexual nature.
  - a. True
  - b. False

8. People with schizophrenia benefit the least from services like psychotherapy.
  - a. True
  - b. False
9. People with schizophrenia are likely to steal from their family members.
  - a. True
  - b. False
10. Based on the capabilities of people with schizophrenia, school counselors should recommend beginning a job-training program rather than continuing in the regular curriculum.
  - a. True
  - b. False
11. For those with serious mental illness, what percent of treatment should be dedicated to medication compliance?
  - a. Greater than 80%
  - b. Less than 50%
12. Neglectful parenting is somewhat responsible for the beginning of a serious mental illness.
  - a. True
  - b. False
13. A person with schizophrenia is capable of being a physician or medical doctor.
  - a. True
  - b. False
14. The divorce rate among the general population is about 50%. What is the divorce rate among people who experience mental illness?
  - a. Greater than 70%
  - b. Less than 50%

## APPENDIX E

### Recovery Scale

Your responses should reflect your overall opinion about people with serious mental illness in general. Answer them on the nine-point scale (1=strongly disagree, 9=strongly agree).

1. People with mental illness have goals in life that they want to reach.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

2. People with mental illness believe that they can meet their current personal goals.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

3. People with mental illness have a purpose in life.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

4. Even when people with mental illness don't care about themselves, other people do.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

5. Fear doesn't stop people with mental illness from living the way they want to.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

6. People with mental illness believe something good will eventually happen.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

7. People with mental illness are hopeful about their future.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

8. Coping with mental illness is not the main focus of the lives of people with mental illness.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

9. The symptoms that people with mental illness experience interfere less and less with their life.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

10. The symptoms that people with mental illness experience are a problem for shorter periods of time each time they occur.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

11. People with mental illness have people they can count on.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

12. Even when people with mental illness don't believe in themselves, other people do.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

13. It is important for people with mental illness to have a variety of friends.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

## APPENDIX F

### Counseling Self-Estimate Inventory

This is not a test. There are no right or wrong answers. Rather – it is an inventory that attempts to measure how you feel you will behave as a counselor in a counseling situation **when you work with clients with mental illness**. Please respond to the items as honestly as you can so as to most accurately portray how you think you will behave as a counselor. Do not respond with how you wish you could perform each item - rather answer in a way that reflects your actual estimate of how you will perform as a counselor at the present time.

Below is a list of 37 statements. Read each statement, and then indicate the extent to which you agree or disagree with that statement, using the following alternatives:

- |                         |                      |
|-------------------------|----------------------|
| 1 = Strongly Disagree   | 4 = Slightly Agree   |
| 2 = Moderately Disagree | 5 = Moderately Agree |
| 3 = Slightly Disagree   | 6 = Strongly Agree   |

PLEASE – Put your responses on this inventory by marking your answer to the left of each statement.

\_\_\_\_\_ 1. When using responses like reflection of feeling, active listening, clarification, probing, I am confident I will be concise and to the point.

\_\_\_\_\_ 2. I am likely to impose my values on the client during the interview.

\_\_\_\_\_ 3. When I initiate the end of a session, I am positive it will be in a manner that is not abrupt or brusque and that I will end the session on time.

\_\_\_\_\_ 4. I am confident that I will respond appropriately to the client in view of what the client will express (e.g., my questions will be meaningful and not concerned with trivia and minutia).

\_\_\_\_\_ 5. I am certain that my interpretation and confrontation responses will be concise and to the point.

\_\_\_\_\_ 6. I am worried that the wording of my responses lack reflection of feeling, clarification, and probing, and may be confusing and hard to understand.

\_\_\_\_\_ 7. I feel that I will not be able to respond to the client in a non-judgmental way with respect to the client's values, beliefs, etc.

\_\_\_\_\_ 8. I feel I will respond to the client in an appropriate length of time (neither interrupting the client nor waiting too long to respond).

\_\_\_\_\_9. I am worried that the type of response I use at a particular time, reflection of feeling, interpretation, etc., may not be the appropriate response.

\_\_\_\_\_10. I am sure that the content of my responses, i.e., reflection of feeling, clarification, and probing, will be consistent with and not discrepant from what the client is saying.

\_\_\_\_\_11. I feel confident that I will appear competent and earn the respect of my client.

\_\_\_\_\_12. I am confident that my interpretation and confrontation responses will be effective in that they will be validated by the client's immediate response.

\_\_\_\_\_13. I feel confident that I have resolved conflicts in my personal life so that they will not interfere with my counseling abilities.

\_\_\_\_\_14. I feel that the content of my interpretation and confrontation responses will be consistent with and not discrepant from what the client is saying.

\_\_\_\_\_15. I feel that I have enough fundamental knowledge to do effective counseling.

\_\_\_\_\_16. I may not be able to maintain the intensity and energy level needed to produce client confidence and active participation.

\_\_\_\_\_17. I am confident that the wording of my interpretation and confrontation responses will be clear and easy to understand.

\_\_\_\_\_18. I am not sure that in a counseling relationship I will express myself in a way that is natural, without deliberating over every response or action.

\_\_\_\_\_19. I am afraid that I may not understand and properly determine probable meanings of the client's nonverbal behaviors.

\_\_\_\_\_20. I am confident that I will know when to use open or closed-ended probes and that these probes will reflect the concerns of the client and not be trivial.

\_\_\_\_\_21. My assessments of client problems may not be as accurate as I would like them to be.

\_\_\_\_\_22. I am uncertain as to whether I will be able to appropriately confront and challenge my client in counseling.

\_\_\_\_\_23. When giving responses, i.e., reflection of feeling, active listening, clarification, probing, I'm afraid that they may not be effective in that they won't be validated by the client's immediate response.

\_\_\_\_\_24. I do not feel that I possess a large enough repertoire of techniques to deal with the different problems my clients may present.

\_\_\_\_25. I feel competent regarding my abilities to deal with crisis situations that may arise during the counseling sessions (e.g., suicide, alcoholism, abuse).

\_\_\_\_26. I am uncomfortable about dealing with clients who appear unmotivated to work towards mutually determined goals.

\_\_\_\_27. I may have difficulty dealing with clients who do not verbalize their thoughts during the counseling session.

\_\_\_\_28. I am unsure as to how to deal with clients who appear noncommittal and indecisive.

\_\_\_\_29. When working with ethnic minority clients, I am confident that I will be able to bridge cultural differences in the counseling process.

\_\_\_\_30. I will be an effective counselor with clients of a different social class.

\_\_\_\_31. I am worried that my interpretation and confrontation responses may not, over time, assist the client to be more specific in defining and clarifying his/her problem.

\_\_\_\_32. I am confident that I will be able to conceptualize my client's problems.

\_\_\_\_33. I am unsure as to how I will lead my client towards the development and selection of concrete goals to work towards.

\_\_\_\_34. I am confident that I can assess my client's readiness and commitment to change.

\_\_\_\_35. I feel I may give advice.

\_\_\_\_36. In working with culturally different clients, I may have a difficult time viewing situations from their perspective.

\_\_\_\_37. I am afraid that I may not be able to effectively relate to someone of lower socioeconomic status than me.

## APPENDIX G

### Expectation for Counseling Success

Instructions: Please respond to each item with the number from 1 (strongly disagree) to 4 (strongly agree) that represents degree to which each statement represents your expectations about counseling for individuals with mental illness.

1. I expect counseling will be helpful for individuals with mental illness.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

2. I am not hopeful that counseling will be beneficial for individuals with mental illness.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

3. I have faith that seeing a counselor will be helpful for individuals with mental illness.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

4. I believe in the helpful nature of counseling.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

5. I do not expect life of individuals with mental illness to get better with counseling.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree



## APPENDIX H

### Working Alliance Inventory – Short Form, Therapist

#### Instruction

On the following page there are sentences that describe some of the different ways you might think or feel about your clients with mental illness.

Below each statement there is a seven-point scale:

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

If the statement describes the way you always feel (or think) circle the number 7; if it never applies to you, circle the number 1. Use the numbers in between to describe the variations between these extremes.

Work quickly, your first impressions are the ones we would like to see.

PLEASE DON'T FORGET TO RESPOND TO EVERY ITEM.

Thank You!

1. Clients with mental illness and I agree about the steps to be taken to improve their situation.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

2. My client and I both feel confident about the usefulness of our current activity in counseling.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

3. I believe clients with mental illness like me.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

4. I have doubts about what we are trying to accomplish in counseling.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

5. I am confident in my ability to help clients with mental illness.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

6. We are working towards mutually agreed upon goals.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

7. I appreciate clients with mental illness as a person.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

8. We agree on what is important for clients with mental illness to work on.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

9. Clients with mental illness and I have built a mutual trust.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

10. Clients with mental illness and I have different ideas on what their real problems are.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

11. We have established a good understanding between us of the kind of changes that would be good for clients with mental illness.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

12. Clients with mental illness believe the way we are working with their problem is correct.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

## APPENDIX I

### Social Desirability Scale

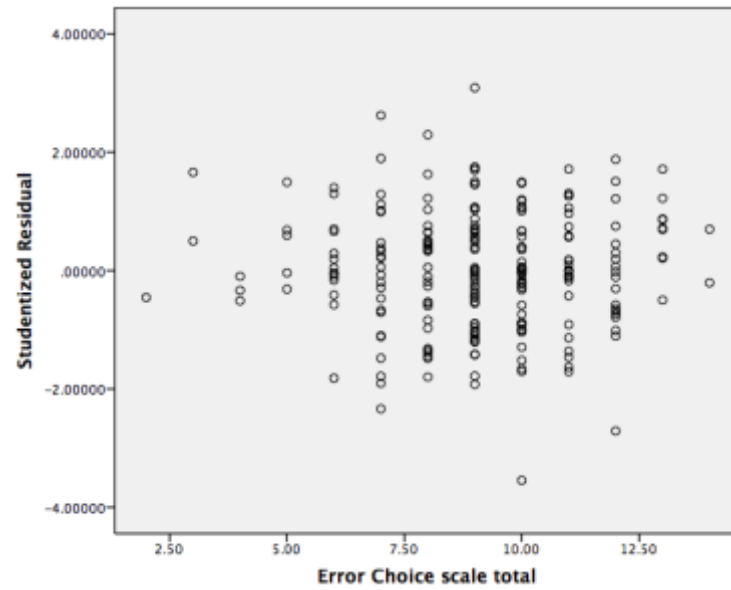
Direction: Please respond to the following statements using the scale provided below. Simply circle the response that best represents your views using the scale below.

Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree  
SD -----D-----N-----A-----SA

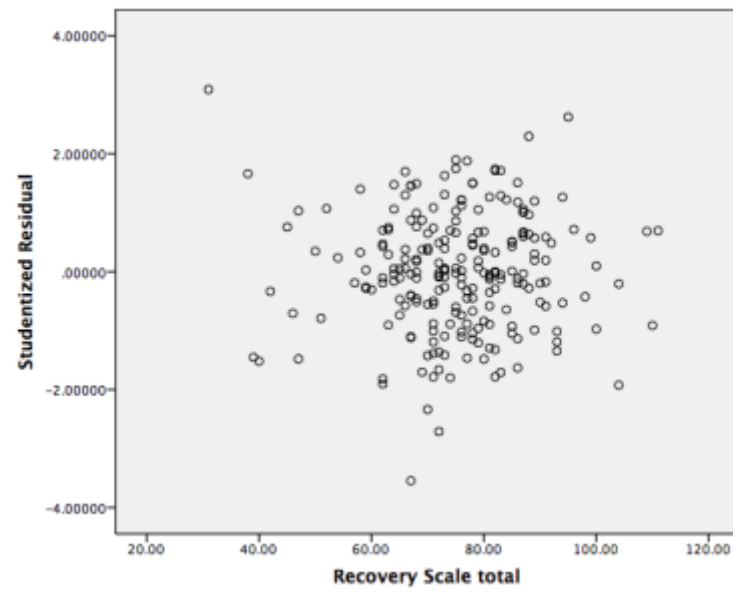
- |   |    |   |   |   |    |
|---|----|---|---|---|----|
| 1. I've never envied anyone.                  | SD | D | N | A | SA |
| 2. Nothing embarrasses me.                    | SD | D | N | A | SA |
| 3. I've never hated anyone.                   | SD | D | N | A | SA |
| 4. I never daydream.                          | SD | D | N | A | SA |
| 5. I've never made up an excuse for anything. | SD | D | N | A | SA |
| 6. I like everyone I meet.                    | SD | D | N | A | SA |

## APPENDIX J

### Figures For Multiple Regression Assumptions



*Figure 1. Scatterplot of Error Choice Test*



*Figure 2. Scatterplot of Recovery Scale*

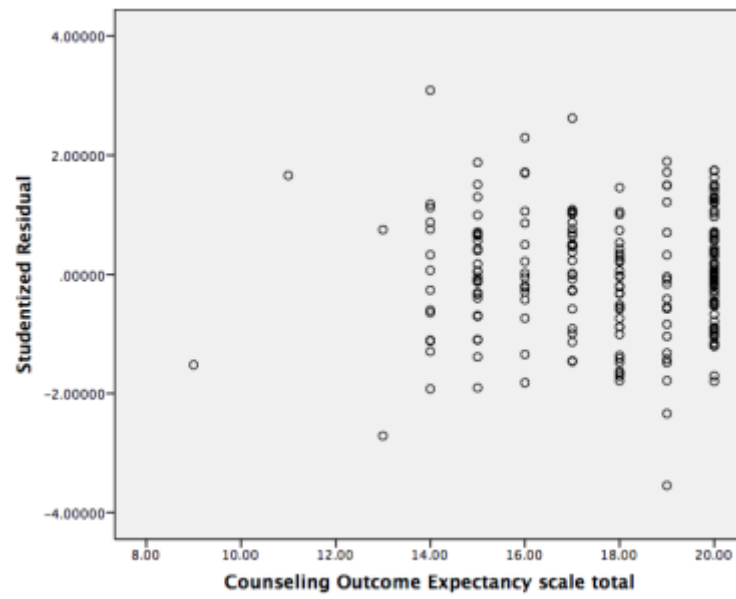


Figure 3. Scatterplot of Counseling Outcome Expectancy Scale

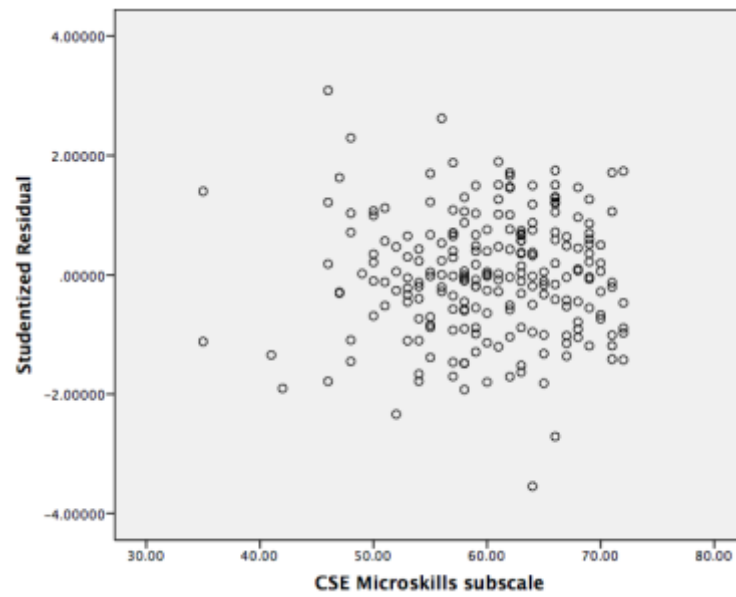


Figure 4. Scatterplot of CSE Microskills Subscale

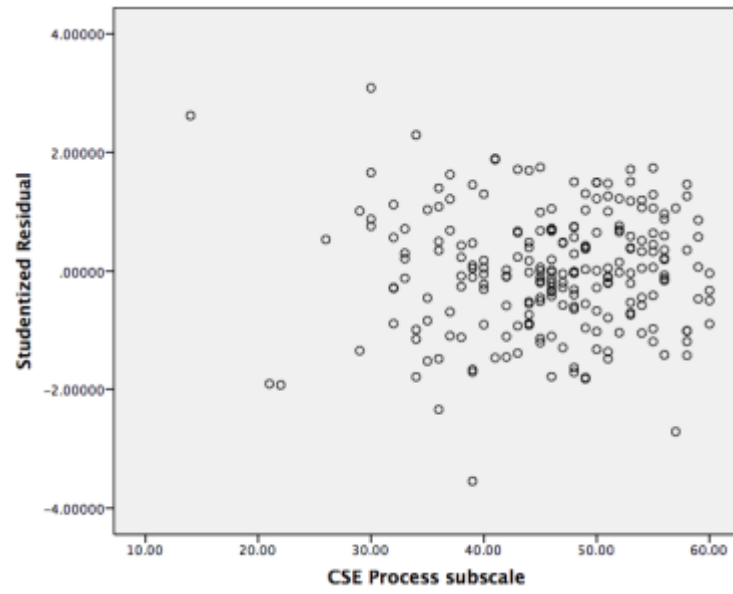


Figure 5. Scatterplot of CSE Process Subscale

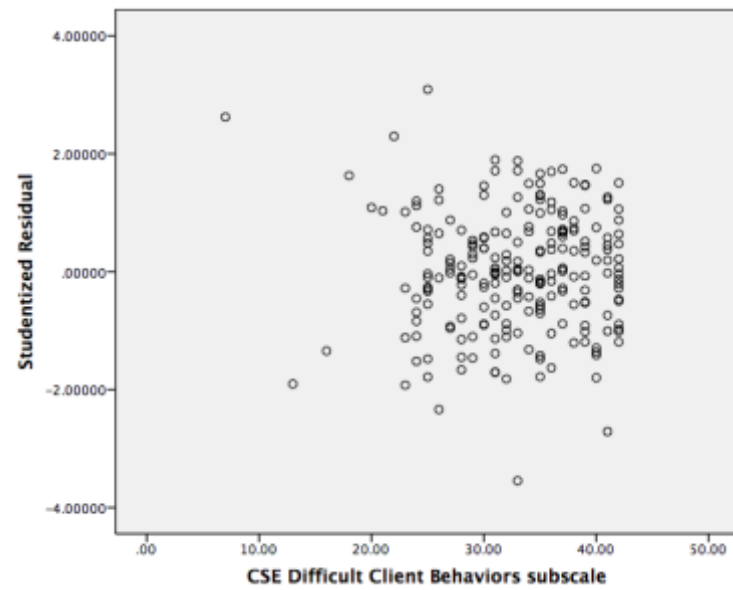


Figure 6. Scatterplot of CSE Difficult Client Behavior Subscale

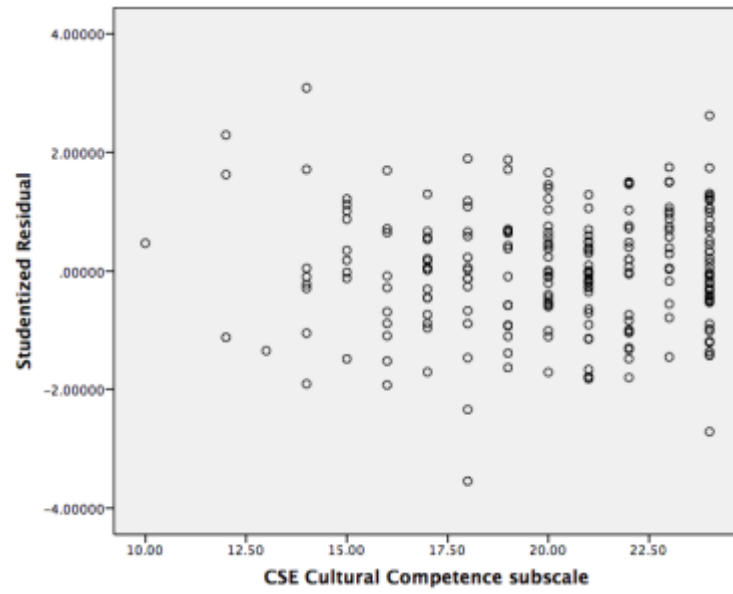


Figure 7. Scatterplot of CSE Cultural Competence Subscale

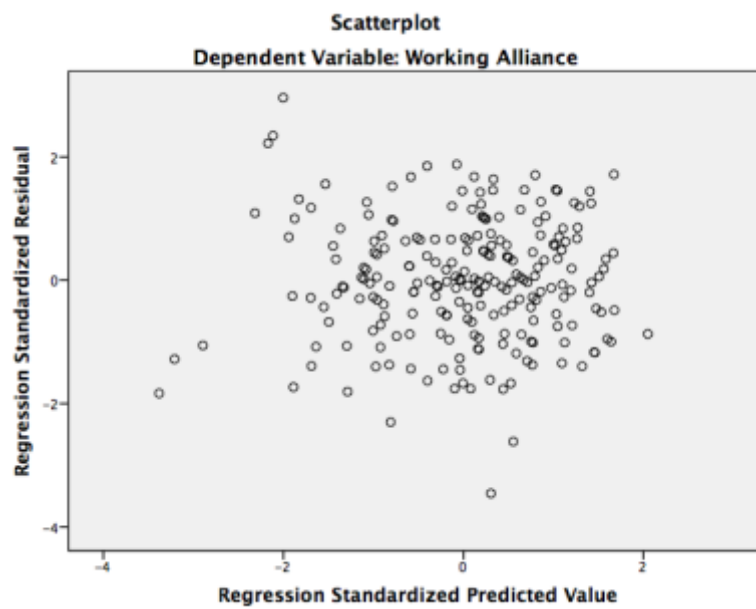


Figure 8. Scatterplot of Unstandardized Residuals to the Outcome Variable



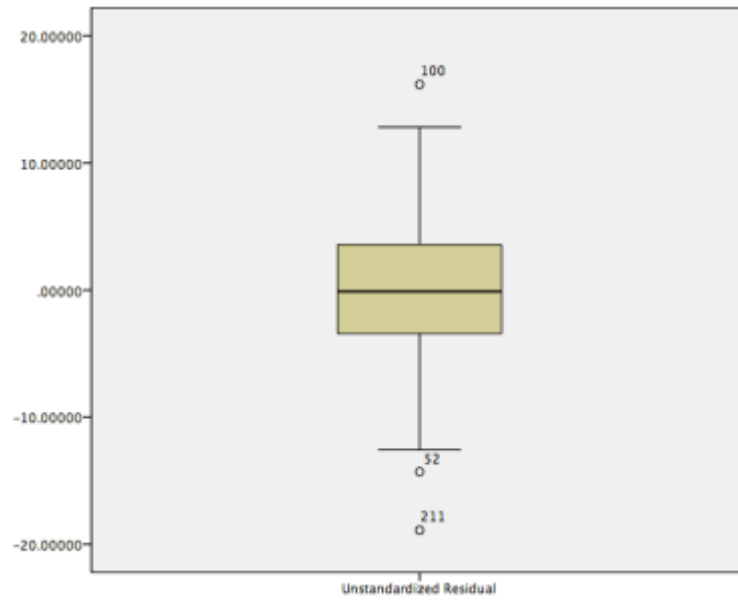


Figure 9. Boxplot of Unstandardized Residuals

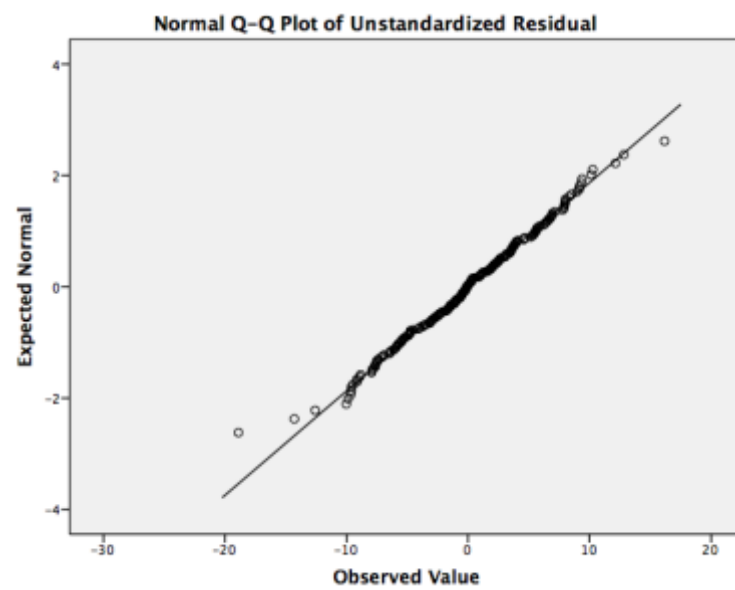


Figure 10. Q-Q Plot of Unstandardized Residuals

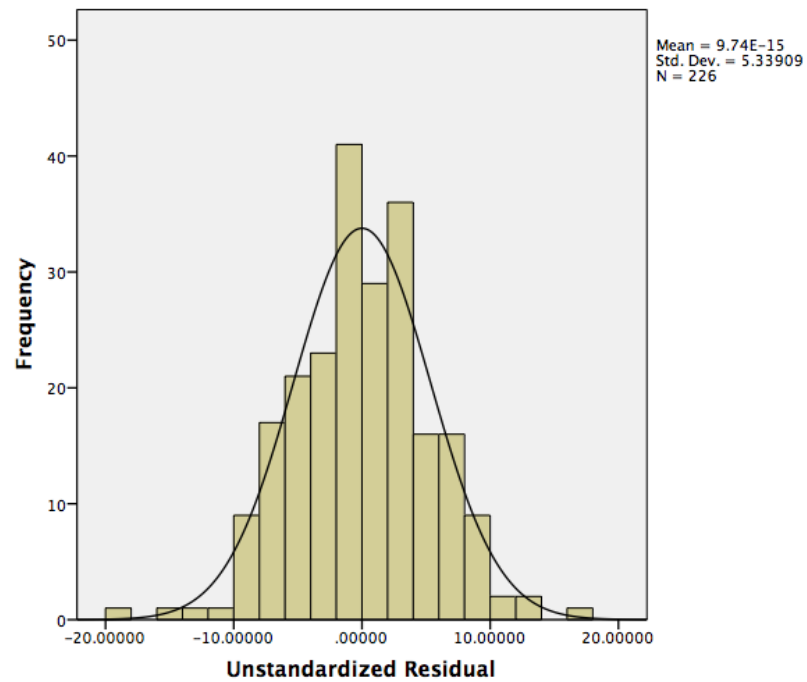


Figure 11. Histogram of Unstandardized Residuals

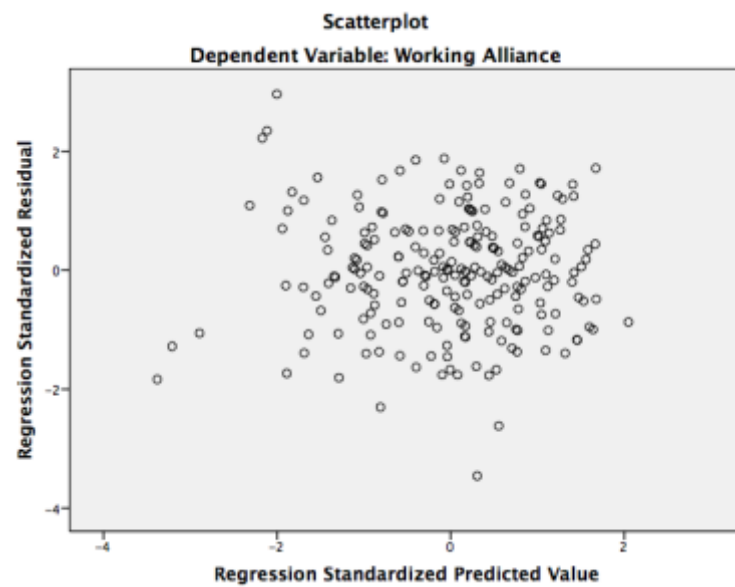


Figure 12. Scatterplot of Standardized Residuals against Standardized Predicted Values

## APPENDIX K

### Supplementary Exploratory Factor Analyses

To identify factor structures and factor scores, Exploratory Factor Analysis (EFA) was conducted for the scale of each predictor variable, using the principle components method. To make the findings more easily interpretable (i.e., to what degree items loaded onto each factor), the varimax (orthogonal) rotation method was used. Factor scores were computed to identify how each individual in the sample would score on factors extracted from a series of factor analyses, and further to be used in the multiple regression analysis. The Bartlett method was used to produce factor scores, since it is easily understood and scores generated from this method are unbiased and correlated only with their own factor (Field, 2009; Yong & Pearce, 2013).

**EFA for the EC.** The Kaiser–Meyer–Olkin measure of sampling adequacy (KMO) for the factor analysis yielded the result of  $KMO = .623$ , above the commonly recommended value of .6, and the Bartlett’s test of sphericity was significant,  $\chi^2 (91) = 263.88, p < .001$ , indicating factor analysis is appropriate with this data (Field, 2009). Based on Kaiser’s criterion of eigenvalues greater than 1, five factors were initially extracted explaining 52.8% of the variance. The examination of the scree plot suggested the possibility of retaining two to five factors. Solutions for two to five factors were each examined using varimax rotation of the factor loading matrix. When examining the factor loading matrix, with the three-factor solution items of the EC could be effectively loaded onto one of the three factors with coefficient values larger than .30 (Raykov & Marcoulides, 2008). The three-factor solution explained 36.4% of the variance. When examining each factor more closely, Factor 1 consists of four items, related to ‘Major Life Domains’. Items within this factor examining rehabilitation counselors’ attitudes

toward individuals with disabilities about the possibility of achieving meaningful goals in life domains such as independent living, intimate relationship, career goals, etc. Factor 2 includes five items, which measure ‘Cause and Current Status’ of individuals with mental illness such as cause of the beginning of mental illness or prevalence of certain status among individuals with mental illness (e.g., homelessness, divorce rate). Finally, Factor 3 also consists of five items, which examine attitudes toward ‘Treatment or Prognosis’ for mental illness. Table 9 shows the rotated component matrix loadings for three scales.

Table 9

*Rotated Component Matrix of Three Factor Solution for the EC*

<b>Rotated Factor Loadings</b>	<b>1</b>	<b>2</b>	<b>3</b>
People with severe mental illness maintaining private residences	.695		
Capability of establishing an intimate long-term relationship	.695		
Use an online dating service among people with mental illness	.689		
Capability of being a physician or medical doctor	.635		
Adolescents with schizophrenia frequently truant from school		.607	
Likelihood of benefiting from services like psychotherapy		.540	
Neglectful parenting responsible for the beginning of mental illness		.477	
Percentage of homeless population of people with schizophrenia		.436	
The divorce rate among people who experience mental illness		.421	
Recommendation of a job-training program over regular curriculum			.601
The average number of separate hospitalizations			.594
Significance of cognitive-behavioral therapy on symptom reduction			-.522
Percent of treatment dedicated to medication compliance			.450
Family relationship			.440

**EFA for the RS.** The EFA was performed on the 13-item RS. The KMO yielded the value of  $KMO = .751$ , which is good for the sample adequacy, and the Bartlett’s test of sphericity was significant,  $\chi^2 (78) = 1060.56, p < .001$ , indicating factor analysis is appropriate with this data (Field, 2009). Based on Kaiser’s criterion of eigenvalues greater than 1, three factors were initially extracted explaining 58.7% of the variance. When examining the scree plot, the point of inflexion occurs at the third point, which suggests the extraction of two factors (Field,

2009). The varimax rotation of the factor loading matrix further supported retaining two factors. The two-factor solution explained 49.0% of the variance.

The first factor, titled as ‘Goals and Importance of Others’, consists of six items measuring rehabilitation counselors’ belief about whether individuals with mental illness have a desire to achieve life goals or to rely on significant others in the recovery process. The second factor, named ‘Positive Hope for Future’, includes seven items related to individuals with mental illness having hope for future and not dominated by mental illness symptoms. Table 10 shows the rotated component matrix loadings for two factors identified for the RS.

Table 10

*Rotated Component Matrix of Three Factor Solution for the RS*

<b>Rotated Factor Loadings</b>	<b>1</b>	<b>2</b>
People with MI have a purpose in life	.834	
People with MI have goals in life	.822	
When people with MI don’t care about themselves, other people do	.766	
When people with MI don’t believe in themselves, other people do	.653	
Belief that People with MI can meet their current personal goals	.580	
It is important for people with MI to have a variety of friends	.394	
People with MI believe something good will eventually happen		.761
People with MI are hopeful about their future		.728
The symptoms interfere less and less with their life		.720
Fear doesn’t stop people with MI from living the way they want to		.689
The symptoms are a problem for shorter periods of time		.618
Coping with MI is not the main focus of the lives of people with MI		.483
People with MI have people they can count on		.406

**EFA for the ECS.** The KMO for the factor analysis yielded the result of KMO = .709; and the Bartlett’s test of sphericity was significant,  $\chi^2 (10) = 383.52, p < .001$ . Only one factor structure was extracted based on Kaiser’s criterion of eigenvalues greater than 1 as well as the examination of the scree plot. It explained 53.1% of the variance (See Table 11).

Table 11

*Rotated Component Matrix of Three Factor Solution for the ECS*

<b>Rotated Factor Loadings</b>	<b>1</b>
Expectation of counseling as helpful	.869
Negative expectation of counseling as beneficial	.845
Expectation of counselor as helpful	.765
A belief in the helpful nature of counseling	.583
Negative expectation of counseling for the change of clients' life	.511

**EFA for the COSE.** The EFA was performed on the 37-item COSE which examines rehabilitation counselors' self-efficacy. The KMO yielded the value of KMO = .922, which is considered very good for the sample adequacy, and the Bartlett's test of sphericity was significant,  $\chi^2 (666) = 3787.83, p < .001$ , indicating factor analysis is appropriate with this data (Field, 2009). Based on Kaiser's criterion of eigenvalues greater than 1, eight factors were initially extracted explaining 59.7% of the variance.

The examination of the scree plot suggested the possibility of retaining two to five factors. In Larson et al. (1992) study that initially conducted the EFA with the COSE, the authors determined five-factor solution as the best approximate simple structure. When examining the factor loading matrix using the varimax rotation, this five-factor structure was also appropriate with the current sample. Table 12 displays the rotated component matrix loadings for five factors identified for the COSE in this study.

Table 12

*Rotated Component Matrix of Five Factor Solution for the COSE*

<b>Rotated Factor Loadings</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Knowledge about counseling	.738				
Confidence about using proper probes	.661				
Worries about understanding client non-verbal behaviors	.658				
Competency dealing with crisis situations	.605				
Worries about using responses to define/clarify problems	.578				
Confidence of assessing client readiness for change	.569				

Table 12 (cont'd)

Confidence of conceptualizing clients' problem	.558	
Worries about setting proper goals	.545	
Worries about giving responses that are not effective	.541	
Assessment being inaccurate to client problems	.539	
Worries about proper reflection feeling or interpretation	.461	
Resolve conflicts in personal life	.447	
Worries about expressing myself	.363	
Uncertainty of confronting clients in counseling	.355	
Confidence of responding to client in view of what the client express		.717
Proper interpretation and confrontation	.659	
Confidence about consistent responses	.643	
Confidence of initiating the end of a session	.637	
Confidence of using responses	.612	
Appropriate length of time in responses	.552	
Consistency between responses and client expression	.527	
Responses that are clear and easy to understand	.523	
Confidence about being respected	.471	
Effectiveness of interpretation and confrontation	.413	
Difficulty dealing with passive clients		.779
Unsure how to deal with clients who are noncommittal		.723
Lack of counseling techniques		.592
Uncomfortable working with unmotivated clients		.590
Worries about not encouraging client engagement		.416
Difficulty understanding client perspectives		.741
Confidence of working with ethnic minority clients		.734
Confidence of working with clients of a different social class		.611
Worries about working with clients of lower SES		.480
Worries about using proper verbal responses		.670
Worries about responding to the client in a non-judgmental way		.568
Worries about giving advice		.498
Impose values on the client		.365

It was noticed that several items loaded on other factors that were originally identified from the Larson et al. (1992) study. For example, three items from 'Difficult Client Behaviors', two items from 'Microskills', and one item from 'Awareness of Values' loaded on 'Process' subdomain. Moreover, one item from 'Process' loaded on both 'Difficult Client Behaviors' and

‘Awareness of Values’ subdomains. When examining such items more carefully, they demonstrated a somewhat ambiguous nature with the possibility of being placed within the different factors. For instance, the item in Difficult Client Behaviors such as “I am confident that I will know when to use open or closed-ended probes and that these probes will reflect the concerns of the client and not be trivial” or one in Microskills such as “I am confident that I can assess my client’s readiness and commitment to change” could also be considered measuring counselors’ confidence in a set of counselor responses presenting throughout the counseling sessions (i.e., Process). Therefore, it seems reasonable to keep the original factors identified in the previous study (Larson et al., 1992): Factor 1 is ‘Process’ domain, which is related to the integrated set of counselor responses when working with a client; Factor 2 is titled ‘Microskills’ and measures microcounseling skills regarding the quality of the counselors’ responses; Factor 3, which is ‘Difficult Client Behaviors’, measures counselors possessing knowledge and techniques to deal with client problems; Factor 4 is ‘Cultural Competence’ and measures counselors’ competency to work with culturally diverse clients; and Factor 5, ‘Awareness of Values’, examines the counselors’ biases or values.

**Multiple regression analysis using factor scores.** A multiple regression analysis was conducted using factor scores generated by a series of factor analyses. In-service training and social desirability biases were included as covariates. Three factors from EC, two factors from RS, one factor for the ECS, and five factors for the COSE were included as predictor variables. The model summary for the multiple regression analysis indicated that the regression model was statistically significant,  $F(13, 212) = 18.73, p < .001$ . Multiple  $R^2$  indicates that the model accounted for approximately 54% of the variation in the WA between rehabilitation counselors and clients with mental illness. The findings from the multiple regression analysis using factor



scores yielded very similar results from the multiple regression analysis using unweighted scores.

The ECS had a significantly predicted the working alliance with  $B = 1.54$ ,  $t(225) = 3.63$ ,  $p$

$< .001$ . In addition, all five factors of the COSE statistically significantly predicted the WA:

Process with  $B = 2.33$ ,  $t(225) = 6.13$ ,  $p < .001$ ; Microskills with  $B = 2.75$ ,  $t(225) = 7.12$ ,  $p$

$< .001$ ; Difficult Client Behaviors with  $B = 2.34$ ,  $t(225) = 6.07$ ,  $p < .001$ ; Cultural Competence

with  $B = 1.67$ ,  $t(225) = 4.36$ ,  $p < .001$ ; and Awareness of Value with  $B = 1.04$ ,  $t(225) = 2.73$ ,  $p$

$= .007$ .

Table 13

*Multiple Regression Model using Factor Scores*

<b>Model</b>	<b><i>B</i></b>	<b><i>SE</i></b>	<b><math>\beta</math></b>	<b><i>t</i></b>	<b><i>Sig.</i></b>
(Constant)	60.774	1.510		40.261	.000
In-service Training	1.673	.991	.084	1.689	.093
Social Desirability	.267	.114	.117	2.345	.020
EC					
Major Life Domains	.403	.395	.051	1.018	.310
Cause and Current Status	.267	.388	.034	.689	.491
Treatment or Prognosis	.259	.378	.033	.686	.493
RS					
Goals and Importance of Others	-.282	.424	-.036	-.665	.507
Positive Hope for Future	-.094	.393	-.012	-.240	.811
ECS	1.541	.425	.198	3.628	.000
COSE					
Process	2.333	.381	.299	6.131	.000
Microskills	2.753	.387	.354	7.123	.000
Difficult Client Behaviors	2.336	.385	.301	6.072	.000
Cultural Competence	1.671	.383	.214	4.356	.000
Awareness of Value	1.035	.379	.133	2.727	.007

*Note:*  $R^2 = .535$ ,  $F(13, 212) = 18.726$ ,  $p < .001$  for the model.

## REFERENCES

## REFERENCES

- Ackerman, S. J., & Hilsenroth, M. J. (2001). A review of therapist characteristics and techniques negatively impacting the therapeutic alliance. *Psychotherapy: Theory, Research, Practice, Training*, 38(2), 171-185.
- Ackerman, S. J., & Hilsenroth, M. J. (2003). A review of therapist characteristics and techniques positively impacting the therapeutic alliance. *Clinical Psychology Review*, 23(1), 1-33.
- Ajzen, I. (1993). Attitudes Theory and the attitude-behavior relation. In D. Krebs & P. Schmidt (Eds.), *New directions in attitude measurement*. (pp. 41-58). Berlin: Walter deGruyer.
- Al-Damarki, F. R. (2004). Counselor training, anxiety, and counseling self-efficacy: Implications for training psychology students from the United Arab Emirates University. *Social Behavior and Personality*, 32(5), 429-439.
- Al-Darmaki, F., & Kivlighan, D. M. (1993). Congruence in client-counselor expectations for relationship and the working alliance. *Journal of Counseling Psychology*, 40(4), 379-384.
- Anderson, J. D. (2005). *Client perception of counselor characteristics* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI No. 3166030)
- Anderson, R., Oades, L., & Caputi, P. (2003). The experience of recovery from schizophrenia: Towards an empirically validated stage model. *Australian and New Zealand Journal of Psychiatry*, 37(5), 586-594.
- Anthony, W. A. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal*, 16, 11-23.
- Anthony, W. A., & Mizock, L. (2014). Evidence-based processes in an era of recovery: Implications for rehabilitation counseling and research. *Rehabilitation Counseling Bulletin*, 57(4), 219-227.
- Antonak, R. F., & Livneh, H. (2000). Measurement of attitudes towards persons with disabilities. *Disability and Rehabilitation*, 22, 211-224.
- Babbie, E. R. (1990). *Survey research methods*. Belmont, CA: Wadsworth Pub. Co.
- Baldwin, S. A., Wampold, B. E., & Imel, Z. E. (2007). Untangling the alliance-outcome correlation: Exploring the relative importance of therapist and patient variability in the alliance. *Journal of Consulting and Clinical Psychology*, 75(6), 842-852.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 34, 191-215.
- Bandura, A. (1986). *Social foundations of thought and action*. New Jersey: Prentice-Hall, Inc.

- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44, 1175-1184.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1-26.
- Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*, 88(1), 87-99.
- Barnes, K. L. (2004). Applying self-efficacy theory to counselor training and supervision: A comparison of two approaches. *Counselor Education and Supervision*, 44(1), 56-69.
- Bates, J. K. (2012). *Predictors of working alliance efficacy among state VR counselors as a function of ex-offender status* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI No. 3534706)
- Beutler, L. E., Malik, M., Alimohamed, S., Harwood, T. M., Talebi, H., Noble, S., & Wong, E. (2004). Therapist variables. In M.J. Lambert (Ed.), *Handbook of psychotherapy and behavior change* (pp. 227-306). New York, NY: Wiley.
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research & Practice*, 16(3), 252-260.
- Bordin, E. S. (1994). Theory and research on the therapeutic working alliance: New directions. In A. Horvath & L. Greenberg (Eds.), *The working alliance: Theory, Research and Practice* (pp. 13-37). New York, NY: Wiley.
- Briggs, D. B., & Munley, P. H. (2008). Therapist stress, coping, career sustaining behavior and the working alliance. *Psychological Reports*, 103(2), 443-454.
- Bruton, W. S. (2013). *The impact of a DBT training on the counselor self-efficacy of preservice counselors working with borderline personality disordered clients* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI No. 3574298)
- Broussard, G., Goulding, S. M., Talley, C. L., & Compton, M. T. (2012). Social distance and stigma toward individuals with schizophrenia: Findings in an urban, African-American community sample. *Journal of Nervous and Mental Disease*, 200(11), 935-940.
- Busseri, M. A., & Tyler, J. D. (2003). Interchangeability of the working alliance inventory and working alliance inventory, short form. *Psychological Assessment*, 15(2), 193-197.
- Carney, J. S., & Cobia, D. C. (1994). Relationship of characteristics of counselors-in-training to their attitudes toward persons with disabilities. *Rehabilitation Counseling Bulletin*, 38, 72-76.

- Chan, F., Livneh, H., Pruett, S., Wang, C. C., & Zheng, L. X. (2009). Societal attitudes towards disability: Concepts, measurements, and interventions. In F. Chan, E. Da Silva Cardoso, & J. A. Chronister (Eds.), *Understanding psychosocial adjustment to chronic illness and disability: A handbook for evidence-based practitioners in rehabilitation* (pp. 333-367). New York, NY: Springer.
- Chan, F., Shaw, L. R., McMahon, B. T., Koch, L., & Strauser, D. (1997). A model for enhancing rehabilitation counselor-consumer working relationships. *Rehabilitation Counseling Bulletin*, 41(2), 122-137.
- Chan, F., Sung, C., Muller, V., Wang, C.C., Fujikawa, M., & Anderson, C.A. (2012). Evidence-based practice and research utilization. In D.R. Maki & V.M. Tarvydas (Eds.), *The professional practice of rehabilitation counseling* (p. 391-412). New York, NY: Springer Publishing, Inc.
- Chan, J. Y. C., Keegan, J. P., Ditchman, N., Gonzalez, R., Zheng, L. X., & Chan, F. (2011). Stigmatizing attributions and vocational rehabilitation outcomes of people with disabilities. *Rehabilitation Research, Policy, and Education*, 25(3-4), 135-148.
- Chaplin, R. (2000). Psychiatrists can cause stigma, too. *British Journal of Psychiatry*, 177, 467.
- Charles, J. L. K. (2015). *Measuring mental health provider stigma: The development of a valid and reliable self-assessment instrument* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI No. 3703057)
- Chinman, M. J., Rosenheck, R., & Lam, J. A. (2000). The case management relationship and outcomes of homeless persons with serious mental illness. *Psychiatric Services*, 51, 1142-1147.
- Cleary, A., & Dowling, M. (2009). Knowledge and attitudes of mental health professionals in Ireland to the concept of recovery in mental health: A questionnaire survey. *Journal of Psychiatric and Mental Health Nursing*, 16(6), 539-545.
- Cohen, J. (1992). Quantitative methods in psychology: A power primer. *Psychological Bulletin*, 112(1), 155-159.
- Cohen, N. L. (1990). Stigma is in the eye of the beholder: A hospital outreach program for treating homeless mentally ill people. *Bulletin of the Menninger Clinic*, 54, 255-258.
- Coleman, H. L. K., Wampold, B. E., & Casali, S. L. (1995). Ethnic minorities' ratings of ethnically similar and European American counselors: A meta-analysis. *Journal of Counseling Psychology*, 42, 55-64.
- Commission on Rehabilitation Counselor Certification (CRCC). (2015). *CRCC media center*. Retrieved from: [http://www.crc certification.com/pages/crcc\\_media\\_center/358.php](http://www.crc certification.com/pages/crcc_media_center/358.php)
- Compton, M. T., Reed, T., Broussard, B., Powell, I., Thomas, G. V., Moore, A., ... & Haynes, N. (2014). Development, implementation, and preliminary evaluation of a recovery-based curriculum for community navigation specialists working with individuals with serious

- mental illnesses and repeated hospitalizations. *Community Mental Health Journal*, 50(4), 383-387.
- Constantino, M. J., Ametrano, R. M., & Greenberg, R. P. (2012). Clinician interventions and participant characteristics that foster adaptive patient expectations for psychotherapy and psychotherapeutic change. *Psychotherapy*, 49(4), 557-569.
- Constantino, M. J., Arnow, B. A., Blasey, C., & Agras, W. S. (2005). The association between patient characteristics and the therapeutic alliance in cognitive-behavioral and interpersonal therapy for bulimia nervosa. *Journal of Consulting and Clinical Psychology*, 73(2), 203-215.
- Corrigan, P. W. (2000). Mental health stigma as social attribution: Implications for research methods and attitude change. *Clinical Psychology-Science and Practice*, 7, 48-67.
- Corrigan, P. W. (2002). Empowerment and serious mental illness: Treatment partnerships and community opportunities. *Psychiatric Quarterly*, 73(3), 217-228.
- Corrigan, P. W. (2004). How stigma interferes with mental health care. *American Psychologist*, 59(7), 614-625.
- Corrigan, P., Markowitz, F. E., Watson, A., Rowan, D., & Kubiak, M. A. (2003). An attribution model of public discrimination towards persons with mental illness. *Journal of Health and Social Behavior*, 44(2), 162-179.
- Corrigan, P. W., Mueser, K. T., Bond, G. R., Drake, R. E., & Solomon, O. (2008). *Principles and practice of psychiatric rehabilitation: An empirical approach*. New York, NY: Guilford Press.
- Corrigan, P. W., Powell, K. J., & Michaels, P. J. (2014). Brief battery for measurement of stigmatizing versus affirming attitudes about mental illness. *Psychiatry Research*, 215(2), 466-470.
- Corrigan, P. W., River, L. P., Lundin, R. K., Wasowski, K. U., Campion, J., Mathisen, J., ... & Kubiak, M. A. (2000). Stigmatizing attributions about mental illness. *Journal of Community Psychology*, 28(1), 91-102.
- Corrigan, P. W., Salzer, M., Ralph, R. O., Sangster, Y., & Keck, L. (2004). Examining the factor structure of the recovery assessment scale. *Schizophrenia Bulletin*, 30(4), 1035-1041.
- Corrigan, P. W., & Shapiro, J. R. (2010). Measuring the impact of programs that challenge the public stigma of mental illness. *Clinical Psychology Review*, 30(8), 907-922.
- Council on Rehabilitation Education (2012). *Accreditation manual for master's level rehabilitation counselor education programs*. Schaumburg, IL: Author.
- Council for Accreditation of Counseling and Related Educational Programs (2016). *2016 CACREPT standards*.

- Couture, S. M., & Penn, D. L. (2003). Interpersonal contact and the stigma of mental illness: A review of the literature. *Journal of Mental Health, 12*(3), 291-305.
- Couture, S. M., Roberts, D. L., Penn, D. L., Cather, C., Otto, M. W., & Goff, D. (2006). Do baseline client characteristics predict the therapeutic alliance in the treatment of schizophrenia? *The Journal of Nervous and Mental Disease, 194*(1), 10-14.
- Crisp, A. H., Gelder, M. G., Rix, S., Meltzer, H. I., & Rowlands, O. J. (2000). Stigmatization of people with mental illnesses. *The British Journal of Psychiatry, 177*, 4-7.
- Crowe, A., & Averett, P. (2015). Attitudes of mental health professionals toward mental illness: a deeper understanding. *Journal of Mental Health Counseling, 37*(1), 47-62.
- Crowe, T. P., Deane, F. P., Oades, L. G., Caputi, P., & Morland, K. G. (2006). Effectiveness of a collaborative recovery training program in Australia in promoting positive views about recovery. *Psychiatric Services, 57*(10), 1497-1500.
- Davis, L. W., & Lysaker, P. H. (2007). Therapeutic alliance and improvements in work performance over time in patients with schizophrenia. *The Journal of Nervous and Mental Disease, 195*(4), 353-357.
- Deane, F. P., Crowe, T. P., & Oades, L. G. (2010). Therapeutic alliance in vocational rehabilitation. In C. Lloyd (Ed.), *Vocational rehabilitation and mental health* (pp. 95-113). Blackwell Publishing Ltd.
- Deans, C., & Meocivic, E. (2006). Attitudes of registered psychiatric nurses towards patients diagnosed with borderline personality disorder. *Contemporary Nurse, 21*, 43-49.
- Dimeff, L. & Linehan, M.M. (2001). Dialectical behavior therapy in a nutshell. *The California Psychologist, 34*, 10-13.
- Donnell, C. M., Lustig, D. C., & Strauser, D. R. (2004). The working alliance: Rehabilitation outcomes for persons with severe mental illness. *Journal of Rehabilitation, 70*(2), 12-18.
- Drake, R. E., & Whitley, R. (2014). Recovery and severe mental illness: description and analysis. *The Canadian Journal of Psychiatry, 59*(5), 236-242.
- Dunkle, J. H., & Friedlander, M. L. (1996). Contribution of therapist experience and personal characteristics to the working alliance. *Journal of Counseling Psychology, 43*(4), 456-460.
- Evans-Jones, C., Peters, E., & Barker, C. (2009). The therapeutic relationship in CBT for psychosis: client, therapist and therapy factors. *Behavioral and Cognitive Psychotherapy, 37*, 527-540.
- Fabian, E. S., & Waugh, C. (2001). A job development efficacy scale for rehabilitation professionals. *Journal of Rehabilitation, 67*(2), 42-47.
- Fall, M. E. (1991). *Counselor self-efficacy: A test of Bandura's theory*. (Doctoral dissertation). Retrived from Proquest Dissertations and Theses. Order Number: 9218006.

- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191.
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Sage Publications.
- Fiorentine, R., & Hillhouse, M. P. (1999). Drug treatment effectiveness and client-counselor empathy: Exploring the effects of gender and ethnic congruency. *Journal of Drug Issues*, 29(1), 59-74.
- Ganske, K. H. (2008). *The relationship between counselor trainee perfectionism and working alliance with supervisor and client* (Doctoral dissertation). Georgia State University.
- Gray, A. J. (2002). Stigma in psychiatry. *Journal of the Royal Society of Medicine*, 95, 72-76.
- Grbevski, S. (2009). *Health care professionals attitudes towards individuals diagnosed with severe mental illness* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI No. 3365817)
- Green, C. A., Polen, M. R., Janoff, S. L., Castleton, D. K., Wisdom, J. P., Vuckovic, N., ... & Oken, S. L. (2008). Understanding how clinician-patient relationships and relational continuity of care affect recovery from serious mental illness: STARS study results. *Psychiatric Rehabilitation Journal*, 32(1), 9-22.
- Hagen-Foley, D. L., Rosenthal, D. A., & Thomas, D. F. (2005). Informed consumer choice in community rehabilitation programs. *Rehabilitation Counseling Bulletin*, 48(2), 110-117.
- Halverson, S. E., Miars, R. D., & Livneh, H. (2006). An exploratory study of counselor education students moral reasoning, conceptual level, and counselor self-efficacy. *Counseling & Clinical Psychology Journal*, 3(1), 17-30.
- Hanson, M. G. (2006). *Counselor self-efficacy: Supervision contributions, impact on performance, and mediation of the relationship between supervision and performance*. Unpublished doctoral dissertation, Southern Illinois University.
- Hauser, M. A. (2009). *The role of optimism and working alliance and its utility in predicting therapeutic outcomes in counseling relationships* (Doctoral dissertation). Old Dominion University.
- Hein, S., Lustig, D. C., & Uruk, A. (2005). Consumers' recommendations to improve satisfaction with rehabilitation services: A qualitative study. *Rehabilitation Counseling Bulletin*, 49(1), 29-39.
- Heinonen, E., Lindfors, O., Härkänen, T., Virtala, E., Jääskeläinen, T., & Knekt, P. (2014). Therapists' professional and personal characteristics as predictors of working alliance in short-term and long-term psychotherapies. *Clinical Psychology & Psychotherapy*, 21(6), 475-494.



- Heppner, M. J., Multon, K. D., Gysbers, N. C., Ellis, C. A., & Zook, C. E. (1998). The relationship of trainee self-efficacy to the process and outcome of career counseling. *Journal of Counseling Psychology, 45*(4), 393-402.
- Hersoug, A. G., Høglend, P., Havik, O., Lippe, A., & Monsen, J. (2009). Therapist characteristics influencing the quality of alliance in long-term psychotherapy. *Clinical Psychology & Psychotherapy, 16*(2), 100-110.
- Hersoug, A. G., Høglend, P., Monsen, J. I., & Havik, O. E. (2001). Quality of working alliance in psychotherapy: Therapist variable and patient/therapist similarity as predictors. *The Journal of Psychotherapy Practice and Research, 10*(4), 205-216.
- Hicks, A. L., Deane, F. P., & Crowe, T. P. (2012). Change in working alliance and recovery in severe mental illness: An exploratory study. *Journal of Mental Health, 21*(2), 127-134.
- Horvath, A. O., Del Re, A., Flückiger, C., & Symonds, D. (2011). Alliance in individual psychotherapy. In J. C. Norcross (Ed.), *Psychotherapy relationships that work* (2<sup>nd</sup> ed.). New York, NY: Oxford University Press.
- Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the working alliance inventory. *Journal of Counseling Psychology, 36*(2), 223-233.
- Horvath, A. O., & Luborsky, L. (1993). The role of the therapeutic alliance in psychotherapy. *Journal of Consulting and Clinical Psychology, 61*(4), 561-573.
- Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology, 38*(2), 139-149.
- Hoy, K. E., & Holden, J. M. (2014). Licensed professional counselors' attitudes about and interest in providing services for clients with schizophrenia: Advocacy implications. *Journal of Counselor Leadership and Advocacy, 1*(1), 67-82.
- Hugo, M. (2001). Mental health professionals' attitudes towards people who have experienced a mental health disorder. *Journal of Psychiatric and Mental Health Nursing, 8*, 419-425.
- Iannelli, R. J. (2000). *A structural equation modeling examination of the relationship between counseling self-efficacy, counseling outcome expectations, and counselor performance* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI No. 9988728)
- Jacobson, N., & Greenley, D. (2001). What is recovery? A conceptual model and explication. *Psychiatric Services, 52*(4), 482-485.
- Jimenez, A. A. (1985). *Effects of profession, education and experience on therapists' expectancies regarding client's needs, therapy process and prognosis* (Doctoral dissertation). Florida State University, Tallahassee, Florida.
- Johnson, L. N., & Wright, D. W. (2002). Revisiting Bordin's theory on the therapeutic alliance: Implications for family therapy. *Contemporary Family Therapy, 24*(2), 257-269.

- Jones, M. C. (2014). *Exploring the professional experiences of counselors' clinical work with the severely and persistently mentally ill: Informing counselor education training* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI No. 3626075)
- Jorm, A. F., Korten, A. E., Jacomb, P. A., Rodgers, B. R. Y. A. N., Pollitt, P., Christensen, H., & Henderson, S. (1997). Helpfulness of interventions for mental disorders: Beliefs of health professionals compared with the general public. *The British Journal of Psychiatry*, 171(3), 233-237.
- Joyce, A. S., & Piper, W. E. (1998). Expectancy, the therapeutic alliance, and treatment outcome in short-term individual psychotherapy. *The Journal of Psychotherapy Practice and Research*, 7(3), 236-248.
- Kaplan, S. P. (1982). Rehabilitation counselor's attitudes toward their clients. *Journal of Rehabilitation*, 48(4), 28-30.
- Katz, A. D., & Hoyt, W. T. (2014). The influence of multicultural counseling competence and anti-Black prejudice on therapists' outcome expectancies. *Journal of Counseling Psychology*, 61(2), 299-305.
- Kierpiec, K. M., Phillips, B. N., & Kosciulek, J. F. (2010). Vocational rehabilitation caseload size and the working alliance: Implications for rehabilitation administrators. *Journal of Rehabilitation Administration*, 34(1), 5-14.
- Kim, B. S., Ng, G. F., & Ahn, A. J. (2005). Effects of client expectation for counseling success, client-counselor worldview match, and client adherence to Asian and European American cultural values on counseling process with Asian Americans. *Journal of Counseling Psychology*, 52(1), 67-76.
- Kingdon, D., Sharma, T., & Hart, D. (2004). What attitudes do psychiatrists hold towards people with mental illness? *Psychiatric Bulletin*, 28, 401-406.
- Kirsh, B., & Tate, E. (2006). Developing a comprehensive understanding of the working alliance in community mental health. *Qualitative Health Research*, 16(8), 1054-1074.
- Kocarek, C. E. (2001). *Understanding the relationships among counseling self-efficacy, anxiety, developmental level, coursework, experience, and counselor performance* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI No. 3020231)
- Kondrat, D. C. (2008). *Expanding understanding of mental health recovery: Effects of stigma and working alliance on the quality of life of persons with severe mental disability receiving community-based case management services* (Doctoral dissertation). Ohio State University.
- Kosciulek, J. F. (2000). Implications of consumer direction for disability policy development and rehabilitation service delivery. *Journal of Disability Policy Studies*, 11(2), 82-89.

- Kosciulek, J. F. (2004). Empowering people with disabilities through vocational rehabilitation counseling. *American Rehabilitation*, 28(1), 40-47.
- Kosyluk, K. (2014). *Investigating the impact of education and contact-based anti stigma interventions on the stigma of mental illness in the college population* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI No. 3662623)
- Kozina, K., Grabovari, N., Stefano, J. D., & Drapeau, M. (2010). Measuring changes in counselor self-efficacy: Further validation and implications for training and supervision. *The Clinical Supervisor*, 29(2), 117-127.
- Kuo, H. J. (2013). *Rehabilitation counselors' perceptions of importance and competence of assistive technology* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI No. 3605734)
- Krippner, K. M., & Hutchinson, R. L. (1990). Effects of a brief intake interview on clients' anxiety and depression: Follow-up. *International Journal of Short-Term Psychotherapy*, 5, 121-130.
- Lambert, M. J., & Barley, D. E. (2002). Research summary on the therapeutic relationship and psychotherapy outcome. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients* (pp. 17-32). New York, NY: Oxford University Press.
- Lambert, M. J., & Ogles, B. M. (2004). The efficacy and effectiveness of psychotherapy. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (5th ed., pp. 139-193). Wiley.
- Landon, T. J. (2016). *Perceptions of supervisory knowledge, behavior, and self-efficacy: Supervisor effectiveness in performing clinical supervision and developing the supervisory relationship* (Doctoral dissertation). Retrieved from ProQuest. (No. 10141206)
- Larson, L. M. (1998). The social cognitive model of counselor training. *The Counseling Psychologist*, 26(2), 219-273.
- Larson, L. M., & Daniels, J. A. (1998). Review of the counseling self-efficacy literature. *The Counseling Psychologist*, 26(2), 179-218.
- Larson, L. M., Suzuki, L. A., Gillespie, K. N., Potenza, M. T., Bechtel, M. A., & Toulouse, A. L. (1992). Development and validation of the counseling self-estimate inventory. *Journal of Counseling Psychology*, 39(1), 105-120.
- Lauber, C., Anthony, M., Ajdacic-Gross, V., & Rossler, W. (2004). What about psychiatrists' attitude to mentally ill people? *European Psychiatry*, 19, 423-427.
- Leach, M. M., Stoltenberg, C. D., McNeill, B. W., & Eichenfield, G. A. (1997). Self efficacy and counselor development: Testing the integrated developmental model. *Counselor Education and Supervision*, 37(2), 115-124.

- Leahy, M. J. (2012). Qualified provider of rehabilitation counseling services. In D.R. Maki & V.M. Tarvydas (Eds.), *The professional practice of rehabilitation counseling* (p. 193-211). New York, NY: Springer Publishing, Inc.
- Lent, R. W., Hill, C. E., & Hoffman, M. A. (2003). Development and validation of the Counselor Activity Self-Efficacy Scales. *Journal of Counseling Psychology*, 50(1), 97-108.
- Lent, R. W., Hoffman, M. A., Hill, C. E., Treistman, D., Mount, M., & Singley, D. (2006). Client-specific counselor self-efficacy in novice counselors: Relation to perceptions of session quality. *Journal of Counseling Psychology*, 53(4), 453-463.
- Lent, R. W., & Maddux, J. E. (1997). Self-efficacy: Building a sociocognitive bridge between social and counseling psychology. *The Counseling Psychologist*, 25, 240-255.
- Lomax, R. G., & Hahs-Vaughn, D. L. (2012). *An introduction to statistical concepts*. Taylor & Francis Group, LLC.
- Lustig, D. C., Strauser, D. R., Rice, N. D., & Rucker, T. F. (2002). The relationship between working alliance and rehabilitation outcomes. *Rehabilitation Counseling Bulletin*, 46(1), 24-32.
- Lustig, D. C., Strauser, D. R., & Weems, G. H. (2004). Rehabilitation service patterns: A rural/urban comparison of success factors. *Journal of Rehabilitation*, 70(3), 13-19.
- Magliano, L., De Rosa, C., Fiorillo, A., Malangone, C., Guarneri, M., Marasco, C., ... & Working Group of the Italian National Study on Families of Persons with Schizophrenia. (2004). Beliefs of psychiatric nurses about schizophrenia: A comparison with patients' relatives and psychiatrists. *International Journal of Social Psychiatry*, 50, 319-330.
- Mallinckrodt, B., & Nelson, M. L. (1991). Counselor training level and the formation of the psychotherapeutic working alliance. *Journal of Counseling Psychology*, 38(2), 133-138.
- Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 68(3), 438-450.
- McAlister, A. L., Perry, C. L., & Parcel, G. S. (2008). How individuals, environments, and health behaviors interact: Social cognitive theory. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and practice* (4th ed., pp. 169-188). San Francisco, CA: Jossey-Bass.
- McCarthy, A. K. (2014). Relationship between rehabilitation counselor efficacy for counseling skills and client outcomes. *Journal of Rehabilitation*, 80(2), 3-11.
- McGuire, A. B., White, D. A., Bartholomew, T., Flanagan, M. E., McGrew, J. H., Rollins, A. L., ... & Salyers, M. P. (2017). The relationship between provider competence, content exposure, and consumer outcomes in illness management and recovery programs. *Administration and Policy in Mental Health and Mental Health Services Research*, 44(1), 81-91.

- Michaels, P. J., & Corrigan, P. W. (2013). Measuring mental illness stigma with diminished social desirability effects. *Journal of Mental Health, 22*(3), 218-226.
- Middleton, R. A., Rollins, C. W., Sanderson, P. L., Leung, P., Harley, D. A., Ebener, D., & Leal-Idrogo, A. (2000). Endorsement of professional multicultural rehabilitation competencies and standards: A call to action. *Rehabilitation Counseling Bulletin, 43*(4), 219-245.
- Murray, M. G., & Steffen, J. J. (1999). Attitudes of case managers toward people with serious mental illness. *Community Mental Health Journal, 35*(6), 505-514.
- National Institute of Mental Health. (2013). *The numbers count: Mental disorders in America*. Retrieved from <http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml>
- Neale, M. S., & Rosenheck, R. (1995). Therapeutic alliance and outcome in a VA intensive case management program. *Psychiatric Services, 46*, 719-721.
- Nelson, M. L. (1993). A current perspective on gender differences: Implications for research in counseling. *Journal of Counseling Psychology, 40*(2), 200-209.
- New Freedom Commission on Mental Health. (2003). *Achieving the promise: Transforming mental health care in America*. Final report. Rockville: US Department of Health and Human Services.
- Nissen-Lie, H. A., Havik, O. E., Høglend, P. A., Monsen, J. T., & Rønnestad, M. H. (2013). The contribution of the quality of therapists' personal lives to the development of the working alliance. *Journal of Counseling Psychology, 60*(4), 483-495.
- Nissen-Lie, H. A., Monsen, J. T., & Rønnestad, M. H. (2010). Therapist predictors of early patient-rated working alliance: A multilevel approach. *Psychotherapy Research, 20*(6), 627-646.
- Nordt, C., Rossler, W., & Lauber, C. (2006). Attitudes of mental health professionals towards people with schizophrenia and major depression. *Schizophrenia Bulletin, 32*, 709-714.
- Oades, L. G., Deane, F. P., Crowe, T. P., Lambert, W., Kavanagh, D., & Lloyd, C. (2005). Collaborative recovery: An integrative model for working with individuals who experience chronic and recurring mental illness. *Australian Psychiatry, 13*(3), 279-284.
- O'Sullivan, D. (2012). The working alliance efficacy among rehabilitation service providers by education, experience, and disability category. *Rehabilitation Research, Policy, and Education, 26*(2-3), 217-228.
- Overton, S. L., & Medina, S. L. (2008). The stigma of mental illness. *Journal of Counseling and Development, 86*(2), 143-151.
- Penn, D. L., & Martin, J. (1998). The stigma of severe mental illness: Some potential solutions for a recalcitrant problem. *Psychiatric Quarterly, 69*, 235-247.

- Peris, T.S., Teachman, B.A., & Nosek, B.A. (2008). Implicit and explicit stigma of mental illness. *Journal of Nervous and Mental Disease*, 196, 752–760.
- Perlick, D., Rosenheck, R., Clarkin, J., Sirey, J., Salahi, J., Struening, E., & Link, B. (2001). Adverse effects of perceived stigma on social adaptation of persons diagnosed with bipolar affective disorder. *Psychiatric Services*, 52, 1627-1632.
- Raykov, T., & Marcoulides, G. A. (2008). *An introduction to applied multivariate analysis*. Routledge.
- Remler, D. K., & Van Ryzin, G. G. (2010). *Research methods in practice: Strategies for description and causation*. Sage Publications.
- Ridgway, P. (2001). Restorying psychiatric disability: learning from first person recovery narratives. *Psychiatric Rehabilitation Journal*, 24(4), 335-343.
- Rosenthal, D. A., Chan, F., & Livneh, H. (2006). Rehabilitation students' attitudes toward persons with disabilities in high- and low-stakes social contexts: A conjoint analysis. *Disability and Rehabilitation*, 28, 1517-1527.
- Russinova, Z. (1999). Providers' hope-inspiring competence as a factor optimizing psychiatric rehabilitation outcomes. *Journal of Rehabilitation*, 65(4), 50-57.
- Russinova, Z., Rogers, E. S., Ellison, M. L., & Lyass, A. (2011). Recovery-promoting professional competencies: perspectives of mental health consumers, consumer-providers and providers. *Psychiatric Rehabilitation Journal*, 34(3), 177-185.
- Safran, J , & Muran, J. (1998). The therapeutic alliance in brief psychotherapy: General principles. In J. Safran & J. Muran (Eds.), *The therapeutic alliance in brief psychotherapy* (pp. 217-229). Washington DC: American Psychological Association.
- Sánchez, J., Rosenthal, D. A., Chan, F., Brooks, J., & Bezyak, J. L. (2016). Relationships between world health organization international classification of functioning, disability and health constructs and participation in adults with severe mental illness. *Rehabilitation Research, Policy, and Education*, 30(3), 286-304.
- Sartorius, N. (2002). Iatrogenic stigma of mental illness. *British Medical Journal*, 324, 1470-1471.
- Saunders, J. L., Barros-Bailey, M., Chapman, C., & Nunez, P. (2009). Rehabilitation counselor certification moving forward. *Rehabilitation Counseling Bulletin*, 52(2), 77-84.
- Schiele, B. E., Weist, M. D., Youngstrom, E. A., Stephan, S. H., & Lever, N. A. (2014). Counseling self-efficacy, quality of services and knowledge of evidence-based practices in school mental health. *Professional Counselor*, 4(5), 467-480.
- Schrank, B., & Slade, M. (2007). Recovery in psychiatry. *Psychiatric Bulletin*, 31(9), 321-325.
- Schulze, B. (2007). Stigma and mental health professionals: A review of the evidence on an intricate relationship. *International Review of Psychiatry*, 19(2), 137-155.

- Schwartz, G. L. (2016). *The relationship of supervision variables to counseling self-efficacy and outcome expectations among practicing psychologists* (Doctoral dissertation). Andrews University, Berrien Springs, Michigan.
- Schwarzer, R., & Weiner, B. (1991). Stigma controllability and coping as predictors of emotions and social support. *Journal of Social and Personal Relationships*, 8, 133-140.
- Shultz, K. S., & Chaves, D. V. (1994). The reliability and factor structure of a social desirability scale in English and in Spanish. *Educational and Psychological Measurement*, 54(4), 935-940.
- Simon, W. E. (1973). Age, sex, and title of therapist as determinants of patients' preferences. *Journal of Psychology*, 83, 145-149.
- Sipps, G. J., Sugden, G. J., & Faiver, C. M. (1988). Counselor training level and verbal response type: Their relationship to efficacy and outcome expectations. *Journal of Counseling Psychology*, 35(4), 397-401.
- Slade, M. (2010). Mental illness and well-being: The central importance of positive psychology and recovery approaches. *BMC Health Services Research*, 10, 26-39.
- Smart, J. (2009). *Disability, society, and the individual* (2nd ed.). Austin, TX: Pro-Ed.
- Smith, A. L., & Cashwell, C. S. (2010). Stigma and mental illness: Investigating attitudes of mental health and non-mental health professionals and trainees. *Journal of Humanistic Counseling, Education, and Development*, 49, 189-202.
- Smith, A. L., & Cashwell, C. S. (2011). Social distance and mental illness: Attitudes among mental health and non-mental health professionals and trainees. *The Professional Counselor: Research and Practice*, 1(1), 13-20.
- Smith, D. (1974). Preferences of university students for counselors and counseling settings. *Journal of College Student Personnel*, 15(1), 53-57.
- Snyder, C. R. (1995). Conceptualizing, measuring, and nurturing hope. *Journal of Counseling and Development*, 73, 355-360.
- Sowers, W. (2005). Transforming systems of care: The American association of community psychiatrists guidelines for recovery oriented services. *Community Mental Health Journal*, 41, 757-774.
- Spears, W. H. (2014). *Testing counselor trainees' self-efficacy for identifying behavioral indicators of the working alliance in family therapy: Can self-efficacy be induced through feedback?* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI No. 3629610)
- Stoltenberg, C. D. (1998). An examination of self-efficacy in master's level counselor trainee. The social cognitive and developmental model of counselor training. *The Counseling Psychologist*, 26, 317-324.

- Strauser, D. R., Ciftci, A., & O'Sullivan, D. (2009). Using attribution theory to examine community rehabilitation provider stigma. *International Journal of Rehabilitation Research*, 32(1), 41-47.
- Strauser, D. R., Lustig, D. C., & Donnell, C. (2004). The relationship between working alliance and therapeutic outcomes for individuals with mild mental retardation. *Rehabilitation Counseling Bulletin*, 47(4), 215-223.
- Stull, L. G., McGrew, J. H., Salyers, M. P., & Ashburn-Nardo, L. (2013). Implicit and explicit stigma of mental illness: Attitudes in an evidence-based practice. *Journal of Nervous and Mental Disease*, 201(12), 1072-1079.
- Substance Abuse and Mental Health Services Administration. (2010). *SAMHSA's working definition of recovery: 10 guiding principles of recovery*. Retrieved from <http://store.samhsa.gov/shin/content/PEP12-RECDEF/PEP12-RECDEF.pdf>
- Substance Abuse and Mental Health Services Administration. (2014). *Substance use and mental health estimates from the 2013 national survey on drug use and health: Overview of findings*. Retrieved from <https://store.samhsa.gov/shin/content/NSDUH14-0904/NSDUH14-0904.pdf>
- Tang, M., Addison, K. D., LaSure-Bryant, D., & Norman, R. (2004). Factors that influence self-efficacy of counseling students: An exploratory study. *Counselor Education and Supervision*, 44(1), 70-80.
- Thomas, C. M., Curtis, R. S., & Shippen, M. E. (2011). Counselors', rehabilitation providers', and teachers' perceptions of mental and physical disabilities. *Journal of Counseling and Development*, 89(2), 182-189.
- Tipper, R., Mountain, D., Lorimer, S., & McIntosh, A. (2006). Support workers' attitudes to mental illness: Implications for reducing stigma. *The Psychiatrist*, 30(5), 179-181.
- Tracey, T. J., & Kokotovic, A. M. (1989). Factor structure of the working alliance inventory. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 1(3), 207-210.
- Urbani, S., Smith, M. R., Maddux, C. D., Smaby, M. H., Torres-Rivera, E., & Crews, J. (2002). Skills-based training and counseling self-efficacy. *Counselor Education and Supervision*, 42(2), 92-106.
- Van Dorn, R. A., Swanson, J. W., Elbogen, E. B., & Swartz, M. S. (2005). A comparison of stigmatizing attitudes toward persons with schizophrenia in four stakeholder groups: Perceived likelihood of violence and desire for social distance. *Psychiatry*, 68(2), 152-163.
- Wahl, O., & Aroesty-Cohen, E. (2010). Attitudes of mental health professionals about mental illness: a review of the recent literature. *Journal of Community Psychology*, 38, 49-62.
- Wampold, B. E. (2001). *The great psychotherapy debate: Models, methods and findings*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.



- Wassel, A. K. (2014). *Internet-based contact programs to fight the stigma of schizophrenia* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI No. 3662334)
- Watson, A. C., Corrigan, P., Larson, J. E., & Sells, M. (2007). Self-stigma in people with mental illness. *Schizophrenia Bulletin*, 33(6), 1312-1318.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4), 548-573.
- Williams, K. E., & Bond, M. J. (2002). The role of self-efficacy, outcome expectancies and social support in the self-care behaviors of diabetes. *Psychology, Health & Medicine*, 7, 127-141.
- Wise, J. B. (2002). Social cognitive theory: A framework for therapeutic recreation practice. *Therapeutic Recreation Journal*, 36(4), 335-351.
- Wong, D. W., Chan, F., Cardoso, E., Lam, C. S., & Miller, S. (2004). Rehabilitation counseling students' attitudes toward people with disabilities in three social contexts: A conjoint analysis. *Rehabilitation Counseling Bulletin*, 47, 194-204.
- Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2), 79-94.
- Young, S. L., & Ensing, D. S. (1999). Exploring recovery from the perspective of people with psychiatric disabilities. *Psychiatric Rehabilitation Journal*, 22(3), 219-231.