MOTIVATIONAL COMPETENCE: AN EXPLORATION OF CLINICAL PERCEPTIONS AND BEHAVIORS TOWARDS THE 'UNMOTIVATED' OR AMBIVALENT CONSUMER

by

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DEDICATION

To my father, Jack B. Hunter, a fellow UW-Madison Badger, who served as my intellectual champion and positive role model in how to live and thrive with a disability; to all rehabilitation counselors who work tirelessly in coming alongside and lifting up people with disabilities everyday; and to God, who lifted me up every day by giving me the inspiration, courage, and grace in accomplishing this goal.

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ABSTRACT

The primary purpose of this study was to employ a Motivational Competency Model (MCM) based upon Sue's (1992) theory of Multicultural Counseling Competency (MCC) to further understand the attitudes/beliefs, knowledge, perceptions, and skills/behaviors of Certified Rehabilitation Counselors (CRCs) as related to judgments regarding consumer motivation and how these perceptions affect subsequent decisions related to service delivery. This study was based on the fundamental assumption that perception of motivation is an essential construct in achieving successful rehabilitation outcomes and is directly influenced by factors related to patterns of human behavior that include both individual and relational beliefs, values, and behaviors of a community, group, or society. Essentially, this study examined how rehabilitation counselors evaluate a hypothetical client in terms of several components of perception and behavior that might be vulnerable to stigma and discrimination in formulating judgments regarding consumer potential for services and employment.

The study is believed to be the first to implement a theory-driven model to examine the perceptions of rehabilitation counselors related to aspects of consumer motivation and how these perceptions may affect decisions related to service delivery. Implications of Motivational Competence are outlined, as well as those variables that are independently associated with negating consumer motivation. Because "motivation' in itself has been a robust, yet illusive construct to define, measure, and operationalize, the Motivational Competency Model (MCM) proposed in this study may provide an evidence-based conceptualization to instigate the integration of client/counselor factors related to motivation to inform future research, theories, and practices towards improving client outcomes.

CHAPTER ONE

Introduction

Motivation has been identified as an essential client characteristic in achieving successful rehabilitation outcomes (Jensen, Nielson, & Kerns, 2003; Fraser, Vandergoot, Thomas, & Wagner, 2004; Patterson, 2000; Roessler, 1989; Rogers, 1980; Salomone, 1972). In fact, 58% of surveyed Vocational Rehabilitation (VR) counselors rated motivation as the most important client factor leading to successful employment outcomes over any other variable (Hayward & Schmidt-Davis, 2005). Conversely, motivational problems are largely recognized as *the* primary barrier to successful outcomes (Thoreson, Smits, Butler &Wright, 1968). Recent vocational rehabilitation research has demonstrated consistently moderate percentages of overall successful closure rates (56%), and 44% are thus closed without a successful employment outcome after being found eligible for services and/or receiving services (Rogers, Embree, Masoudi, Huber, Ford, & Moore, 2011). Moreover, further analysis of Rehabilitation Service Program (RSA 911) data implies motivational problems as the fundamental reason behind dropout rates (Hayward & Schmidt-Davis, 2005), with proportionately more consumers closed for "failure to cooperate", "unable to locate", or "refusal of services" (Mwachofi, 2008). Improving consumer engagement appears to be an important goal across rehabilitation settings due to the high prevalence and heavy impact of "unmotivated" clients.

Statement of the Problem

Billions of US citizen dollars are spent each year to increase vocational rehabilitation

consumer participation and outcomes, including Project Match, Social Security Plan for Achieving Self-Support (PASS), Independent Work-Expense Plans (IWRE), and Projects with Industry (PWI), in addition to countless other state and community interventions. Sadly, the trend of consumer disengagement in the vocational rehabilitation process persists (Fraser, Vandergoot, & Wagner, 2004). Although many factors contribute to unemployment in people with disabilities, there appears to be a large gap between their desire to return to work and participating in available services that may actually help them attain employment. Along with compensation disincentives, people with disabilities often face physical, emotional, environmental, and social obstacles that may thwart their efforts to gain employment. Despite their recognized need to work, unemployment and underemployment has been shown to perpetuate the occurrence and severity of depression and anxiety, alcohol and other drug abuse, low self-esteem, and poor quality of life (Creed & Macintyre, 2001; Dutta, Gervey, Chan, Chou, Ditchman, 2008; Jackson, 1999; Johoda, 1981; Martella & Maass, 2000; Waters & Moore, 2002).

As of 2009, the U.S. Bureau of Labor Statistics (BLS; 2009), estimated that only 18% of individuals with disabilities were employed compared to 64% of people without disabilities. This report further emphasized that only 12% of unemployed people with a disability are actively seeking work. According to Overman and Schmidt-Davis (2000), 16% of working-age people with disabilities would benefit from VR services to obtain employment. Unfortunately, VR only serves about 37% of those who may benefit from services. At the end of a three-year VR longitudinal data study, only 45% of consumers had achieved an employment outcome, while 21% had exited VR services without employment. Another 17% had not yet solidified an employment outcome but were still receiving VR services (Hayward & Schmidt-Davis, 2003).

Within the context of VR, "motivation" is often used to describe and predict consumer outcomes based upon counselors' subjective perceptions of a consumer's willingness to initiate, maintain, and accomplish the actions necessary to attain employment (Wagner & McMahon, 2004). Although rehabilitation literature indicates that treatment motivation is highly relevant in anticipating VR outcomes, researchers generally concede *motivation* to be a broad, multifaceted and fluctuating construct that is difficult to measure objectively and is prone to value judgments (Holland, Johnston, & Asama, 1993; Seiegert & Taylor, 2004; Super & Thompson, 1979). Despite its conceptual confusion, "work motivation" can be defined as a broad construct pertaining to the conditions and processes that account for the initiation, direction, persistence, intensity of effort towards one's attainment and maintenance of employment (Jensen, Nielson, & Kerns, 2003; Katzell & Thompson, 1990).

Within the United States, work is a powerful and value-laden construct that often evokes weighty stereotypical judgments fueled by causal social attributions of socioeconomic status and economic inequality. A 2012 national Pew Research Center survey found that nearly 9 out of 10 Americans (88%) report feelings of admiration towards people who get rich by working hard, while 65% of Americans presume that success is entitled by almost anyone who works hard enough. Conversely, nearly half (47%) of the 2,048 people surveyed blamed lack of motivation and effort to explain people's poverty (see Drake, 2013). Russell and Fiske (2008) note that labels such as 'lazy' and/or lacking a 'good' work ethic are more associated with low-status out-groups, than that of rich people, attributing economic position and circumstances within one's personal control. Rehabilitation literature recognizes that similar perceptions and stigma persist within vocational rehabilitation; reporting that rehabilitation counselors often perceive

motivational problems as attributed to consumer character deficits such as laziness, lack of impulse control, resistance, and indecisiveness (Berglind & Gerner, 2002; Strohmer et al., 1995).

Further research reveals that motivation is significantly influenced by how the clinician chooses to perceive and interact with the consumer (Friedberg, 1996; Jensen, 2003; Miller & Rollnick, 2013; Prochaska, Rossi, & Wicox, 1991). Miller and Rollnick's on-going work to delineate client/counselor influences on treatment engagement (1991, 2013) has revealed motivation to be a byproduct of quality of the therapeutic alliance and that low client motivation can be thought of as a clinician deficit rather than a client inherent deficit (Miller & Rollnick, 1991; Pruett, Swett, Chan, Rosenthal, & Lee, 2008).

A growing body of research has explored the complex relationship involved in clinical judgment and decision-making within the rehabilitation counseling process (Dividio & Fiske; Rosenthal, 2004, Sharf & Bishop, 1979; Wagner & McMahon, 2004). Evidence suggests that common stereotypes and biases related to motivation influence clinical perceptions and behaviors and are linked to more unfavorable clinical judgments and to poorer outcomes (Salomone, 1972; Strohmer & Leierer (2000). Rehabilitation professionals may be especially vulnerable to making subjective evaluations of consumer motivation at the time of intake—which has been shown to significantly influence clinical judgments and behaviors with consumers (Drieschner, Lammers, & van der Staak, 2002; MacLean & Pound, 2000). In particular, counselors' feelings toward consumers appear to be significantly related to counselor perceptions of the consumer's levels of motivation, realism of consumer-stated vocational goals, and consumer physical appearance (Sharf & Bishop, 1979).

Research in social cognition has developed systematic ways of understanding the beliefs and actions associated with discrimination and prejudice at both the group and individual levels.

Fiske and associates' (2007) Stereotype Content Model (SCM) has firmly established that people tend to universally differentiate each other through perceptions of the 'other(s)' degree of *warmth* (likeability, trustworthiness) and *competence* (capability, respectability). In fact, the basic dimensions of warmth and competence and have been shown to account for over 82% of the variance in perceptions of everyday social behaviors (Wojciszke, Bazinska, & Jaworski, 1998). The SCM (2002; 2007) explains that the *warmth* dimension captures traits that are related to perceived degrees of intent, including friendliness (unfriendly), helpfulness (unhelpful), sincerity (insincere), trustworthiness (untrustworthy), and morality (immorality), whereas the *competence* dimension reflects traits that are related to degrees of perceived ability (or inability), including intelligence, skill, creativity, and efficacy.

The SCM has identified the current 'in-group' populations to include: middle-class people, Christians, heterosexual people, and US citizens. Members of these identified in-groups were viewed to be both warm and competent, while raters also endorsed feelings of pride and admiration toward them. Conversely, 'out-group' populations included poor white people, poor black people, Latinos, the elderly, people with disabilities, welfare recipients, homeless people, drug addicts, , and undocumented immigrants. Out-group members were rated as lacking either warmth or competence or both. Moreover, raters reported experiencing more negative feelings toward out-groups, that range from pity to disgust (Cuddy et al., 2007; Fiske, Xu, Cuddy, & Glick, 1999; Fiske, Cuddy, Glick, & Xu 2002). These finding are important to the present study as the SCM also posits that, when individuals within an intergroup have a position of power (i.e., medical doctors, nurses, mental health practitioners, VR counselors) and come into contact with 'out-group' members (i.e., people with chronic illness and disabilities), it can trigger stereotype-charged emotions that predict distinct behaviors which are considered active, passive,

facilitative, and harmful (Cuddy, Fiske, and Glick 2008). Sentiment in other research studies show that people universally tend to endorse working people (as measured by economic success and job prestige) with higher social status and regard them as more competent, while ranking people who are either unemployed or have lower-paying jobs as having lower social status and as less competent (Cuddy et al., 2009; Fiske et al., 2002; Kervyn, Fiske, Yzerbyt, 2013).

Prejudice is generally characterized as conscious and/or unconscious animosity toward another person or social group. Researchers have commonly viewed prejudice simply as dislike (low warmth and/or low competence) of an individual, primarily because of his or her perceived membership in a social group (Fiske, 2012). These dimensions are especially important to rehabilitation psychology and the stigma associated with people with disabilities. Specifically, this model emphasizes the ambivalent nature of the majority of societal stereotypes, which combine both hostile and favorable beliefs and behaviors simultaneously toward the same target group (both positive and negative), which can often result in harmful benevolent justifications for discrimination. For example, results of this research found that, although the general public view people with disabilities as 'warm' and 'likable', they also perceive them as lacking competence, and often feel sorry for them (pity). However, feelings of 'pity' were replaced by feelings of 'hostile contempt' if the person with the disability was perceived as having caused their disability or neglected to follow prescribed treatment (Corrigan, 2004; Wu, Ames, & Fiske, in-press). Persistent stereotypes associated with psychopathology are also shown to influence perceptions of consumer motivation, resulting in clinical underestimates or overestimates of the existence and severity of different types of pathology (Dovidio, & Fiske, 2012; Hayward and Schmidt-Davis, 2005; Lopez, 1989; Moyers & Miller, 1993, Shih, Pittinsky, & Ambady, 1999; Mwachofi, 2008).

There is little doubt that clinicians across various mental health and rehabilitation specialties are often frustrated by clients who are resistant to adaptive behavior change (Carpenter, Alberg, Gray & Saladin, 2010). "Motivating the unmotivated" can be a significant challenge for providers across social service disciplines, which can often lead to low work-satisfaction, empathy-fatigue, and burn-out (Day & Chambers, 1991; Hidi & Harackiewicz, 2000; Moyers & Miller, 2012; Stennicki, 2000). Clinicians may be unaware of or feel justified in their own negative bias towards the unmotivated (Jost & Banaji, 1994). Well-intentioned individuals, may also be fully aware of their personally held prejudices and stereotypes about members of out-groups, which can serve as the justification to behave in unfair, discriminatory ways (Cuddy, Glick, & Beninger, 2011; Katz & Hoyt, 2014). In fact, research has shown that practitioners can hold genuine egalitarian values and view themselves as low in prejudice yet, at an unconscious and involuntary level, can demonstrate harmful prejudicial attitudes and behaviors (Devine, 1989; Dovidio & Gaertner, 2004). Consequently, consumers deemed as 'unmotivated' by rehabilitation counselors may also be perceived as less likely to respond favorably to resource allocation and service provision. Thus, counselor perceptions related to expectations of 'unmotivated' consumers' may better explain findings behind lower acceptance rates and higher percentages of unsuccessful closures associated with certain consumer characteristics noted throughout the literature (Hayward & Schmidt-Davis, 2005; Manthey, Jackson, & Evans-Brown, 2011;Wagner & McMahon, 2004).

The profession of rehabilitation counseling is a discipline designed to assist persons with disabilities to fully participate in all aspects of meaningful life activities, especially work (Phillips, 2011; Szymanski, 1985). As the primary gatekeepers, rehabilitation counselors are responsible for successfully managing and executing key functions of the rehabilitation process,

which means actively facilitating consumer engagement and movement through the VR service plan, whether consumers present as motivated or not (Brodwin & Orange, 2002; Fraser et al., 2004; Wagner & McMahon, 2004). VR counselors must oftentimes weigh motivational issues in relation to the perceived benefits of a given service (Rubin & Roessler, 2001). It is during this cost-benefit analysis that motivational discrimination can emerge given limited counselor awareness, knowledge, and skill as to how to influence motivation when working with unmotivated or difficult consumers.

At the same time, VR counselors are typically under significant time and resource pressures to meet federally-mandated service delivery expectations and quotas (Lane, Shaw, Young, and Bourgeois, 2012). Hayward & Schmidt-Davis (2005) report that, on average, VR counselors' typical caseloads consist of approximately 112 consumers at one time. Thus, it is not surprising that only 22 percent of counselors report having sufficient time to spend with each consumer throughout his or her VR experience, given the size and disability-related complexities of their caseloads. As a result, VR counselors may need to make rapid estimations as to where and to whom their limited time and resources would best be spent. Unfortunately, in efforts to be more efficient, these estimations often result in counselors formulating negative bias towards "unmotivated" clients, which may contribute to biased clinical judgments that restrict consumer access to employment services and placement opportunities (Fleming, Del Valle, Muwoong, & Leahy, 2013; Fraser et al., 2004; Wagner & McMahon, 2004).

Because of time and resource constraints, many counselors have been shown to have difficulty recognizing and strategically responding to known aspects of motivation embedded within consumers' initial presentation and/or expressed desire, ability, reasons, and need for change (Miller & Rollnick; 2004), which may inadvertently mask and/or thwart consumers'

potential in receiving services to attain employment (Ackerman & Hilsenroth, 2001; Meier, Barrowclough, & Donmall, 2005; Miller & Rollnick, 2013; Norcross & Wampold, 2011; Saarnio, 2002); Resko, Walton, Chermack, Blow, & Cunningham, 2012; Vader, Walters, Prabhu, Houck, & Field, 2010). Consequently, the overall evaluations of unmotivated consumers tend to be more negative and have been linked to the perpetuation of client ambivalence and/or resistance in service participation (Amrhein, Miller, Yahne, Palmer, & Fulcher, 2003; Hausmann, Jeong, Bost, & Ibrahim, 2008).

Motivation is strongly influenced by how the clinician chooses to perceive and interact with the consumer (Friedberg, 1996; Jensen, 2003; Miller & Rollnick, 2013; Prochaska, Rossi, & Wicox, 1991). Miller and Rollnick's on-going work to delineate client/counselor influences on treatment engagement (1991, 2013) has revealed motivation as a byproduct of quality therapeutic alliance, and maintains that low client motivation can be thought of as a clinician deficit, rather than a client deficit (Miller & Rollnick, 1991). One evidence-based practice that has growing empirical support towards fostering and sustaining client motivation is Motivational Interviewing (MI). MI is a brief, client-centered, and directive counseling approach that enhances intrinsic motivation to engage and maintain positive behavior change. Research shows that MI is effective in facilitating behavior change toward vocational readiness as well as maintaining employment across a variety of disability groups (Johnson, Bamer, & Fraser, 2008; Hollar & McAweeney, 2008; Muscat, 2005).

Practitioners proficient in MI have been shown to facilitate client engagement by attuning to and strategically responding to clients' own expressions of readiness (i.e., desire, ability, reasons, and need for change) (Miller & Rollnick, 2012). Additionally, MI is inherently culturally sensitive, in that counselors largely avoid giving unwanted advice and ask clients to

weigh the pros and cons of behavior change in light of their own goals and values, which may be influenced by their culture and/or disability (Añez, Silva, Paris, & Bedregal, 2008; Bombardier, Ehde, & Gibbons, 2013; Hettema, Steele, & Miller 2005; Imel, Baer, Martino, Ball, & Carroll, 2011).

Often, clients seeking rehabilitation services may appear ambivalent or "stuck" between wanting services and doing what is necessary to obtain desired goals. In spite of its appearance, ambivalence is considered a normal part of the change process (Miller & Rollnick, 2002). For these reasons it is essential for rehabilitation professionals to gain awareness of their own internal biases associated with client motivation, as well as developing their ability to recognize, understand, and foster motivational opportunities with consumers throughout the rehabilitation process. The fundamental "spirit" of MI emphasizes a particular "way of being with people" (Miller & Rollnick, 2002), which promotes an overall sense of collaboration, evocation, and honoring of client autonomy. Unfortunately, in the absence of counselor awareness and knowledge concerning motivational processes, and of evidence-based techniques specifically shown to enhance motivation, many consumers who might otherwise benefit from VR services may not be afforded the opportunity (Jensen et al., 2003).

Although previous research has shown that negative attitudes toward people with disabilities unduly restrict service options or alternatives formulated by professionals (Paris, 1993), to date very few studies have assessed the extent to which rehabilitation counselors' perception of 'unmotivated clients' may impact service delivery and outcomes. Even fewer studies have been conducted to test the potential impact that counselor perceptions may have on their therapeutic behavior, which may in turn influence consumer motivation. Thus, it is highly relevant and justified to broaden the fields' contemporary conceptualization and response style

when working with consumers who struggle with motivation in the prospect of improving rehabilitation service delivery and outcomes.

Assumptions and Theoretical Framework

The literature indicates that motivational issues may serve as significant contributors to the unemployment and underemployment of people with disabilities. However, efforts to understand the complex interaction between internal (personal) and external (contextual/environmental/service) factors that are known to foster consumer motivation continue to be underexplored. Clearly, motivational challenges facing people with disabilities cannot be attributed to individual consumer related factors alone, thus a new approach to conceptualizing the dynamics of Motivational Competency in order to improve employment interventions and outcomes seems very much warranted.

The Multicultural Counseling Competence (MCC) model (Sue & Sue, 1990) is one such model that has gained wide acceptance among researchers, educators, and counseling practitioners across rehabilitation and psychology disciplines. The MCC is a theoretically driven framework used to understand and facilitate effective service delivery with diverse cultural and ethnic populations (e.g., racial, ethnic, gender, social class, sexual orientation), which can also include persons with disabilities (Rubin, Pusch, Fogarty, & McGinn, 1995; Sue, Arredondo, & McDavis, 1992; Sue et al., 1998).

The MCC framework provides an integrative and interactive framework that conceptualizes the therapeutic effects related to three primary counseling components: (a) awareness of attitudes/beliefs, (b) knowledge, and (c) skill-behavior in working with culturally

diverse clients. Specifically, the MCC framework's emphasis in the development of practitioner awareness, knowledge, and skill has been shown to be influential in improving rehabilitation outcomes and client satisfaction across rehabilitation and counseling settings (Dovidio & Fiske, 2012; Pedersen et al., 2002). For example, applications of the MCC have demonstrated improved practitioner sensitivity, judgment, and service delivery in common medical practice. Specifically, specialized training in MCC that involved improved personal awareness, knowledge, and skill was found to enhance decision making in medical personnel when serving patients with divergent worldviews from their own and while simultaneously experiencing activated biases during routine practice (Dasgupta & Rivera, 2006; Rudman, Ashmore, & Gary, 2001). This is especially important when considering the human propensity to experience bias associated with motivation, as it is known to be a value-laden construct that that is strongly influenced by how the clinician chooses to interact with the consumer (Cuddy, Fiske, & Glick, 2008; Cuddy, Glick, Beninger, 2011; Friedberg, 1996; Jensen, 2003; Lichner, 2002;Miller & Rollnick, 2013; Prochaska, Rossi, & Wicox, 1991). Additionally, staff emotional reactions are related to either exacerbation or diffusion of challenging client behaviors (Hastings, 2005; Willems, Embregts, Stams, & Moonen, 2010) depending on the staffs' degree of awareness and access to adaptive coping strategies when confronted with challenging behavior (Mitchell & Hastings, 2001; Noone & Hastings, 2009).

The MCC has been chosen as the primary model of this study for two reasons; (1) constructs within the MCC (i.e., awareness, knowledge, and skill) have demonstrated strong interaction effects relative to client outcomes (i.e., attrition, satisfaction, and compliance; Bellini, 2003; Constantine, 2000) and (2) because of MCC emphasis on the on-going development of practitioner competencies that respect, honor, and advance diverse and disparaged populations,

rather than judging and dismissing them (Constantine, 2007). Additionally, practitioner proficiency in multicultural competency across rehabilitation disciplines is thought to mediate the health disparities common to issues of inclusion and community participation across cultures, thus increasing the empirical basis for rehabilitation counseling practice (Chan, Keegan, et al., 2009; Chan, Sasson, et al., 2009; Peterson & Rosenthal, 2005; Rosenthal, 2004).

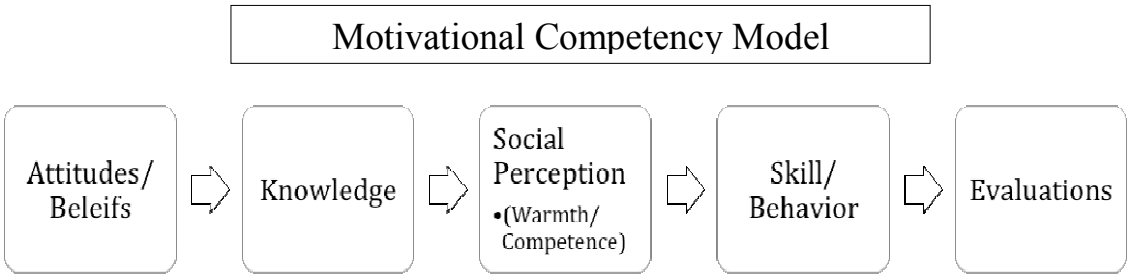

Figure 1.1 The Framework of the Motivational Competency Model adapted from Sue & Sue, 1990).

Literature indicates that the persistent unemployment and underemployment of people with disabilities with motivational issues cannot be reduced to a single personal factor/trait (i.e., historical or etiological), but rather is influenced by a set of therapeutic factors (i.e., awareness, knowledge, and skill), interacting with each other in a complex manner (Miller, 1983; Magil, Apodaca, Barnett, & Monti, 2010). Applications of empirical models, such as the MCC, can also be used to develop systematic research agendas to develop and validate evidence-based practices to enhance vocational rehabilitation outcomes (Chan, Tarvydas, Blalock, Strauser, & Atkins, 2009; Fleming et al., 2013). Because the MCC model emphasizes the effects of relational factors, it appears to therefore be ideally suited for use by rehabilitation counselors as part of a vocational rehabilitation competency framework to conceptualize their own roles in influencing consumer engagement and related outcomes.

Significance of This Study

This study is significant and unique in a number of respects. First, and foremost, this study is the first to adapt Sue's Multicultural Counseling Competency (MCC) model to operationalize a similar framework to address clinical competence in facilitating motivation in people with disabilities. The variables that distinguish motivational competence are identified, as well as those variables that are independently associated with negating consumer motivation. Additionally, clinical perception has been shown to be susceptible to stereotypes and bias early in the rehabilitation process, when only limited client information is available (Dovidio, & Fiske, 2012). Moreover, research indicates that clinical perceptions of the presence or absence of motivation are associated with clinical judgments of consumer service potential, with proportionately more consumers closed for reasons of failure to cooperate and/or locate (Hayward & Schmidt-Davis, 2005; Mwachofi, 2008).

Research further shows initial clinical impressions are resistant to change (Mohr, Israel, & Sedlacek, 2001), and that biased impressions persist throughout service delivery, even in the face of contradictory information (Rosenthal, 2004; Sharf & Bishop, 1979). More importantly, rehabilitation counselors have been found more attuned to negative client factors (e.g., disagreeableness and incompetence) that are concurrent with more unfavorable evaluations of client status and rehabilitation outcomes, even when presented with more positive client factors (Strohmer & Leierer, 2000). While current studies advance researchers' knowledge of intervention factors affecting employment among people with disabilities, a significant deficit remains in terms of a thorough understanding of the complex factors of client motivation and the effects that VR counselors may have upon employment (Cook, 2005; Larson, 2008; Manthey, Jackson, & Evans-Brown, 2011; Wagner & McMahon, 2004). Moreover, the rehabilitation

outcome literature implies a respective link between the perceptions of motivation and service acceptance and outcomes (Salomone, 1972; Sharf & Bishop, 1979; Strohmer & Shivy, 1994. Thus, this study's rational for examining how CRC's perception of a motivation, within the context of the Motivational Competency Model appears to be highly relevant and merited.

Statement of Purpose

The primary purpose of this study is to employ a Motivational Competency Model (MCM) based upon Sue's (1992) theory of Multicultural Counseling Competency (MCC) to further understand the attitudes of rehabilitation counselors related to aspects of consumer motivation and how these perceptions effect subsequent decisions related to service delivery. This study is based on the fundamental assumption that motivation is an essential construct in achieving successful rehabilitation outcomes and is directly influenced by factors related to patterns of human behavior that include both individual and relational beliefs, values, and behaviors of a community, group, or society (Cross et al., 1989). Sue (2001) states that 'the goal of cultural competence in mental health is providing *relevant* treatment to all populations and that this end is desirable" (p. 800).

Because "motivation" in itself has been a robust, yet illusive construct to define, measure, and operationalize, the Motivational Competency Model (MCM) used in this study may provide an evidence-based conceptualization to instigate the integration of client/counselor factors related to motivation into pertinent counseling theories, techniques, and practices. MI appears to be an appropriate and much needed intervention in rehabilitation counseling. MI and VR are both goal-oriented and share the common spirit of self-determination by empowering individuals to make proactive decisions in accordance with their own given strengths, limitations, and values (Wagner & McMahon, 2004). Most importantly, both interventions have demonstrated positive

outcomes in serving some of the most diverse, marginalized, and complex client groups, including addictions, minorities, and people with disabilities (Bombardier, 2008; Hayward & Scmidt-Davis, 2005; Hettema, Steele, & Miller, 2005; Burke, Dunn, & Atkins, 2004). Thus, the specific intent of the proposed MCM may offer VR consumers, who struggle with motivational issues, more effective service delivery that is most relevant to meeting their unique needs to succeed. To date, the conceptual framework of (MCC) has not yet been applied to evaluate clinical competencies to enhance client motivation in rehabilitation. However, the proposed MCM framework does emphasize the development of practitioner awareness of attitudes and beliefs, knowledge, perceptions, and skill, which has been evident in significantly improving rehabilitation outcomes and client satisfaction across rehabilitation and counseling settings (Dovidio & Fiske, 2012; Pedersen et al., 2002). As with Sue's MCC theory, this is a preliminary study that examines *awareness*, *knowledge*, perception, and *skill* of rehabilitation counselors when working with diverse client groups that present with amotivational characteristics.

The goal of this study is to determine how practicing rehabilitation counselors evaluate a hypothetical client in terms of several components of perceptions that might be vulnerable to stigma and discrimination toward consumers' potential for services and employment, and how these perceptions may affect counselors' response style and service related decisions. This is a theory-driven model that is predominantly based on Sue's (1992) theory of Multicultural Counseling Competency (MCC) to examine counselor perceptions related to aspects of consumer motivation and how these perceptions may affect clinical behaviors and decisions related to service delivery. This proposed model utilizes other important factors from the extant rehabilitation counseling literature, theories of social perception (i.e., Fiske's Stereotype Content Model [SCM]), attribution theory (Weiner, 1995), and the theory of Motivational Interviewing

(MI) in attempt to understand counselor' clinical formulations and counseling processes (Heider, 1958; Rahimi, Rosenthal, & Chan, 2003; Wright, 1986). The following section specifies the details on how the research was conducted and includes a discussion of the research procedures in the study, as well as the study's participant characteristics, sampling plan, measurement/instrumentation, and statistical analysis.

Research Questions

The following four research questions were addressed, using four separate hierarchical regression analyses (HRA). The first three HRAs were conducted to understand the impact of the independent variables (IVs) proposed within the MCM (i.e., *attitudes/beliefs, knowledge, perception, and skill-behavior),* upon the three DVs of counselor evaluation of a hypothetical consumer (i.e., level of motivation, potential for achieving full-time competitive employment, and level of expectancy to engage in VR services). The first three HRAs were conducted to determine how the explicit and implicit measures of attitudinal/belief, knowledge, and skill-behavior would uniquely account for the variance in participants' evaluations of the hypothetical consumer.

Since the research (Wampold, 2001) has determined that at least 70% of psychotherapeutic effects are due to common factors (e.g., working alliance, empathic listening, collaborative goal setting) counseling skills-behaviors can be considered a causal outcome mediated by the contextual factors within the proposed MCM model. The fourth HRA was conducted to determine how the unique contributions of the IV's (i.e., attitudes/beliefs, knowledge, and perceptions of warmth and competence as specified in the SCM) would account for the variance in predicting the quality of participant skill-behaviors (DV).

1. Do the MCM constructs (i.e., demographic variables, awareness of attitudes/beliefs, knowledge, skill-MITI, and social-perception of warmth and competence) predict perceptions of a hypothetical consumer's degree of *motivation* to engage in VR related services? For this research question, it was hypothesized that all contributing MCM constructs will account for a significant amount of variance related to participant evaluations of the hypothetical consumer's level of motivation.
2. Do the MCM constructs (i.e., counselor-related demographic variables, awareness of attitudes/beliefs, knowledge, skill-behavior, and social-perception of warmth and competence) predict evaluations of a hypothetical consumer's vocational potential to successfully attain full-time competitive employment? For this research question, it was hypothesized that all contributing MCM constructs will account for a significant amount of variance related to CRCs' general evaluation of the hypothetical consumer's potential to attain competitive employment.
3. Do the MCM constructs (i.e., counselor-related demographic variables, awareness of attitudes/beliefs, knowledge, skill-behavior, and social-perception of warmth and competence) predict expectations of a hypothetical consumer's behavior to engage in VR services? For this research question, it was hypothesized that all contributing MCM constructs will account for a significant amount of variance related to CRCs' expectations of the hypothetical consumer's potential to engage throughout the VR process.
4. Do the MCM constructs (i.e., counselor-related demographic variables, awareness of attitudes/beliefs, knowledge, and social-perception of warmth and competence) predict clinical skill-behavior (as measured by the MITI) towards a hypothetical consumer? For this research question, it was hypothesized that all contributing MCM constructs will

account for a significant amount of variance related to participants' clinical skill-behavior (as measured by the MITI) towards the hypothetical consumer.

CHAPTER TWO

Review of the Literature

"There is no such thing as an unmotivated client. From the counselor's perspective, learning how to help clients do what is needed for successful rehabilitation to occur is of central concern." (Daniel W. Cook, 2005)

This chapter reviews the conceptual framework and theoretical justification of the proposed Motivational Competency Model (MCM) based upon Sue's (1992) theory of multicultural competency (MCC) in relation to VR counselors' perception formation and subsequent decisions related to service delivery. The primary purpose of this study is to propose an initial version of such an overarching models as the MCM. This review is divided up into four major sections that: (1) provide a working definition of motivation and its relation to Vocational Rehabilitation; (2) review clinical perception formation within the context of service delivery and outcomes--including empirical support, challenges, and predictors; (3) draw on current research to highlight counseling competencies and personal and contextual variables that impact clinical perceptions, service delivery, and VR outcomes related to consumer motivation; and (4) provide a conceptual framework and rationale for the Motivational Competency Model (MCM) within the context of vocational rehabilitation [i.e., (a) *awareness of attitudes/beliefs;* (b) *knowledge;* (c) *skill;* and (d) *social perception*] and its potential to impact clinical evaluation as well as consumer motivation and engagement. The four major sections of this review offer a logical progression into the design of the proposed Motivational Competency Model (MCM) and its potential for enhancing VR service delivery and outcomes.

Motivation and Vocational Rehabilitation Counseling Outcomes

Rehabilitation counselors have a very complex, yet rewarding job designed to assist persons with disabilities to fully participate in the full array of meaningful life activities, especially work (Phillips, 2011; Szymanski, 1985). Quality counselor performance across the VR process is synonymous with service delivery that enable people with disabilities to attain employment through career development and planning, whether they appear motivated or not (Mullins, Roessler, Schriner, Brown, & Bellini, 1997). According to the 2009 Disability Status Report (DSR), only about 18% of working age people with disabilities are employed in comparison to approximately 64% of the US non-disabled population. Unfortunately, this same report found that only 10.8% of unemployed persons with disabilities are "actively searching" for work. Despite these statistics, 72% of unemployed adults with disabilities indicate a preference to work (Louis Harris and Associates & National Organization on Disability, 1998).

Billions of US citizen dollars are spent each year to increase vocational rehabilitation consumer participation and outcomes, including Project Match, Social Security Plan for Achieving Self-Support (PASS), Independent Work-Expense Plans (IWRE), and Projects with Industry (PWI), in addition to many other state and community interventions. Unfortunately, the phenomenon of consumer disengagement in the vocational rehabilitation process persists (Fraser, Vandergoot, & Wagner, 2004). Although many factors contribute to unemployment for people with disabilities, there is too often a significant gap between consumers' desire to return to work and the effort put forth to adequately participate in services that will help them attain employment. A consumer may feel motivated to return to work and at the same time be unmotivated to face and remediate barriers that keep them stuck in the status quo. Hence, the focus and money spent developing efficacious return-to-work programs may be in vain if

vocational rehabilitation consumers lack the motivation to engage and persist through the provision of services, let alone attain and maintain employment.

Conceptualizing Motivation

To better understand and incorporate motivation concepts into rehabilitation counseling, a thorough grounding in motivational theory is important. . Specifically understanding the definitions of the key terms underpinning motivational theory (i.e. motivation, amotivation, [finish the list of terms from below, etc.), especially with regards to how they are used within this study is crucial before proceeding. "Motivation," derived from the Latin term motivu*s,* means *"*a moving cause*,"* or the state of having a strong reason to act or accomplish something (Random House, 2010). Generally, researchers concede that motivation is a broad, multidimensional construct that is difficult to measure objectively and is prone to value judgments (Seiegert & Taylor, 2004). Eccles and Wigfield (2002) describe motivation as entailing both volition and dedication of the *will* to act in pursuit or completion of a task that is highly valued to personal outcomes. Most definitions and psychosocial theories suggests that motivation is a personal state or characteristic that is intrinsic within an individual, and is not necessarily influenced by outside factors, such as by practitioners during treatment or one's social environment (Drieschner, Lammers, & van der Staak; 2004; Hal, Meershoek, Nijhuis, & Horstman, 2013; Wagner & McMahon, 2004). Although Terborg & Miller (1978) warn that motivation cannot be measured directly, it can be inferred from observations of arousal, amplitude, persistence, and direction of behavior. In terms of work, Katzell & Thompson (1990) defined "work motivation" as a broad construct pertaining to the conditions and processes that account for the arousal, direction, magnitude, and maintenance of effort in a person's job.

Although there are some differences across these constructs, the commonalities outweigh the disparities through the connection between what one does and why one does it.

Amotivation. Amotivation can be defined as a state in which individuals cannot perceive a relationship between their own behavior and that behavior's subsequent outcome (Deci & Ryan, 1985, 2002). Amotivated individuals are perceived as having difficulty predicting the consequences of their behavior, as well as assessing the motive behind it, and are thought to feel ambivalent or detached from their actions, thus invest little effort or energy in goal execution. Such individuals are thought to perceive their behavior as outside of their control. The state of amotivation has been equated to that of learned helplessness (Abramson, Seligman, & Teasdale, 1978), which Skinner (1953) concluded, stems from operant conditioning, or learning through rewards and/or punishments for behavior.

Ambivalence. Miller and Rollnick (2013) describe 'ambivalence' as a normal part of the human condition towards change. Ambivalence is likely to occur when one experiences simultaneous competing motivations for and against change; wanting something, yet not wanting something at the same time (p. 6). For example, one may want to lose weight to look and feel healthier, but at the same time, not want to or feel like doing the 'hard' part in losing the weight (e.g., exercise regularly, eat healthier, etc.). Often, consumers seeking rehabilitation services may appear *ambivalent* or "stuck"; between wanting services, and doing what is necessary to obtain desired goals. There may be many conscious or unconscious reasons and real barriers for consumers to remain stuck in ambivalence. A 'helpers' natural instinct is to step in and actively encourage or persuade the consumer of the importance of change along with directly advising how to best going about change. Unfortunately, well-intentioned direction or advice may actually evoke consumer resistance, and even solidify opposition to change. This corresponds with

Bem's (1967) self-perception theory, that postulates human beings tend to believe and trust themselves, verses what others tell them to be true (even if part of themselves believe what the other is telling them). In spite of its appearance, ambivalence is considered a *normal* part of the change process (Miller & Rollnick, 2002). For these reasons it is essential for rehabilitation professionals to understand the underpinnings of motivation behind consumer behavior to effectively utilize therapeutic interventions, such as MI, that focus on eliciting clients' own motivation to change, rather than overtly imposing externalized reasons, warnings, and methods to change.

Motivate. "Motivate" is a verb, meaning 'to stimulate (someone's) interest in or enthusiasm for doing something' (*Merriam-Webster's Collegiate Dictionary*, 2013). As previously mentioned, cumulative research shows that client 'motivation' can be fostered or negated by counselors' therapeutic response to perceptions of client resistance or ambivalence to engage in positive behavior change (Friedberg, 1996; Prochaska, Rossi, and Wicox, 1991; Lichner, 2002; Jensen, 2003; Miller and Rollnick, 2004; MacLean and Pound, 2000). Given this definition and a review of the social-cognitive literature, motivation appears to be a revolving cognitive and behavioral process of willful action that can be influenced by relationships and shares five primary components: (a) values, (b) recognition, (c) goal choice and commitment, (d) self-efficacy (pursuit of goals), and (e), hope. Self Determination Theory (SDT) is one of the only motivational theories that emphasizes the importance and quality of support from significant others to either enhance or detract one's motivation (Deci & Ryan, 1987). Such relational supports offered can be perceived either as reinforcing and validating individual values and choice, or restrictive and contingent on complying with the values imposed by others. Ultimately, reinforcement on either end of the spectrum has been shown to significantly

influence one's quality and direction of motivation toward a goal-oriented task (Deci & Ryan, 2000). Key factors such as relatedness to others and perceived competence are central to enhancing self-determined motivation.

Subjective Assessment of Motivation

VR counselors are shown to associate negative consumer deficits (e.g., poor motivation, laziness, lacking impulse control, resistant, indecisive, etc.) to explain unfavorable treatment outcomes (Berglind & Gerner, 2002; McConnaughy, Prochaska, & Velicer, 1983; Strohmer et al., 1995). With that said, very few standardized instruments have been developed that can adequately measure motivation as a valid and reliable predictor of vocational potential (Blanchard, Morgenstern, Morgan, Labouvie, & Bux, 2003). Consumers who apply for services through the Division of Vocational Rehabilitation (DVR) are assumed to be already prepared with sufficient motivation to engage in job-seeking activities and willingness to change long-standing maladaptive behaviors that may have contributed to their unemployment. However, as stated earlier, motivation to engage in these activities can present and fluctuate throughout the return-to-work process. Depending upon the consumer's present motivational state, this fluctuation may ultimately mask his or her potential for employment. For this reason, it is understandable that rehabilitation counselors may misinterpret such initial presentations of amotivational characteristics as pathological and presume that such consumers are "not ready for services". Consciously or unconsciously, without personal awareness of one's own motivational bias and/or knowledge in which to appropriately respond to such ambivalent conflict, these quick clinical formations may ultimately restrict opportunities to enhance consumer motivation and potential to attain employment. Conversely, other, more persistent counselors may try to overtly convince their ambivalent consumer to make premature changes with a variety of logical and

very persuasive reasons why doing x, y, and z are important potentially resulting in the withholding of services if consumers do not comply with those changes. Unfortunately, such well-intentioned tactics are more likely to reinforce or strengthen consumer ambivalence or discontent to prescribed services, as cumulative clinical trials have routinely demonstrated that authoritarian and confrontational counseling styles are associated with either no change or adverse client outcomes (Moyers & Miller, 2013). Inevitably, without valid and reliable measures of motivation, vocational counselors are typically reliant on subjective judgments to determine consumer readiness to seek and maintain employment (Strohomer & Leierer, 2000). Moreover, research reveals that these negative perceptions adversely influence counselors' service decisions and willingness to actively engage with clients in building productive working-alliances (Dovidio, Penner, Albrecht, Norton, Gaertne, Shelton, 2008; Penner Albrecht, Orom, Coleman, & Underwood, 2010).

As mentioned previously motivation is typically viewed as an important concept within the field of rehabilitation, but is difficult to define, prone to value judgments, and too obscure to measure objectively (Seiegert & Taylor, 2004). More recent attention has been placed upon the construct of 'motivation' as a necessary catalyst or active ingredient necessary to attain and maintain vocational readiness (Anthony & Jansen, 1984; Cook, 2005; Larson, 2008; Manthey, Jackson, & Evans-Brown, 2011; Wagner & McMahon, 2004). With that said, very few instruments have been developed that can accurately and reliably measure motivation as a predictor of consumer potential to actively pursue and attain successful vocational outcomes. In a review of return-to-work measures, Wasiak and associates (2007) argued current measurement tools available to assess vocational readiness are inadequate in accurately conceptualizing the global relationship between engagement and successful client outcomes.

Most interestingly, this review indicates, that even though numerous research instruments have been used to assess readiness to return to work, many important dimensions necessary in the employment process (i.e., motivation, goal-setting, expectations, job-seeking, and work maintenance) lack standardized and validated instrumentation, as well as operationalization. As a result, considerable variation exists amongst outcomes, not only within the conceptual development of standardized measures that can accurately assess 'readiness' of clients to engage in VR services, but that clients' overall potential in predicting successful rehabilitation outcomes (job attainment). Additionally, in 2005 a panel of international investigators examined the complex developmental nature of return-to-work issues among people with disabilities in order to improve research and outcomes (Fraser et al, 2007). They concluded that returning to work is not merely a static state; but a multiphase process that simultaneously encompasses interactions with people and the environment through a revolving series of actions, events and transitions--all of which require motivation to persist through the process.

Objective Appraisal of Motivation

There is rich literature on motivation that includes a variety of theories trying to explain the causes of human behavior towards change. However literature dealing with motivation in the area of vocational rehabilitation is limited. The most widely recognized model representing motivation that keeps in accord with the earlier mentioned assessment recommendations, is Prochaska & DiClemente's Transtheoretical Model of Change (TTM)—also known as the stages of change model. Given the predictive utility of the stages of change model, Prochaska & DiClemente (1992) developed one of the first measures to assess client self-reported profiles or patterns that characterize readiness to change with the University of Rhode Island Change Assessment (URICA). Recognizing the significance and importance of consumer engagement

within the field of vocational rehabilitation, Mannock, Levesque, and Prochaska (2002), developed the URICA-Vocational Counseling (URICA-VC), a brief 12-item scale designed to measure three factors related to readiness for employment pertaining to job seeking behaviors: (1) *pre-contemplation*—unawareness or denial of the need to change; (2) *contemplation*—considering the costs and benefits of change; (3) *preparation*—increasing commitment and taking initial steps to change; and (4) *action*—changing behavior. The URICA-VC was field tested with 155 adults who possessed a variety of disabilities and had been referred to state vocational counseling services.

In a recent study, Gervery (2010) confirmed the clinical utility of the URICA-VC and the three-factor structure: Pre-contemplation = *Reluctant Cluster*, Contemplation = *Reflective Cluster*, and Action=*Participative Cluster* in terms of readiness for persons with psychiatric disabilities entering into vocational programs. These clusters are able to discriminate between distinct populations with differing levels of disability severity to vocational interest and involvement. The Cronbach's alpha internal consistency reliability coefficients for Pre-contemplation, Contemplation, and Action are computed to be .54, .66, and .89, respectively (Mannock, Levesque, & Prochaska, 2002). Although the URICA-VC appears to be an applicable complimentary tool to assist in the counselors' clinical judgment of consumer readiness, it has not been utilized or validated from the VR counselors' perspective in gauging consumer motivation or to identify discrepancies, if any, in perception of motivation or 'readiness' between counselors and consumers. Examining such discrepancies may prove useful in understanding the relationship between discrepancy in perception of motivation and its relationship with working alliance, outcome expectancies and actual outcomes.

Intake Judgments. Decades of research across a variety of subfields (i.e., personality psychology, social psychology, organizational psychology, and rehabilitation psychology) have found that a counselor's initial feelings towards a client are significantly related to his or her attitudes and perceptions of clients' race, relatedness (likability), degree of motivation, the realism of the clients' stated goals, and overall physical appearance (Berven, 1984; Rosenberg, Nelson & Vivekananthan, 1968; Rosenthal & Berven, 1999; Willis & Todorov, 2006). Further studies suggests that during the initial stages of treatment, counselors tend to have difficulty processing verbal and non-verbal stimuli that may comprise accurate clinical judgment that can negatively impact counseling outcomes (Strohmer & Leierer, 2000). Additionally, the weight of other perceived positive psychosocial factors such as 'agreeableness' and 'optimism' are strongly related to more favorable judgments and successful return-to-work outcomes in people with disabilities (Chapin & Kewman, 2001). Conversely, client factors deemed as more negative by counselors (e.g., laziness, lacking impulse control, resistance, and even indecisiveness) are related to more unfavorable judgments regarding client motivation and potential, and are indicative of poorer outcomes (Berglind & Gerner, 2002; Strohmer et al., 1995).

Outcome expectancy. Assessing consumer potential for related services as a function of counselors' expectations constitutes a large gap within the research literature (Worthington, Soth-McNett, & Moreno, 2007). Although most of the literature on counseling expectancies, asserts the power of consumer expectancies in influencing outcomes related to working alliance, engagement, attrition, and to the overall effectiveness of counseling (see Greenberg, Constantino, & Bruce, 2006), very few research studies have evaluated the effect of counselor outcome expectancy as a predictor of service provision and clinical behavior related to client outcomes (Katz & Hoyt, 2014). Of the few, Martin and Sterne (1975) validated the Therapist

Expectancy Inventory (TEI Factor II) that correlated therapists' outcome expectations with multiple measures of client outcome.

Within the vocational rehabilitation process, Chan and associates (2004) describe counselor expectancies as critical to the effective development of Individualized Plan for Employment (IPE) that is known to drive service provision. Chan et al 2004, further provide research driven rational in explaining low counselor expectation within the context of VR, which include: (a) perceptions of low competency in many consumers' capacity to attain meaningful employment due to the presence of cognitive impairments, inadequate work experience, or naivety regarding the VR process; (b) the pervasiveness of an organizational culture that supports the traditional, hierarchical counseling structure in which the counselor occupies the power position; (c) lack of multicultural competencies in understanding and facilitating the ethnic and cultural differences that impact the prospects for consumer participation (p. 128). Consequently, even minor discrepancies in VR counselor-consumer expectancies have been associated with lower perceptions of working alliance and lower consumer satisfaction, while higher discrepancies in counselor-consumer expectations are related to consumer dissatisfaction, and lower service-related outcomes (O'Brien, Heppner, Flores, & Bikos, 1997).

After conducting a comprehensive review of rehabilitation literature on counseling expectations and working alliance, Chan et al. (2004) developed the *Expectations About Rehabilitation Counseling Scale* (EARC) to understand the discrepancies between VR counselors and the perceptions of their clients by measuring the degree of influence bonds, goals, and tasks had on working alliance and VR outcomes. A confirmatory analysis revealed significant discrepancies between VR counselors and consumers on two counseling expectancy components, finding that on average, (a) consumers expected themselves to be more motivated

than did their counselors; and (b) consumers also expected to receive more clinical and support services than did their counselors. Results from this study reiterate the importance of understanding expectancies towards enhancing awareness and redress of harmful personal biases. Thereby attending to these biases, VR counselors may become better able to respond to the motivational needs of their consumers.

Additional studies aimed at measuring Multicultural Counseling Competencies (MCC) have revealed that therapist projected expectancies of alliance and prognosis of their clients were predictive of therapeutic outcomes (Joyce, Ogrodniczuk, Piper, & McCallum, 2003; Martin & Sterne, 1975). Unfortunately, most measures aimed at evaluating counselor expectancies within the context of MCCs have not demonstrated significant prejudice-relevant item content and reliable self-reported measures of prejudice to gauge theoretical sources of unconscious bias (Katz & Hoyt, 2014). Moreover, Greenberg et al, (2004) argues that expectancies, when more generally conceived, are likely to explain an even greater portion of the outcome variance than has been typically estimated.

Confirmatory bias. Counselor biases may hinder the valid assessment of client assets and limitations, while leading to underestimates of consumer potential. These biases can lead to disparities in eligibility determination, inadequate assessments, and ineffective service plans (Rahimi, Rosenthal, & Chan, 2003). Clinicians' perceiving clients as 'unmotivated' may stigmatize and create negative bias that may harm the therapeutic relationship and client motivation to engage in appropriate service prevision and employment. Seminal research by Strohmer and Leierer (2000) revealed that counselors are susceptible to systematic biases associated with specific client variables, such as gender, age, sexual preference, social class, and disability type. Moreover, incidences such as diagnostic overshadowing may lead counselors to

place undue weight on one salient variable while disregarding or missing other important information (Spengler, Strohmer, & Prout, 1990). As a result, counselors are susceptible to formulating negative hypotheses regarding consumers, that may actualize discrimination; seeking confirmatory information while attending to and weighting less dis-confirmatory information, even in the face of contradictory evidence (Strohmer & Shivy, 1994; Wong, Chan, & Cardoso 2004).

Over the years, research has sought to counter bias by using an objective model of information processing as a sound prescriptive for professional practice (Berven & Scofield, 1980; Strohmer & Newman, 1983). Such models suggests that in order to make objective tentative judgments about the client, counselors should first collect salient information through direct observations of the client's behavior and verbal statements, as well as through indirect information in the form of medical, psychological, and vocational evaluation reports. As the counselor proceeds in this objective fashion, he/she formulates a malleable working hypothesis, and tests it against additional observations of the client over time (Strohmer & Pellerin, 1995).

Applications of the commonalities of motivational theories and definitions present a potential evidence-based framework for developing a motivational competency model. The initial version of such a framework is proposed in order to help researchers and clinicians better understand the unique roles that (a) *awareness of attitudes/beliefs;* (b) *knowledge;* and (c) *skill* play in influencing clinical perceptions and decision making and its potential effects on consumer motivation, and to inform future research seeking to identify the common and specific factors associated with improving consumer engagement and outcomes across rehabilitation disciplines. In this article, motivation is seen as a judgment associated with a consumers'

readiness or potential to successfully achieve rehabilitation outcomes, which is most commonly made during the initial phase along the rehabilitation path.

VR Consumer Characteristics & Motivation

The traditional model of motivation often attributes unsuccessful case closures to the fault of the consumer or client (Miller, 1983; Sue, 2001; Thoreson et al. 1969). Whereas, successful case closures are typically attributed to the delivery of quality VR services (Patterson, 2000; Roessler, 1989). In 1968, Thoreson and colleagues found that nearly half (44%) of a sample of rehabilitation counselors rated 'lack of client motivation' as the central problem in counseling clients with disabilities. More alarming in this study, was the associated stigma attributed to unmotivated consumers, revealing that rehabilitation counselors rated unmotivated consumers to be less: intelligent, psychologically sound, verbal, likable, and less desirable to clients' perceived as 'motivated'. Moreover the counselors in this study rated 'unmotivated' clients as more hostile, more immature, more likely to malinger for secondary gain, and more likely to be of a lower socio-economic status (SES).

Thoreson et al (1968), thus concluded client motivation was primarily due to the clients' own feelings of hopelessness and depression due to their disability; (b) the client assuming a passive role in counseling process: (c) the client having unrealistic goals; (e) the client receiving financial aid that acts as a disincentive to rehabilitation; and (f) the client is unable to attain employment due to lack of employment demand (p. 19). Similar research during this time, specified that clients are more likely to be labeled as "unmotivated" when they refuse to follow prescribed tasks; try a task, but give up quickly; keep trying, but fail to learn; lack insight; and do not accept professional definitions and solutions (Safilios-Rothschhild, 1970). Other research linking more unfavorable clinical judgments to poorer outcomes (Salomone, 1972) with the

propensity of counselors to mislabel clients as “unmotivated” when their goals did not match with the goals counselors had in mind for their clients (Gaines, 1975; Lane & Barry, 1970).

These early findings thrust research towards reconceptualizing the role and functions of rehabilitation counselors that would ultimately incorporate supportive methods that honored VR consumers’ autonomy and choice. This evolution was the first attempt in VR history to facilitate a mutually beneficial and egalitarian partnership rather than to force or even coerce people into making decision that would take away their inherent right to choose (Lane & Barry, 1970; Wagner & McMahon, 2004). More recent research has identified contextual consumer variables associated with their uncertainty and despondent expectations about outcome, suggesting that some consumers may be apprehensive about the risks involved in entering a new employment territory, thus appearing amotivated (Deitchman & McHargue, 1973). Wright (1980) noted that in weighing the perceived costs and benefits related to the attainment of a stated goal, consumers may often prefer the security of the status quo; especially if one lacks confidence (i.e., self-efficacy) in their ability to execute the related tasks. Similar concepts recognizing the importance of addressing client ambivalence to improve rehabilitation outcomes has since been empirically substantiated throughout disability research. (Bombardier, Ehde, Wadhwani, Gibbons, LaRotunda, Hunter, Madrone, Wight, Sullivan, & Kraft, 2008; Colby, Nargiso, O'Leary, Barnett, Metrik, Lewander, Woolard, & Rosenhow, 2012; Hunter, Johnson, & Fraser, 2007).

In one of the largest vocational rehabilitation longitudinal inter-agency studies conducted to date, Hayward & Schmidt-Davis (2005) found that 85% of over 8,000 rehabilitation counselors surveyed, rated ‘level of motivation’ as an important client factor leading to successful outcomes. More significantly, over 58% of VR counselors rated motivation as the *most important* client factor leading to successful employment outcomes over any other variable,

including, work habits (7.8%), work history (9.6%), emotional stability (7.6%), occupational skills2 (2%), work tolerance (1.4%), extent of family support (0.8%), personal and social history (1.5%), significance of disability (1.4%), educational level (2.1%), intellectual capability (13.7%), type of disability (2.7%), social economic status (0.4%), and gender (0.0) . In fact, other commonly cited factors seen in the literature towards solidifying successful rehabilitation outcomes (e.g., type of disability, socioeconomic status, and intellectual capacity) were viewed as less important than perceptions of consumers' level of motivation to achieve an employment outcome.

Other consumer factors. Consumer factors are associated with initial receipt of services and successful outcomes. Hayward & Schmidt-Davis's (2003) report also analyzed aggregate consumer-related factors associated with VR eligibility determination and outcomes. Their findings revealed several consumer factors (i.e., disability type, receiving financial assistance, level of physical/psychosocial functioning [gross-motor function/self-esteem], educational status, work history, career knowledge & motivation, and demographic characteristics associated with the likelihood receiving VR services and successful employment outcomes.

Disability. The type of disability and significance of functional limitation was an important factor, as nearly two-thirds of applicants determined not eligible for services were noted as having significant disabilities. On-set of disability also proved to be a factor. Higher rates of eligibility were given to people with a congenital on-set (28%), verses acquired disability (16%). People with orthopedic disabilities, also had the highest rates of successful employment outcomes (26.1%) verses, other disabilities (i.e., mental illness (17.3); intellectual/cognitive; hearing (11.3); visual (8.6%); learning (7%); substance use (5.9%); with traumatic brain injury (TBI) having the lowest employment rate at (1.2%) (Hayward & Schmidt-Davis, 2003).

*Financial Assistance***.** Hayward & Schmidt-Davis's (2003) review also found that of applicants who reported receiving some form of financial government or family assistance, higher eligibility rates were found in applicants reporting their own earnings as their primary source of support, than applicants who were predominantly dependent on government or family subsidies. Additionally, fewer consumers achieved a competitive employment outcome if they were receiving financial assistance (SSI/SSDI and/or family/friends) at the time of application (39%), then consumers who were not receiving financial subsidies (62%).

Educational and Work Status. Educational status was also a contributing factor pertaining to eligibility determination, as more applicants (31%) were found to be ineligible for services if they failed to graduate from high school or equivalent credential (i.e., General Education Development GED) than applicants found eligible for services (25%). Furthermore, employment history appears to be a significant factor in determining eligibility for services and achieving successful employment outcomes. Proportionally more consumers were found eligible for services and achieved competitive employment outcomes if they had been working at the time of application to VR (36.5% versus 21.6% respectively). Similarly, transparency regarding current and past employment status at the time of application appears to be an important factor contributing to VR eligibility and successful closure rates, with higher eligibility and successful closure rates related to persons who were already working at the time of application, and who had demonstrated evidence of an extended employment history.

Psychosocial Characteristics. As mentioned earlier, counselor's perception of consumers'' level of self-efficacy (i.e., self-esteem/self-confidence) played a significant role in both determining eligibility of VR services and employment outcomes. In order to study psychosocial characteristics, Hayward & Schmidt-Davis's (2003) developed composite measures

that gauged perceptions of self-esteem, self-efficacy, and beliefs that events are controlled by powerful others. Specifically, Hayward and Schmidt-Davison (2003) found significantly higher rates of VR applicants were found to be ineligible for VR services, if they were rated as having lower self-esteem as well as poorer locus of control beliefs (i.e., stronger beliefs that events were controlled by powerful others) by VR counselors at the time of intake. Conversely consumers perceived with higher self-esteem had higher incidences of achieving a successful employment outcome, than consumers perceived with a lower self-esteem.

Career-Related Interests and Motivation. As mentioned within the previous section, VR counselors rated motivation as the most important client factor leading to successful employment outcomes over any other variable (Hayward & Schmidt-Davis (2005). At the same time, most VR agencies do not report using a standardized method in which to measure client motivation. In order to assess consumer motivation to receive VR services, Hayward & Schmidt-Davis (2003) rated consumers expressed reasons and interest for seeking services at the time of in-take. Results indicated consumers' applicants who were perceived by rehabilitation counselors at the time of intake to be more knowledgeable regarding specific jobs in which they were interested in and whom appeared to posses higher resourcefulness in their abilities to gather employment-related information were rated with higher motivational scores and were more likely to be found eligible for VR services than applicants with lower perceived career development awareness and skill. Furthermore, consumer-expressed desire to obtain medical treatment as a motive for applying for services reduced the odds of obtaining competitive employment.

Race. In the same study (Hayward & Schmidt-Davis, 2003), more applicants were found eligible if they were White/Caucasian. Additionally, white consumers had higher overall rates of achieving employment outcomes than did consumers that were African-American or any other

race/ethnicity. This is a common phenomenon throughout the rehabilitation literature (Rosenthal, Ferrin,Wison, & Frain, 2005), and provides further evidence that perceptions of race may continue to play a role in VR eligibility determination.

On the other hand, in Hayward & Schmidt-Davis (2003) review of VR services and outcomes, found consumers that did attain employment through VR-related services generally reported relatively high levels of satisfaction with the quality of their relationship with their VR counselor, with 89% of these consumers believing that the counselor was working for them to assist in meeting their employment-related needs as they moved through the VR process. Additionally, 77% of the surveyed consumers reported that their counselor was always willing to listen to their ideas and suggestions regarding their VR services. However, 15% of those surveyed commented that their counselor sometimes listened, while 11% of consumers who attained successful closure status commented that their VR counselor rarely or never showed adequate concern. Similar findings regarding perspectives of consumers with unsuccessful closures were not available in this report, presumably due to the large percentage of 'unable to locate' or 'uncooperative' closure statuses. In short, it appears that the attitudes and behaviors of the counselor, along with the basic concept of his/her role matters to clients' decisions to stick with services (Rogers, 1948), as higher drop-out rates have been linked to therapists with lower expression of Rogerian skills (e.g., expressions of empathy, worth, significance, and unconditional positive regard toward the client) (Saarino, 2002). Thus, understanding the beliefs and attitudes held by VR counselors who serve consumers with motivational problems are an important focus of rehabilitation research to which we now turn.

The Role of Vocational Counselors

The profession of rehabilitation counseling is a discipline designed to assist persons with disabilities to fully participate in all aspects of meaningful life activities especially work (Phillips, 201, Szymanski, 1985). The role and function of rehabilitation counselors is considered to be broad and specialized all at the same time; simultaneously requiring skills related to medical aspects, benefits, and affective counseling, vocational assessment, vocational counseling, case management, and job placement and/or career development, and psychosocial adjustment of all disabilities (Fraser et a 2004). VR counseling roles within state/federal agencies typically include: (a) case finding, (b) intake interviews, (c) diagnosis, (d) eligibility determination, (e) plan development and implementation, (f) service provision, (g) placement and follow-up, and (h) post-employment services (Rubin & Rosessler, 2001). Within the last 30 years, increasing knowledge and competency demands required of rehabilitation counselors has necessitated many master's level rehabilitation counselors to specialize and practice outside the traditional scope and title of a "rehabilitation counselor". Although these specializations continue to remain within the broader context of "rehabilitation", they often digress from the traditional vocational agenda to include titles such as vocational evaluator, case manager, job placement specialist, substance abuse, or psychosocial adjustment counselors (Stebnicki, 2009).

VR counselors are typically under significant time and resource pressures to meet federally-mandated service delivery expectations and quotas. Although the actual volume of persons within and through the system is not constant (i.e., the number of persons applying for VR or exiting VR varies from month to month), the typical counselor has relatively little time available to provide services to any one consumer. Hayward & Schmidt-Davis (2005) report that on average, VR counselors' typical caseload is approximately 112 consumers at one time, and

can range from 54 to 244 consumers within their active caseload. This equates to counselors spending less than 15 minutes per person per month on eligibility determination, less than 20 minutes on counseling activities, and about 20 minutes per month on file management. Thus, it is not surprising that only 22 percent of counselors report having sufficient time to spend with each consumer throughout his or her VR experience, given the size and complexities of their caseload.

As a result, VR counselors may need to make rapid decisions about where and to whom their limited time and resources would best be spent. Unfortunately, in efforts to be more efficient, such decisions are often based on negative biases towards "unmotivated" clients, which, in turn may contribute to restriction of consumer access to employment services and placement opportunities (Fleming, Del Valle, Muwoong, & Leahy, 2013; Fraser et al., 2004, Wagner & McMahon, 2004). Consequently, counselors are prone to experiencing job burnout, or emotional depletion that contributes to a loss of motivation and commitment to their job and the recipients within their care (Maslach, Schaufeli, Leiter, 2001).

Counselor factors related to motivation. Lambert et al (2004), suggests that counselor age, sex, and race are generally poor predictors of client outcomes. Despite this, counselors' age and experience appear to be relatively associated with attitudes toward persons with disabilities (Darnell, 1981), and has been most consistently related to job burnout. Interestingly, Maslach et al, emphasizes that younger counselors (between 30 to 40 years old) are at greater risk of experiencing symptoms of burnout, such as depersonalization, which is most associated with negative attitudes and beliefs towards clients. Additionally, age is related to job tenure (Lambert eta (2004), with younger, more novice counselors shown more likely to make quicker, and less accurate client hypothesis formations, and offer more advice-giving (Skovholt & Ronnestad, 2003) than older, more seasoned counselors.

*Gender***.** Similarly, research findings between therapist sex and outcomes have been ambiguous, at best. In a meta-analysis of 58 studies, Bowman, Scogin, Floyd, and McKendree-Smith (2001) found a significant, but small effect size favoring female therapists (d = .04). Another meta-analysis conducted by Lambert et al (2004) found similar findings and disconfirmed the role of therapist gender as a contributing variable to outcome, including dropout propensity. Despite this, research from other service professions indicates that gender plays a factor in patient perceptions of working alliance. When analyzing contributing factors related to working alliance in health educators, Guequierre (2010) found female health educators in primary care settings tended to form stronger alliances than male health educator counterparts. Hill (1975) investigated the influence of counselor gender upon the working relationship within counseling sessions involving 24 counselors (12 male, 12 female) among 48 clients, and found that counselors were more comfortable with same-sex clients as evidenced by eliciting more feelings and demonstrating more empathic responses with the same-sex clients. Gender also appears to affect the experience of burnout differently between men and women. A study conducted by Cordes and Dougherty (1993) found that women tend to experience burn out as 'emotional exhaustion' while men were shown to develop higher and more severe frequency of depersonalization (Maslach & Jackson, 1984). Maslach and Jackson (1984) suggest that this distinction may be due to gender-role socialization where women are conditioned to be more people-oriented, possessing a greater capacity to emotionally connect with clients on a deeper level (Maslach, 1982).

*Caseload Size***.** The amount of active consumers on a counselor's caseload has also been shown to influence counselors' perceptions, job satisfaction, and burnout rates. Caseload size may be an especially important factor related to rehabilitation counselor perceptions where the

average size of a VR counselors' typical caseload is frequently large (Emener, 1979), and can range from 54 to 244 consumers within their active caseload (Hayward & Schmidt-Davis, 2005). Over-sized caseloads have been positively linked to physical and psychological stress among human service professionals (Farber & Heifetz, 1981) as well as burnout (Maslach & Florian, 1988). In a recent national ethics survey of practicing CRCs conducted by Lane et al (2012), that elicited qualitative data consisting of situations where workplace culture influenced ethical behavior and decision-making, found that counselors generally feel uncomfortable managing 'large caseloads' (pg. 228). Specifically, counselors reported that they have difficulty or are unable to provide quality consumer services due to the size and complexities of their caseloads. Most pertinent to this present study, due to organizational overemphasis on securing case closures, counselors reported feeling pressure to provide "quickly conceived and often inadequate services to their clients" (pg. 228), which often result in premature closures, and re-occurring case entries.

Caseload Population. The Hayward and Schmidt-Davison (2005) longitudinal data analysis, [The Second Final Report: VR Services and Outcomes] concluded that consumer characteristics are the most important factors in VR service patterns. Specifically, the size, the complexities of consumer populations within a counselor's caseload may also influence attitude formation, bias, and burnout. Disability types have been associated with more negative counselor stereotyping bias, which influenced counselor-client interactions (Strohmer & Leierer, 2000). Further research indicates that rehabilitation counselors with more negative attitudes toward persons with disabilities tend to be more unsuccessful with clients who are perceived as having less favorable disabilities (Krauft, Rubin, Cook, & Bozarth, 1976). For example, studies show that VR counselors perceive clients with psychiatric (e.g. mental illness) or cognitive

disabilities (e.g. mental retardation) as more challenging to work with (Beck, 1987; Ben-Dror, 1994; Cranswick, 1997; Schulz, Greenley, & Brown, 1995) as opposed to clients with physical (i.e., quadriplegia) or sensory disabilities (i.e., hearing impairment).

Analysis of RSA longitudinal data confirms that successful competitive employment cases were more likely to be achieved if consumers have only one disability (especially if it is a minor visual impairment), are male, are younger, do not receive social security benefits, and are employed at the time of their application for services. Secondary or co-existing disabilities have been found to have a significant impact on employment and are negatively related to successful VR outcomes (Kirchner, Schmeidler, & Todorov, 1999). Bolton, Bellini, & Brookings (2000) also found that VR counselors had more negative attitudes towards consumers with cognitive, learning, and psychiatric disabilities than those with only physical disabilities due to perceiving the prior group as having more limitations with communication and adaptive behavior. Thus counselors in this particular study reported encountering more difficulty with helping clients with cognitive and psychiatric disabilities acquire insight and adaptive functioning in finding and maintaining competitive employment relative to their disabilities (Becker, Drake, Bond, Xie, Dain, & Harrison, 1998; Wood & Cronin, 1999). Hayward and Schmidt-Davis (2003) acknowledge "additional measures (such as clients' functional level, work history, interests and motivation, and receipt of financial assistance) will contribute greatly to our understanding of differences in counselor caseloads, differences in applicants and accepted consumers, and explanation of outcomes" (p. 1-7).

Although counselors have historically (and anecdotally) perceived motivated consumers to comprise a disproportionately low percentage of their total consumer caseload (only 10%) (Olshansky, 1964), it is anticipated that persons with disabilities who struggle with motivational

issues may continue to persist as a prevalent subtype of consumers needing VR related services Thus, it is important to study the manner in which negative and value-laden stereotypes about work and motivation held by counselors might influence clinical judgment, allocation of resources, and the counseling relationship.

Theoretical Framework of Motivational Competency (MCM)

Clinical competency implies clinician effectiveness. One may be considered an effective clinician by successfully integrating into practice the most relevant research knowledge, clinical wisdom and skill, and client sensitivity to enhance outcomes (Sommers-Flanagan, 2015). Motivational Competency implies clinical effectiveness or success in motivating others, especially those commonly seen as 'unmotivated'. The MCM draws upon Sue's Multicultural Counseling Competency Model due to the overarching parallels consistent with social justice and the recognition that human service workers share responsibility with their clients in ultimately determining the outcome of an intervention. Sue (2001) defines cultural competence as "the counselor's acquisition of awareness, knowledge, and skills needed to function effectively in a pluralistic democratic society (ability to communicate, interact, negotiate, and intervene on behalf of clients from diverse backgrounds), and on an organizational/societal level, advocating effectively to develop new theories, practices, policies, and organizational structures that are more responsive to all groups (p. 802)". The Motivational Competency Model adapts Sue's Multicultural Counseling Competency (MCC) model to operationalize a similar framework to address clinical competence with facilitating consumer motivation to take action that is in line with one's own best interests. The MCM also incorporates aspects of social perception to further understand counselors' attitudes related to aspects of consumer motivation and how these perceptions affect subsequent behaviors and decisions related to service delivery.

Stereotype research and awareness dissemination has provided a better understanding of the underpinnings of stereotype bias and the consequences resulting in unregulated prejudice. Despite experiencing automatically activated prejudice and stereotypes, clinicians have been found to be able to self-regulate, control, and even change long-held attitudes/beliefs and expressions of prejudice through developing mindful awareness, knowledge, and adaptive skills in effectively manage activated bias and behaviors (Dasgupta & Rivera, 2006; Rudman, Ashmore, & Gary, 2001). Thus, one can speculate that given similar awareness and skills training, one can develop Motivational Competency ability to override one's own negative biases and choose to engage with an unmotivated and/or 'uncooperative' consumer in a constructive and therapeutic manner, shown more likely to improve engagement and client outcomes. For the purposes of this study, the researcher was interested in understanding the way in which counselors' attitudes/beliefs, knowledge, social perceptions, and behavior contribute to counselors' overall 'Motivational Competency' when interfacing with consumers presenting with typically cited amotivational features (Drake, Salomone, 1972; Fraser et al, 2004; Mannock et al., 2002; Miller & Tonigan, 1996; Roessler, 1986).

Attitude Formation and Clinical Competence

Clinical formation is considered a cognitive, emotive, and behavioral conceptualization of client evaluation, in which a counselor must collectively (or selectively) integrate the cues given by a client (and/or subsequent information about the client). Inferences or interpretations of salient factors are then applied towards making efficacious service decisions within the context of given information combined with cognitive appraisals of past experiences with similar clients (Berven, 2011). One social theory that may be used to explain clinical perceptions of consumer motivation is Weiner's Attribution Theory (1986).

Attribution theory. Attribution theory (Weiner 1995) is an important framework for explaining the relationship between stigmatizing attitudes and discriminatory behavior. According to Weiner's theory (1995), peoples' attributions or judgments about the cause and controllability of an event trigger emotional responses, such as pity or anger, that subsequently lead to helping, punishing, and/or avoiding behaviors. Attribution theory is particularly relevant to understanding social reactions to disability through Weiner's descriptions of '*O-set controllability'*. O-set controllability postulates a societally ranked hierarchy of preferences associated with disability that can be understood as value-latent blame and/or acceptance within two dimensions of causality; (1) on-set controllability; and (2) stability. For example, because a large proportion of U.S. society values the self-sacrifice and honor of military service and hard work, disabilities acquired while defending the nation or through hard work are considered less stigmatizing than those acquired through personal or moral irresponsibility (e.g., acquired spinal cord injury due to drunk driving or diving into shallow pool while intoxicated) (Corrigan, 2000). Not surprisingly, these findings also affect the workplace. Attitudinal research revealed that individuals who were judged to be responsible for their disability were offered fewer job interviews, job offers, and assistance in the workplace as did those perceived not to be accountable for their disability (Bordieri & Drehmer, 1988; Thorn et al, 1994; Weiner et at.1988).

Similarly, when a chronic illness or disability is considered unstable or unable to improve, the medical community typically lowers rehabilitation expectations of the individual, perceiving the severity of symptoms in direct control of the patient or be beyond rehabilitation potential. For example, obesity has typically been stigmatized as a 'social disability' within the medical field (Maddox & Liederman). In a systematic review conducted by Teixeira, Pais-

Ribeiro, and Maia (2015) general medical practitioners (GPs) were found to hold negative attitudes towards patients with obesity, and generally perceived patients with obesity as non-compliant with treatment, lazy, unattractive, unmotivated, emotionally unstable and with no self-control. Additionally the GPs within this study self-reported feeling more pessimistic about their patients' ability to lose weight, and in their own ability to motivate their patients make improvements in their weight. As a result, the GPs in this study were found more likely to give up or play a passive role in these patients medical care. Similarly, rehabilitation research reports physicians underlying negative attitudes/beliefs towards patients suffering with chronic pain creates conflicts within the therapeutic relationship and has been shown to interfere with patient satisfaction and health care outcomes (Frantsve & Kerns, 2007). Common clinical perceptions of patients suffering from chronic pain include doubt that the pain is real or as severe as the patient describes, and are 'malingering'. Through the medical literature, more challenging patients are often labeled as "difficult' when course or treatment poses inconsistencies to physician assumptions as well as expectations in how patients 'should' behave (Wilson, 2004), which may adversely impact physicians' abilities to convey empathy effectively or lead to under-involvement (Diesfeld, 2008). It is important to note, however, that similar attitudes are pervasive within the general population and across cultures. In cross-cultural studies by Corrigan et al (2000) and Zheng, Rosenthal, Talley, Hunter, & Keegan (2015) both US and Chinese societies tend to perceive people with physical illness and disabilities (i.e., diabetes, heart diseases) more positively, reportedly considering these conditions to be more controllable and stable than more 'invisible' and less understood conditions such as cognitive or psychiatric disabilities; while substance abuse was viewed the most negatively in terms of stigma and controllability.

Attribution Theory represents the formulation of particular beliefs, attitudes, and responses to interacting with social and natural phenomena within one's environment. In turn, these attributions help to evaluate the extent to which the outcomes one experiences are positive or negative, especially for the unexpected or unusual occurrence and no apparent explanation readily available. More specifically, it attempts to understand, predict, and control one's world through developing running hypotheses, assigning causes, and associated responses to antecedents and consequential evidence to determine whether certain behaviors are typical or deviant. This requires knowledge through repeated exposure of the behavior(s) across various individuals and populations. However, research suggests that many professionals (i.e., physicians, lawyers, rehabilitation counselors, psychologists, scientists) often deviate from this tentative and self-correcting method by relying on a number of common inferential errors to expedite the decision-making process (i.e. Snyder & Swann 1978; Spengler, Strohmer, & Prout, 1990). These errors have been used to simplify data-gathering and inferential processes, which have been commonly coined as "cognitive shortcuts" (Dawes, Faust, & Meehl, 1989). The potential risks of implementing 'cognitive shortcuts' pose potential risk of inaccurate diagnoses, inappropriate intervention choices, client stereotyping, and prejudice. Particularly troubling is the findings that more experienced counselors are more prone to acting in a biased way, rather than in a less biased way (see Lopez, 1989).

Social Perception

The Stereotype content model (SCM). The Stereotype Content Model (SCM) (Fiske, Cuddy, Glick & Xu, 2002) is one of the most validated theoretical frameworks of social attribution explaining intergroup relations, especially in terms of humanizing verses dehumanizing behaviors. Specifically, this model emphasizes the ambivalent nature of the

majority of societal stereotypes, which combine both hostile and favorable beliefs and behaviors towards the same target group. Pertinent to this study, the SCM attempts to explain both the interpersonal and intergroup social cognition processes underlying the development of stereotypes that contributes to clinical formation, decision-making, and counselor behaviors.

The model has been empirically substantiated by numerous social and neurocognitive studies (Harris & Fisk, 2012) asserting that stereotype formation primarily occurs through the perception of two universal and global dimensions: (a) relatedness (warmth) and (b) ability (competence). In fact, the basic dimensions of warmth and competence and have been shown to account for at least 82% of the variance in perceptions of everyday social behaviors (Wojciszke, Bazinska, & Jaworski, 1998). Specifically, this theory postulates that social impression formation serves as a systematic cognitive and behavioral adaptive process in decision making to determine if other's intentions are (a) good or ill (friend or foe) [warm], and (b) whether the 'other' is capable to enact those intentions [competent] (Fiske, Cuddy, & Glick, 2007). Traits such as friendliness, helpfulness, sincerity, trustworthiness, and morality encapsulate the warmth dimension, whereas, competence assumes intelligence, creativity, skill, and efficacy. The SCM suggests that people spontaneously look for clues pointing to the person's good (or bad) intentions (i.e., warmth) and ability (competence) to act on these intentions (i.e., competence). Furthermore, these views are often mixed and can exist along a continuum of both positive and negative beliefs, characterized as ambivalence. For example, (Fiske et al, 2002) found that some groups are perceived to be high in one dimension, but low in the other (i.e., people with disabilities as rated high on warmth, but low on competence).

History of warmth & competence. Early research in both social and personality psychology have long supported that both individuals and social groups are categorized

according to their level of competence and warmth (Allport, 1954; Fiske 1998; Macrae & Bodenhausen, 2000). Although the terms used for these dimensions were not the same, the distinctions were very similar, and the attributes that defined the endpoints of the dimensions were virtually identical. For example, Rosenberg, Nelson, and Vivekananthan (1968) seminal work examined factors associated with personality descriptions, and found social and personal judgments to be based on two- dimensional continuum of social perception: (a) *intellectual good*/*bad*—contrasting traits such as intelligent and determined on the positive end of the specturum with foolish and irresponsible on the other), and (b) *social good/bad*—with perceived positive traits as sociable and helpful, contrasting with unpopular and irritable on the negative end of the spectrum.

Initial impressions of warmth & competence. Perceptions of intent (i.e., friend or foe) and capacity (competence) associated with a person or group has been shown to be a significant predictor in attitude formation and behavior, and have a greater impact on overall attitudes toward others (Cuddy et al. 2011). Fiske (2007) concludes that warmth (morality) judgments take primacy from an evolutionary perspective, as discerning another person's intent for good or ill is more important to survival than whether the other person can act on those intentions. Inferences associated with warmth and competence have been shown to solidify quickly in relation to categorization of perceived competence or status (i.e., prestige, economic success) (Cuddy, Fiske, & Glick 2008; Kervyn, Fiske, & Yzerbyt (2013). Therefore, because warmth is judged prior to competence, and appear to carry more weight in affective and behavioral approach–avoidance responses, warmth may be considered the central aspect of evaluation.

However, determining competence may take more time and evidence than once hypothesized. Willis and Todorov (2006) evaluated how rapidly people evaluate warmth and

competence in others, and found that people perceive someone's warmth more quickly than competence, and they do so in a fraction of a second. In fact, Wojciszke et al. (1998) demonstrated that perceptions of warmth were a significantly stronger predictor (accounting for 59% of the variance) than competence (accounting for 29% of the variance) of global evaluations of others.

Cumulative international studies confirm that perceptions of warmth are more stable and consistent across cultures. In a cross-cultural study by Ybarra, Chan, Park, et al., (2008) comparing perception ratings by U.S. and Hong Kong participants, yielded warmth primacy was more stable across cultures and contexts; while competence inferences demonstrated greater variance. Within intergroup situations, Tauscher & Kenworthy (2008) found people to perceive warmth information as more reliable and accurate than competence information.

Unlike other theories of prejudice and stereotype formation (that describe the negative and uniform antipathy or contempt toward a group), the SCM supports that prejudice can involve both positive or ambivalent attitudes that serve to protect and maintain power relations relative to the perceiving group's socio-economic status (high vs. low) within society's hierarchy (i.e., status). The SCM seeks to understand the underpinnings of each group's situation, while identifying core fundamental dimensions of stereotypes that help explain commonly held experiences (Fiske et al, 2002). In essence, The SCM helps to describe individuals' perceptions related to what people want to know about each other, in order to cooperate and function in the same social space. This model evokes the broader conceptualization of status hierarchies in general, an issue only occasionally acknowledged in clinical practice (Fiske, 2012). This is especially relevant to human service related fields, such as rehabilitation counseling, as

judgments of groups and individuals are distinguished according to their potential impact on the in-group (or the self).

Behaviors outcomes related to SCM. Further SCM research has shown that the two dimensions of the SCM can be conceptualized applied along'high-low' warmth by competence continuum. This descriptive space produces four descriptive quadrants shown to predict specific emotions that produce active, passive, facilitative, and harmful behaviors directly associated with perceived stereotypes judgments (Fiske et al. (1999, 202; Table 1). For example, simultaneous perceptions of high warmth and high competence are shown to elicit feelings of admiration and facilitative behaviors (helping). Conversely, downward contrastive comparisons or perceptions of low warmth and low competence elicit feelings of contempt (i.e., poor and/or homeless people) (Dijker, Kooomen, vanden Heuve, & Frijda, 1996; Fiske, Cuddy, et al., 2002). Converse perceptions to these two extremes are shown to elicit more ambivalent emotions and behaviors. Upward perceptions of high competence, but low warmth (i.e., wealth processionals, Asians) elicit feelings of envy, and predict harmful behaviors (Fiske, Glick, et al., 2002), while perceptions of high warmth and low competence (i.e., the elderly, people with disabilities, etc.) elicit feelings of pity followed by paternalistic, yet not entirely useful helping behaviors (Cuddy & Fiske, 2002). The following section will provide descriptions of each quadrant in turn, focusing on the role of emotions and subsequent behaviors elicited from determined stereotypes.

	Competence	
Warmth	**High Warm/Low Competence** • Paternalistic Stereotype • Low status, not competitive • (i.e., housewives, elderly, physically disabled people) • Emotion = Pity • Behavior = Active	**High Warm/High Competence** • Admiration Stereotype • High Status, not competitive • (i.e., in-group, close allies) • Emotion = Pride • Behavior = Facilitative
	Low Warm/Low Competence • Contemptuous Stereotype • Low Status, competitive for resources (e.g., welfare recipients, poor people) Emotion = Contempt, disgust, anger, resentment • Behavior = Passive	**Low Warm/High Competence** • Envious Stereotype • High Status, competitive for resources • (i.e, Asians, Jews, rich people, feminists) Emotion = Envy, jealousy • Behavior = Harm/Attack

Table 2.1. Stereotype content model predictions of emotions and behaviors within the warmth and competence quadrants. Adapted from Cuddy et al. (2007).

Warmth and competence quadrants. The SCM quadrants have been shown to identify systematic clusters of society's stereotypical labeling of groups and people within that society. Multiple cross-cultural research studies have confirmed the universality of warmth and competence dimensions, in that, status predicts perceived competence (correlations averaging above .70), and cooperation predicts perceived warmth (correlations averaging about .30) (Cuddy et al, 2007; Cuddy, et al, 2009). Moreover, these dimensions are shown to emerge consistently across cultures and time within studies using diverse participants and methods such as representative and convenience sampling, multidimensional scaling (Kervyn et al, 2013), semantic differential and qualitative surveys, as well as within neuroimaging data (see Cuddy, Fiske, and Glick 2008).

For example, although there may be slight variations across cultures of ethnic, gender, and other social group positions within the SCM quadrants, low-status 'out' groups (deemed as low in warmth and competency) appear to universally represent poor people, immigrants, the homeless, as well as drug addicts. In a neuroimaging study conducted by Harris and Fiske (2006), participants self-reported tendencies to de-humanize groups within the low warm/low competency quadrant because they lacked "typical human qualities such as sociability and uniquely human qualities such as autonomy" (pg. 35 in Fiske et al 2012). Additionally, when viewing pictures of stereotypically looking homeless people or drug addicts, neuroimaging demonstrated evidence of dehumanization denoted by low to no cognitive and neural process activation within the medial prefrontal cortex, which is typically known to activate whenever people encounter another person (Harris & Fiske, 2006). Cross-culturally, groups categorized within this low-low quadrant evoke disgust and contempt and are often actively avoided, neglected, demeaned, and devalued in relation to others lives through outward displays of active attack and/or passive harm (Cikara, Farnsworth, Harris, & Fiske, 2010).

High warmth/high competence: admiration. Simultaneous perceptions of high warmth and high competence elicit feeling of admiration and pride of those being perceived. Cuddy et al. (2011), describe this quadrant to belong to high status, dominant, mainstream, in-groups that or close allies that are seen as not competing with societal in-groups, and advance the interests of such groups. Weiner (1985) conjectured that feelings of pride and desire align with high warm/high competent individuals as a result of self-identification, and positive, controllable outcomes. Pride and self-affirmation are as seen as eliciting positive outcomes that can be attributed to the self, and by extension, to one's group or reference group. As a result, the successes of identifying with others in this quadrant engender feelings of hope and optimism

apparent and, as long as others' does not create an unfavorable comparison to the self (Tesser, 1988). An example of this may be when a sports fan celebrates their local team's success, yet may feel shame and distance themselves through omission or criticism during the team's losing streak (Cialdini et al., 1976), thus eliciting both active (i.e., helping) and passive facilitation (i.e., both helping and associating)

Low warmth/low competence: contempt. Alternatively, those perceived as low in warmth (disliked), and low in competence tend to belong in low-status, competitive groups and elicit more adverse stereotypes, resulting in 'contemptuous prejudice' (p. 82). Fiske and associates found that people tended to perceive people within this quadrant as 'freeloaders' and as menaces that drain valuable resources from the rest of society. Groups identified within this quadrant tended to be those that are seen as being responsible or to blame for their condition: drug addicts, obese, welfare recipients, poor people, and people with disabilities or chronic illness brought about by their own actions (Corrigan, 2000; Weiner, 1985). Rush (1998) found that when controllability was manipulated for a variety of stigmas, it engenders perceptions of immorality, culpability, blame, and anger In turn, these feelings of contempt, disgust, hate, and resentment towards resented groups result in both kinds of harmful behaviors: active attack and/or passive neglect. Such examples have been historically seen associated with both brutality (i.e., 'unintentional' shootings of unarmed African-Americans) and/or neglect (i.e., restricting resources to inner city neighborhoods). In short, this group's position is viewed as self-inflicted, and consequentially seen and treated as being unworthy.

High warmth/low competence: paternalism. Low-status, noncompetitive groups that are perceived as warm, but incompetent elicit paternalistic forms of prejudice. This quadrant includes groups that are seen as disadvantaged due to circumstances beyond their control (due to

racism and poverty). Specifically, this group usually includes the elderly, people with physical and/or mental disabilities, working mothers, and sometimes, African-American people (as a result of Whites' oppression) (Katz & Hass, 1988; Scott, 1997). Pity and sympathy are the primary emotion expressed toward groups within this quadrant, as they are seen as having been unnecessarily inflicted upon from causes not under their control (Corrigan, 2004; Weiner, 1980, 1985). For example, because American society generally values the honorability of the military and hard work, disabilities acquired while defending the nation or through hard work are considered less stigmatizing than those acquired through personal or moral irresponsibility (i.e., acquired brain injury due to crashing one's car while intoxicated- eliciting contempt). Pitied groups tend to elicit both active and helping behaviors at the same time as passive harm and neglectful (ignoring) behaviors.

Paternalism may aptly describe behavior toward people with disabilities or older people, who are often over helped and at other times neglected. Within the quadrant, active facilitation is more likely to be directed toward pitied groups when their perceived warmth is experienced as agreeable or compliant, while passive harm tends to be directed toward pitied groups when their perceived lack of competence is considered permanent and likely to decline (i.e., people with Alzheimer's disease or congenital, intellectual, or progressive disabling conditions) (Becker & Asbrock, 2011; Corrigan, 2004).

Low warmth/ high competence: envy. Perceptions of competent, but cold groups, such as the wealthy, corporate and academic professionals tend to evoke feelings of inferiority and jealousy that can evolve into envious prejudice. Although groups within the envious stereotype quadrant are perceived as competent, and thereby responsible for creating their own success and high status, they are also seen as potentially untrustworthy competitors who lack warmth and

may harbor potentially hostile intent that they are capable of carrying out (Cuddy et al, 2007). Envy is created through comparing the positions of the self at a disadvantage to others. Parrott & Smith (1993) found that people feel envy when they perceive themselves lacking another's more superior; outcome that is now desired and can lead to feelings of hostility and depression (Smith, Parrott, Ozer, & Moniz, 1994). Spears & Leach (2004) argue that people are less likely to honestly endorse having envious feelings, which can make it difficult to measure. Because envied groups are seen as simultaneously privileged and exploitative (low in warmth and dislikable), Smith (1991) found behaviors towards this group were either expressed in righteous indignation of the other's presumably illegitimate gain, to active attack or desire to 'maybe bring them down a notch' and take what they have, or active associating with them in hopes of attaining similar status through proximity.

Within the field of Rehabilitation Psychology Wright's (1983) seminal work also recognized the power position of group status in society, positing that individuals who belonged to the 'in-group' (insiders), were relatively favored in society and ranked with higher status, while members perceived to be in the 'out-group' (outsiders) were viewed more negatively and considered to be of lower status). Multiple research studies using the SCM confirm Wright's position, with a twist. Instead of solely perceiving out-groups as all 'bad' or negative, current research has found a mixed negative relationship between out-group stereotypes and the two dimensions of competence and warmth. Specifically, while they did find that holding negative perceptions of one did correlate with lower assumptions of competence (i.e., poor people, welfare recipients, and immigrants), they also found that groups can be perceived with a positive evaluation on one dimension and a negative evaluation on the other (Fiske et al, 2002; Judd, Hawkins, Yzerbyt, & Kashima, 2005). As mentioned above, Fiske and associates found that in

the US, people viewed older people and people with physical or mental disabilities as warm, but incompetent. Subsequently, people tend to express sympathy and pity toward individuals with physical disabilities (i.e., Alzheimer's disease, blindness, cancer, heart disease) because due to being inflicted outside of ones' control (Corrian, 2000) and tend to elicit pity and sympathy (Cuddy, Fiske, & Glick, 2007; Fiske et al. 1999, 2002; Fiske & Cuddy, 2006; Weiner et al., 1988). As a result, many individuals or groups are seen as warm, but incompetent (e.g., "*She's so sweet … but since her diagnosis with MS, she's probably not going to be able to continue to work as an engineer for Boeing*"); or to be competent, but cold (e.g., *"He's really smart, but feels lazy and manipulative, I think he is scamming the system"*). Ironically, studies show that higher ratings on one dimension lead to perceived lower ratings on the other – the more competent the target is perceived to be, the colder he/she is rated to be and vice versa (Kervyn, Yzerbyt, Judd, & Nunes, 2009). Furthermore, research shows that these attitudes may be contagious to the perceived target, with recipients of pity reporting lower levels of self-efficacy and participation in goal-directed behaviors (Fiske, 2011).

Moderators of Stereotype Content and Biased Behaviors

Fortunately, more and more research is showing that people are able to over-ride and control their behaviors, despite experiencing automatically activated stereotypes and prejudice if they are willing to confront and unlearn their biased conditioning (Blair 2002; Sue, 2001; Wittenbrink, Judd, & Park, 2001). Moreover, McIntosh (1989) reiterated that in overriding stereotype bias and behaviors requires one to unlearn not only the biased misinformation on a cognitive level, but also the misinformation (assumptions) that has been glued together by painful emotions (see Sue, 2001; p. 804).

Awareness and motivation. Studies show that automatic prejudice on social judgment is conditional upon people's motivation to be non-prejudiced (or at least to not appear prejudice). Motivation (personal reasons or incentives to act has long been suspected to influence or moderate automatic attitudes and behavior (also see Olson & Fazio, 2004). These studies found that when people have the motivation and opportunity to be mindful, their controlled attitudes are likely to override their automatic attitudes to predict behavior. Conversely, unconscious motivations and subsequent behaviors of automatically activated attitudes are found to predict the likelihood of acting out biased and prejudicial attitudes. A study by Dasgupta and Rivera (2006) demonstrated that automatic antigay prejudice resulted in discrimination against gay men only participants were unconscious of personal motives in controlling their activated bias. More specifically, this study showed participants less motivated by egalitarian beliefs were less likely to control their automatic antigay prejudice and behaviors, while participants who endorsed

egalitarian beliefs or who were skilled at controlling their behaviors were less likely to engage in discrimination, regardless of their automatic attitudes.

This phenomenon was first confirmed in Dunton and Fazio (1997) seminal study which found participants who were unmotivated to change their discriminatory behavior against African Americans, not only had stronger automatic prejudice, but were also less likely to give favorable judgments of a African American college students. On the other hand, those who were highly motivated to control their feelings of prejudice had lower endorsement of automatic prejudice, which in turn, predicted more favorable judgments of the same student. These findings suggest that motivated participants may have over adjusted their judgments to avoid potential bias responses. Other studies have attempted to differentiate the incentives behind one's motivation to restrain their biased attitudes—finding potential motives to be non-prejudiced emanates from the desire to adhere to one's personal standards consciously held beliefs and values about egalitarianism or to social normative standards (Dasguta & Rivera, 2006). These findings may be especially important when clinicians find themselves interacting with consumers that trigger personal negative motivational attitudes.

Counselors' perception of self-efficacy. Cook (1987) warns that rehabilitation professionals are not immune to negative attitudes toward persons with disabilities. Upon contemplation of Fiske's data, Schlossberg & Pietrofesa (1973) suggest that counselors' values do not differ from the general population, and that such negative perceptions may affect the responses of counselors made towards persons with disabilities. As a result, counselors with negative attitudes may be less effective in working with persons with disabilities in general due to their own feelings of anxiety, discomfort, and low expectations of their clients (Huitt & Elston, 1991). Several cognitive factors appear to mediate a clinician's ability to cope with high-

risk situations that may appear threatening or unpleasant (i.e., working with a resistant or unmotivated consumer). One such factor is Bandura's (1977) concept of self-efficacy, namely a person's perception that he or she can constructively cope with a prospective high-risk situation. Self-efficacy largely depends upon an individual's expectation regarding the process and outcome of the experience. Such expectations influence the nature and effectiveness of the coping behaviors initiated in response to the perceived threat.

One such perceived threat is 'clinical perfectionism' or fear of being perceived as incompetent in the face of more challenging clinical issues. The problem of perfectionism has been well documented within the medical literature as a potential factor in physicians discouraging admissions of vulnerability, uncertainty, and fallibility when faced with patients' conditions that are considered irresolvable, particularly in a highly competitive professional culture, and as a result either avoid, disengage, or blame the patient for unsuccessful treatment outcomes (see Diesfeld, 2008). In the case of dealing with unmotivated consumers, if a counselor has low expectancies regarding the consumer's potential to effectively engage in service provisions and/or attaining a successful employment outcome, there is a high risk of engaging with that consumer in an apathetic manner because they do not expect the consumer to be effective. These expectancies are strongly influenced by social and cultural beliefs, self-esteem and environmental factors (Bandura, 1977).

As previously mentioned, rehabilitation counseling is a cognitively and emotionally demanding, fast-paced, and time-sensitive job. VR counselors often need to judge prospective consumers quickly and often do not have the time or luxury to exert the required cognitive resources to make effective evaluations. As a result, they are susceptible to making broad assumptions and judgments that are less nuanced and less accurate. Assumptions about

competence similarly can undermine effective decision-making. Although warmth usually trumps competence in judgments of strangers in social situations, within organizational contexts, such as Vocational Rehabilitation, competence judgments may again take primacy. Warmth and competence are inferred from actions that appear to serve self-interest versus others' interests, and can predict the direction according to the anticipated resources used by the target-- will the allotted resources be used to benefit the perceiver (vr counselor) or the target (consumer) (Scholer & Higgins, 2008). Feelings of contempt, and active harm (i.e., attack) are elicited when in-group members face an out-group that threatens taking the in-group's resources, particularly if they are judged as lacking warmth (Cuddy et al. 2007). Ironically, positive beliefs on either dimension are thought to conceal, or even help maintain negative beliefs about the same group on another dimension, thus legitimizing the status quo and leading to what Jost and Banaji (1994) define as "*system justification"* (Durante, Pasin, & Trifiletti, 2009).

System-Justification. System Justification refers to the psychological processes contributing to the preservation of existing social arrangements even at the expense of personal and group interest. The concept of *system justification* is proposed to account for previously unexplained phenomena, such as the participation by disadvantaged individuals and groups in solidifying negative stereotypes of themselves, and the reciprocal nature of stereotypic beliefs of groups in position of power and authority to justify imposing limited access and opportunities for the disadvantaged to advance in status (Jost & Banaji, 1994). Inferences of warmth and competence are thought to be derived by evolutionary instinct that may serve self-interest versus others' interests, (Cislak & Wojciszke, 2008), which has been shown to predict the direction of target resource allocation (Scholer & Higgins, 2008). For example, self-interest motivates people to believe that those who suffer have brought about their own misery, eliciting just-world beliefs

that outcomes are typically deserved (Lerner & Miller, 1978), such as that groups with high-status and well-paying jobs must have earned these outcomes through talent and hard work. Kaplan (2000) warns that this is a widely held attitude held towards people with disabilities, in which the individual with a disability is seen as intrinsically responsible for their problems, rather than their interactions with social and environmental limitations.

The importance of motivating factors in consumer achievement of rehabilitation outcome (e.g., employment commitment, financial need, self- efficacy, social pressure (Boswell, Zimmerman, & Swider, 2012;McKee-Ryan, Song, Wanberg, & Kinicki, 2005); Wanberg, 2012) has been emphasized in more recent rehabilitation outcome research. Accordingly, the field of VR may be highly warranted in restricting allotment of many services in which counselors accurately perceive consumers as lacking readiness or motivation to attain employment. Consumer displays of negative attitudes to engage in taking active steps to attain employment due to social or funding disincentives or through perceptions of low self-efficacy are common throughout the rehabilitation process (Roessler, 1989; Wagner & McMahon, 2004). Tajfel (1981) argued that stereotypes contribute to the maintenance of a system or organizational culture that serves to rationalize or justify a variety of social actions. Nevertheless, early rehabilitation research found examples of system justification within the field of VR, which may persist today. Salomon (1972) demonstrated that the closure criteria used by rehabilitation agencies did not sufficiently reward counselor efforts to actively engage 'unmotivated' clients in building motivation in achieving successful outcomes, and may even encourage counselors to close these cases without providing thorough service provisions. System justification may be especially relevant to vocational rehabilitation counselors' perceptions of motivation in which they try to infer consumers' intentions (warmth) or competence to accurately predict incentives as well as

their capability, skill, and agency to engage in services. During the initial intact session, VR counselors need to make decisions upon which to take on, whether to invest time, energy, and capital in a potential consumer will reap successful outcomes– accurate judgments about others represent a key component for making good decisions. Thus, it seems appropriate that counselors need to become skilled at how to quickly and accurately read others to discern their character, as well as their employment potential. Disincentives (Hayward and Schmidt-Davis, 2003; Hernandez, Cometa, Velcoff, Rosen, Schober, & Luna, 2007) and perceptions of malingering (Korzycki, Korzycki, & Shaw, 2008); Wagner, Wessel, & Harder, 2011) have been frequently endorsed as significant barriers in consumers achieving successful rehabilitation outcomes. However, it should be noted that the majority of VR consumers typically fall within either the low-low or mixed categories of stereotype content [i.e., Noncompetitive, low-status out-groups are perceived as warm but incompetent (disabled and older people) and are usually liked and pitied but disrespected]. At the same time, VR serve groups regarded as incompetent and not warm (i.e., welfare recipients, poor people, the homeless, and people with alcohol and drug addictions) (Hayward and Schmidt-Davis, 2003) who elicit feelings of contempt and pity (Fiske, 2012). Although VR counselors may be very well-intentioned in respect to their attitudes of general beneficence towards serving people with disabilities, research associated with the SCM points to the likelihood that counselors may implicitly or explicitly employ prejudice as a univalent antipathy responses toward consumers stereotyped as amotivated as a result of empathy fatigue and/or job burnout.

Job burnout. Job burnout is a common phenomenon among human service professionals. In a recent study by Morse et al. (2012) found that up to two-thirds, or 67%, of sampled mental health workers have experienced some level of job burnout. Researchers note

job burnout to be a multidimensional construct seen in health and social service professionals as a result of stressful encounters with clients and co-workers, as well as being overworked. Maslach, Leiter, and Jackson (1996) note job burnout to involve a progressive decline in practitioners' attitudes and behaviors towards clients and work related tasks as a result of emotional exhaustion, depersonalization, and reduced feelings of self-efficacy or personal accomplishment.

Emotional exhaustion. Emotional exhaustion refers to the depletions of one's emotional and psychological resources, and is related to the inability to express empathy which may result in feeling that one has nothing left of give (Maslach & Florian, 1988). Maslach, Schaufeli, and Leiter, (2001) warns that emotional exhaustion is not only an affective experience, but also involves behaviors that lead clinicians to distance themselves emotionally and cognitively from clients or one's work as a self-preservation coping mechanism. As mentioned earlier, emotional exhaustion is commonly seen in physicians' working with more challenging patient populations, which has demonstrated both lower effective expressions of empathy as well as under-involvement in patient care (Diesfeld, 2008).

Depersonalization. Consequently, emotional exhaustion often leads to depersonalization or the development of negative and callous attitudes towards the people one works with, which is often termed 'empathy fatigue' (Stebnicki, 2000). Effects of depersonalization have been well documented (Wills, 1978) throughout the medical (Ratanawongsa Roter, Beach, Laird, Larson, Carson, & Cooper, 2008), education (Skaalvik & Skaalvik, 2011, and vocational rehabilitation literature (Maslach & Florian, 1988). Depersonalization has been associated with links to high turnover, poor job performance, and low client satisfaction (Maslach, Schaufeli, & Leiter, 2001; Truchot & Deregard, 2001). In essence, depersonalization is the attempt to disengage from

service recipients through passive involvement, actively ignoring the personal strengths and characteristics in effort to avoid connection, resulting in what Harris and Fiske (2006) refer to as dehumanizing, or perceiving and relating to clients as impersonal objects (Maslach et al 2001). Human service providers are thought to develop cynical attitudes that reflect depersonalization when they are exhausted or discouraged. Additional research provides substantial evidence linking depersonalization with pervasive system justification among clinicians and staff believing that clients are somehow deserving of their troubles (Lerner, 1980; Ryan, 1971), and in turn, respond with less compassion, genuineness, and unconditional positive regard for the persons they serve (Garske, 2007; Ryan, 1971).

Personal Accomplishment. One's sense of self-efficacy or personal accomplishment is enhanced or diminished as a function of one's ability to cope with overwhelming work-related demands. Lower feelings of personal accomplishment result from over extension or imbalances between the job demands and the capabilities, resources, or needs of the practitioner (Maslach & Jackson 1981). Interestingly, rehabilitation counselors with master's degrees and/or are certified rehabilitation counselors (CRCs) have been found to experience less stress and higher degrees of personal accomplishment due to higher successful closure rates, than VR counselors without a masters' degree. Additionally, master's level VR counselors were found better equipped to deal successfully with stressful work and consumer related issues (see Templeton & Satcher, p. 41).

The consequences of job burnout are significant. Individuals endorsing burnout within or across any of the three mentioned constructs are reported to experience a sense of dread in going to work, a sense of boredom or loss of motivation resulting in lower productivity, physical and mental health problems, increased absenteeism from work, family relation problems, high employee turnover, and poor client services (Maslach & Leiter, 2008). However, Maslach (1982)

warns that individuals may be unaware of that their subtle attitude and behavior changes related to symptoms of job burnout, and encourages agencies and supervisors prevent burnout before it starts by recognizing and educating staff on the signs, symptoms, and prevention associated with burnout, as well as actively encouraging employee autonomy and recognition of employee accomplishments and efforts with clients, and by facilitating co-worker support systems.

Theoretical Orientation. Substantial research shows that the effectiveness of counseling may be more associated to the unique values and beliefs held by the counselor than the effect of specific techniques used throughout the counseling process (Lambert et al. 2004). Carl Rogers (1948) emphasized the importance of attitudes in shaping our theoretical orientation, *"The primary importance here is the attitude held by the counselor toward the worth and the significance of the individual. How do we look upon others…Do we tend to treat individuals as persons of worth, or do we subtly devalue them by our attitudes and behavior?"* (p. 82). Research suggests that theoretical orientation is a relevant area to consider when evaluating counselors' attitudes and counseling skills in session. Stiles and Shapiro (1988) examined rater bias associated to a counselor's theoretical orientation and employed use of counseling skills. Findings concluded that counselors' theoretical orientation influenced the use of particular skills, with directive skills shown to be more frequently associated with behaviorally oriented counselors and active listening to be more consistently utilized by counselors prescribing to exploratory and prescriptive treatment orientations. Hill and colleagues (1979) found similar differences among counseling techniques applied by Rogers, Perls, and Ellis when analyzing patterns of multichannel and non-verbal communication conducted across sessions within the Gloria tapes (Shostrom, 1968). Additionally, formalized training has been shown to promote higher order skill related to therapeutic orientation (Rest, 1999).

Motivation is shown to be highly influenced by how the clinicians chooses to interact with the consumer (Prochaska, Rossi, & Wicox, 1991; Jensen, 2003; Miller & Rollnick, 2013); thus, it can be fostered or negated by counselors' therapeutic response to perceptions of client resistance or ambivalence to engage in service related behaviors (Ackerman & Hilsenroth, 2001; Miller & Rollnick, 2013; Resko, Walton, Chermack, Blow, & Cunningham, 2012; Vader, Walters, Prabhu, Houck, & Field, 2010). Thus, one can speculate that through eliciting clinicians' own egalitarian motivations, awareness and skills through evidence-based motivational competency training, rehabilitation counselors could supersede their own negative biases and choose to engage with an unmotivated consumer in a constructive and therapeutic manner.

Conversely, suppose the clinician may be accurate in his/her evaluations in that the consumer may be in fact, either unmotivated or is significantly ambivalent about actively participating in necessary services at the time of in-take. What then? How shall the counselor best proceed in communicating with that individual that may either increase the consumer's current level of motivation or help them to make their own decision regarding other service alternatives that may be better suited for their current needs and situation? Or, if the amotivated and/or ambivalent consumer does qualify for services, but may present with misinformed or unrealistic vocational aspirations, how does the counselor best proceed with educating the consumer, while still respecting the consumer's autonomy? This is the quandary that many human service professionals face on a daily basis, thus counselors' skill-behavior is expected to serve as a significant contributing factor associated with Motivational Competency, as well as in VR counselors' overall evaluation of consumer motivation, employment potential, and behavioral expectations if appropriated with VR related services.

Skill-Behavior

Miller and Rollnick's on-going work to delineate client/counselor influences on treatment engagement (1991, 2013) has revealed motivation as a byproduct of quality therapeutic alliance, and that low client motivation can be thought of as a clinician deficit, rather than a client variable (Miller & Rollnick, 1991). Within vocational rehabilitation settings clients' lack of motivation have been associated to persistent feelings of hopelessness and passivity, unrealistic treatment goals, fear of losing social security benefits, and uncertainty in unstable job markets (Fraser et al, 2004;Thoreson et al, 1968; Wagner & McMahon, 2004). Current theoretical models for understanding the construct of motivation are primarily focused upon identifying the personal and social reasons behind the *consumers'* motivational deficits (i.e., Self-Determination Theory (SDT) (Deci & Ryan, 2012); Self-Efficacy Theory (Bandura, 1989), Maslow's Hierarchy of Needs theory (1943; see 1987), Operant Learning theory (Baer & Sherman, 1964; Skinner, 1971). Although these models offer important theories in attempts to explain human behavior, many researchers concede that these models encourage practitioners to pathologize clients with fixed stereotypical 'motivational subtypes', and have yet to offer consistent concurrent and predictive validity in measuring outcomes (Blanchard, Morgenstern, Morgan, Labouvie, & Bux, 2003). Unaware of the theoretical motivational processes and effective change techniques, counselors may resort to direct coercion, confronting, arguing, debating, prescribing, or warnings to persuade their clients to change. Unfortunately, these efforts may strengthen the very behaviors they intend to diminish; reinforcing their client's ambivalence and/or resistance to change, which in turn creates reluctance to adhere to treatment conditions (Butler & Rollnick, 1996; Miller, Benefield, & Tonigan, 1993; Patterson & Forgatch, 1985; White & Miller, 2007). Growing research demonstrates that low-expressions of empathy and confrontational counseling,

has been associated with higher drop-out and relapse rates, weaker therapeutic alliance, and less client change (Boardman et al., 2006; Miller & Wilbourne, 2002; Saarnio, 2002; White & Miller, 2007).

In contrast, counselors who are aware of their own negative biases, and whom consciously demonstrate higher levels of empathy, have shown higher rates of successful treatment outcomes, as well as improved sense of work satisfaction (see Moyers & Miller, 2013; Schoener, Madeja, Henderson, Ondersma, & Janisse, 2006). Further research reveals that motivation is significantly influenced by how the clinician chooses to perceive and interact with the consumer (Friedberg, 1996; Jensen, 2003; Miller & Rollnick, 2013; Prochaska, Rossi, & Wicox, 1991). Therefore, it is important for rehabilitation counselors to learn to recognize and attune to signs of consumer motivation related to behavioral change in order to encourage active participation in addition to external forces that impact motivation (Cook, 2005).

Motivational Interviewing. One evidence-based practice that has growing empirical support towards fostering and sustaining client motivation is Motivational Interviewing (MI). MI is a brief, patient-centered, and directive counseling approach that enhances intrinsic motivation to initiate and maintain positive behavior change. Although practicing MI effectively involves application of specific therapeutic skill-behaviors, the underlying spirit of MI is considered the relational catalyst thought to induce change (Miller & Rollnick, 2013). The spirit of MI incorporates aspects of the counselors' attitudes-beliefs, knowledge, and perceptions by viewing client motivation as a state amenable to change, rather than a permanent trait (Jensen, et al, 2003). Practicing with the MI spirit thereby conveys genuine acceptance, compassion, and collaboration, that naturally evokes the possibility of change without judgment or shame. Although important, Miller and Rollnick (2013) recognize that imparting an authentic MI spirit

all of the time, with every client is not a prerequisite for the practice of MI, and indicates, "the practice of MI itself teaches these four habits of the heart". (p. 15).

MI and therapeutic outcomes. Research shows that MI is effective in facilitating behavior change toward vocational readiness as well as maintaining employment across a variety of disability populations (Bombardier et al, 2008; Johnson & Frasier, 2011; Muscat, 2006). Generally, MI is used during initial treatment stages of brief interventions to enhance the effectiveness of other therapies; i.e., substance abuse, chronic pain management, physical, occupational, speech, and vocational interventions, as well as in relapse or to prevent possible relapse of behavior disengagement. (Hettema et al, 2005; Jensen, 2002; Fraser et al, 2004). In a recent meta-analysis comparing outcomes of MI against other forms of therapy (Lundahl, Kun, Brownell, et al. 2010), found MI to produce only a relatively small effect size when outcome variables were collapsed across all 132 assessed studies [the average effect size across the 132 comparisons and all outcomes was $g = 0.22$ (confidence interval [CI] 0.17-0.27), which was statistically significant, $z = 8.75$, $p < .001$]. However, when contextualizing the results of MI against specific treatment circumstances, the same study found MI produced statistically significant client improvement in less time than comparative modes of therapy, especially when treatment was directed at increasing healthy behavior change given a specific target or goal while simultaneously decreasing risky or unhealthy behaviors (e.g., substance abuse, smoking cessation, HIV risk reduction, adoption of water purification/safety technology in rural African villages, and adherence to diet and exercise programs) (pg. 152). For example, in a study conducted by Project Match (1997), four sessions of MI produced changes in drinking and alcohol problems that were shown to be comparable to 12 sessions using Cognitive-Behavioral Therapy (CBT) and 12 sessions of twelve step facilitation therapy. Within this meta-analysis, the

average number of MI sessions found associated with therapeutic effects and treatment adherence ranged from two to four sessions (Burke et al, 2010).

Additionally, this study found the initial therapeutic effects of MI persisted well after treatment ended. While, the quantity of longitudinal studies were limited, therapeutic effects of MI were reported as sustainable for up to at least 2-years post treatment, and may even be seen beyond that time frame. Although this meta-analysis showed mixed results with the efficacy of MI across all nationalities and races, results did find MI to be particularly effective with older clients and clients from lower socioeconomic status and/or from minority ethnic groups who have experienced forms of social exclusion/suppression (although outcomes were variable among African American populations). Interestingly, a significant negative relationship was found among the percentage of White and African American participants (q value = 6.27, $p < .01$). As a result, because these White participants made up the largest participant population across analyzed studies, the lower overall effect size of MI may be more reflective White participant' treatment response to MI verses participants from other ethnic groups. Additionally, other research has found MI to be differentially effective with clients who are perceived as more angry and resistant, or less ready for change (Heather et al. 1996, Project MATCH Research Group 1997). Although MI researchers have not formally provided an empirical explanation for these findings, Lundal and associates (2010) speculate that described 'out-groups' that have benefited from MI may have been particularly responsive to the humanistic approach of MI that seeks to affirm the humanity and self- determination within every client.

Evolved from Carl Roger's person-centered theory, MI focuses on using empathy and unconditional positive regard to safely explore clients' present maladaptive behaviors that may be incongruent with their core values and expectancies. Similarly, strength and frequency of a

client's verbalized desires, reasons, and ability to change or "change talk" (Miller & Rollnick, 2002) has been found to significantly increase the probability of behavior change, especially when commitment to an action plan has been specified (Gollwitzer, 1999; Ambrhein, 2003). Thus, the process of MI can be separated into two revolving phases; beginning with increasing one's motivation to change, and then solidifying commitment to take and maintain action (Miller & Rollnick, 2002).

Clinicians trained in MI acquire knowledge and skills in four principal areas consistent with the overall spirit or philosophy of MI: (a) expressing empathy, through non-judgmental, reflective listening increases rapport and working alliance, helps clients feel understood understand by allowing clients to explore their inner thoughts and motivations; (b) *developing discrepancy:* process in which the counselor evokes clients' awareness between current behavior and core values creates change (Rokeach, 1973) in such a way that allows the client argue for reasons why they should change verses the counselor imposing reasons for change; (c) *roll with resistance*: clients' reluctance to make changes is respected, and viewed as a normal part of the change process rather than pathological, direct confrontation or threats to personal choice are avoided, while autonomy and choice and choice are encouraged (Brehm, 1983; Sanchez-Craig, 1995)' (e) *support self-efficacy*: encourages optimism and hope by facilitating an environment that promotes the likelihood of success, reinforcing successive approximations, affirming successes (even small ones) and reframing failures as intermediate successes (Bandura, 1997).

Knowledge

Formalized training has been shown to promote higher order therapeutic orientation (Rest, 1999). Although MI is learnable and enhances practitioners' communication (Hettema, 2005; Madson, Loignon, & Lane, 2009) research has confirmed that stand alone workshops and

minimal amounts of follow-up feedback supervision or coaching sessions may be insufficient for most providers to achieve competence in MI (Miller 2001; Mitcheson, Kaanan, & McCambridge, 2009). Likewise, very few studies have demonstrated the effectiveness of brief counselor training courses aimed at increasing multicultural the competencies of knowledge, awareness, and skill (e.g., Diaz-Lazaro & Cohen, 2001; Neville, Heppner, Thompson, Brooks, & Baker, 1996; Wang, 1998). Although participation in multicultural competency and other evidence-based practice workshops has been shown to statistically improve scores on the counselors' perceived level of multicultural skills, knowledge, and awareness domains (Walters et al., 2005), Wheaton and Granello (1998) found these improvements do not typically translate into improvement of the client/counselor relationship domain.

Exposure to Motivational Interviewing. Therapeutic process research suggests that practitioner exposure and training in MI helps clients resolve their own ambivalence by voicing their own, rather than the counselors' arguments for change (Amrhein et al., 2003). Psycholinguistic analyses of MI session transcripts have recognized the importance of client change talk as a mediator of client behavior change in outcomes (Amrhein et al., 2003). Further MI research has generated convincing support for practitioners to develop their ability to recognize and strategically attend to client expressed language and motivational influencers (Miller & Rose, 2009). Thus, motivational competence requires practitioners to accurately identify and differentiate change talk as it naturally occurs in the context of the client's ambivalence. If unable to recognize change talk when it occurs, the practitioner may also miss opportunities to effectively reinforce and foster client motivation into committed action (Apodaca & Longabaugh, 2009). Recent developments in training research using Motivational Interviewing emphasizes the importance of reliable and on-going feedback to improve clinicians'

awareness to effectively combat personal bias and integrate skills into competent practice that has been shown to enhance service engagement and outcomes (Miller et al., 2005). Developing competency in MI is thought to involve on-going trainings and direct observations and feedback of clinical interactions with clients. Direct feedback of clinician skill is usually accomplished via recorded sessions with actual clients, as self-evaluation has demonstrated little effectiveness in developing clinician own awareness and/or therapeutic skills (Miller & Rollnick, 2013).

Eight Stages in Learning MI. In efforts to delineate core knowledge and skill related developing clinical competency in MI, Miller and Moyers (2006) developed the 'Eight stages of learning MI as an initial theoretical guideline involved in learning MI. These stages, or skills include (a) becoming familiar with its underlying philosophy or the "spirit of MI", (b) acquiring basic client-centered counseling skills commonly referred to by the acronym OARS (open questions, affirmation, reflection, summary), (c) recognizing and reinforcing change talk, (d) asking about, reflecting, and emphasize statements concerning change (change talk), (e) avoiding confrontations and arguments with a client (i.e., rolling with resistance), (f) developing a change plan, (g) helping clients enhance their commitment to their change plan, and (h) integrating MI effectively with other interventions (Arkowitz & Miller, 2008; Miller & Moyers, 2006).

Additionally, the Motivational Interviewing Network of Trainers (MINT) have sought to outline developmental training guidelines based upon the eight learning stages (Miller & Moyers, 2006) along with recommended time estimates thought to adequately address learning objectives for each corresponding level: (1) Introduction to MI (two hours to a day)—emphasizing practitioner familiar with the fundamental spirit and principles of MI; (2) Application of MI (one hour to a day)-- To learn practical applications in understanding the basic spirit and practice principals of MI; (3) Clinical Training (two to three days across 4- 8 hour

sessions) -- To learn apply empathic counseling skills (OARS) in response to fundamental client language cues (change talk and resistance); (4) Advanced Clinical Training (two to three days across 4- 8 hour sessions) -- To learn advanced clinical skillfulness in MI through intensive observed practice in advanced MI skills; (5) Supervisor Training (two to three days across 4- 8 hour sessions) -- To learn quality teaching and supervision methods of MI in facilitation quality MI skill and practice dissemination; (6) Training for Trainers three to four days across 4- 8 hour sessions)—Advanced supervision training to assess the specific needs and context of trainees, and to design and adapt training approaches accordingly. Although the eight stages model appears to have practical merit, it still requires empirical validation to more adequately understand how model relates to trainings and competency outcomes (Madson, Lane, Nobe, 2012). Madson and colleagues (2009) further suggest that while the eight stages model is a good foundation, more work is needed to outline a method of learning MI that emphasizes the fluidity and overlap involved in developing skill in MI.

Formal training. Perceptions related to knowledge attained through types of formal undergraduate and graduate training appears to be a relevant factor cited within the rehabilitation literature (Fleming et al, 2012). The consensus across the literature associates better outcomes with master's level education. Specifically, rehabilitation counselors with masters degrees from Council on Rehabilitation Education (CORE) accredited rehabilitation education programs have significantly higher successful closure rates, than rehabilitation counselors that either do not have a master's degree or have a masters degree from another counseling related backgrounds (Frain, Ferrin, Rosenthal, & Wampold, 2006; Leahy, 2002). Additionally, Froehlich and Linkowski (2002), found counselors with master's degrees in rehabilitation counseling also felt better prepared to carry out the essential functions of their jobs. Especially in regard to serving people

with more severe disabilities, counselors with a master's degree in rehabilitation counseling or in a closely related field had better VR outcomes with consumers with severe disabilities than did their counterparts with unrelated master's degrees or with less education (Cook and Bolton, 1992; Szymanski & Danek,1992).

CORE is the oldest and most established accreditation body among the counseling professions with over 100 CORE-accredited master's degree programs (CORE, 2011). Because the CORE process remains firmly grounded in research and regularly conducts systematic reviews applied to the adequacy and relevancy of its standards, CORE accredited rehabilitation counseling programs are required to teach theoretical counseling theories and techniques pertaining to recognizing and responding to consumer assets, limitation, and preferences related to employment. As such, graduates from CORE accredited programs are hypothesized to display a propensity to recognize consumer strengths in light of perceived weaknesses in fostering productive working alliances and mobility in achieving consumer-centered career related goals.

Certifications/Licensure(s). The primary participant sample of interest within this study is Certified Rehabilitation Counselors (CRCs). As mentioned earlier, CRCs are the only professional counselors educated and trained at the graduate level specifically to serve individuals with disabilities. This practice encompasses a broad range of highly specialized services to evaluate, determine, coordinate, and manage any or all necessary services throughout the rehabilitation process. Rehabilitation research shows that consumers served by CRCs have better outcomes than vocational counselors with less education and certified expertise (Szymanski & Parker, 1989). Additionally, rehabilitation research has attempted to examine the cumulative benefit of rehabilitation counselors possessing additional certifications and/or licensures to advanced specific disability related knowledge and skill in a particular area.

Because the licensure and certification process normally requires an examination of knowledge and an evaluation of education and/or work experience related to the area of certification, it is assumed that additional licenses beyond the CRC may contribute to better rehabilitation outcomes due to more specialized knowledge in complex rehabilitation counseling and vocational issues (Leahy, 1999, 2004).

CHAPTER THREE

Methodology

A cross-sectional descriptive correlation design was used to examine the relationships of counselor demographic, attitude/belief, knowledge, skill-behavior, and social perception variables to counselor appraisal of a hypothetical consumer's motivation, employment potential, and behavior expectancies in VR. In addition, this study investigated demographic characteristics, attitude/belief, knowledge, and social perception as potential mediators of counselor skill-behavior. The following section will review characteristics of the research design, participant sample and procedures, psychometric properties of measures and instrumentation, and the statistical analysis utilized to understand Motivational Competency.

Research Design

A quantitative descriptive research design utilizing Hierarchical Regression Analysis (HRA) and correlational analysis (Heppner, Wampold, & Kivlighan, 2008) was used to investigate the extent to which the variables in the Motivational Competency Model (MCM) (i.e., level of motivation, potential for achieving full-time competitive employment and level of expectancy to engage in VR services to predict participant evaluation of a hypothetical consumer's potential in participating in VR service delivery in attaining successful employment outcomes. Specifically, three separate hierarchical regression analyses were conducted to determine the unique contributions from each predictor variable (i.e., demographic variables, awareness of attitudes/beliefs, knowledge, skill-behavior, and perception of warmth and competence) on three evaluative criteria variables (i.e., the consumer's degree of motivation to engage in VR related services, potential to successfully attain full-time competitive employment,

and (c) expected behaviors related to the hypothetical consumer's participation in VR services). A fourth HRA was conducted to determine how the unique contributions of the IV's (i.e., attitudes/beliefs, knowledge, social-perceptions, and warmth and competence as conceptualized in the SCM model) that would account for the variance in predicting the quality of participant skill-behaviors (DV).

The proposed Motivational Competency Model was examined using the following four research questions and hypotheses:

1. Do the MCM constructs (i.e., demographic variables, awareness of attitudes/beliefs, knowledge, skill-MITI, and social-perception of warmth and competence) predict perceptions of a hypothetical consumer's degree of *motivation* to engage in VR related services? For this research question, it was hypothesized that all contributing MCM constructs will account for a significant amount of variance related to participant evaluations of the hypothetical consumer's level of motivation.
2. Do the MCM constructs (i.e., counselor-related demographic variables, awareness of attitudes/beliefs, knowledge, skill-behavior, and social-perception of warmth and competence) predict evaluations of a hypothetical consumer's vocational potential to successfully attain full-time competitive employment? For this research question, it was hypothesized that all contributing MCM constructs will account for a significant amount of variance related to CRCs' general evaluation of the hypothetical consumer's potential to attain competitive employment.
3. Do the MCM constructs (i.e., counselor-related demographic variables, awareness of attitudes/beliefs, knowledge, skill-behavior, and social-perception of warmth and competence) predict expectations of a hypothetical consumer's behavior to engage in VR

services? For this research question, it was hypothesized that all contributing MCM constructs will account for a significant amount of variance related to CRCs' expectations of the hypothetical consumer's potential to engage throughout the VR process.

4. Do the MCM constructs (i.e., counselor-related demographic variables, awareness of attitudes/beliefs, knowledge, and social-perception of warmth and competence) predict clinical skill-behavior (as measured by the MITI) towards a hypothetical consumer? For this research question, it was hypothesized that all contributing MCM constructs will account for a significant amount of variance related to participants' clinical skill-behavior (as measured by the MITI) towards the hypothetical consumer.

Sample

The population of interest for this study included Certified Rehabilitation Counselors (CRCs) who currently worked as counselors for a state vocational rehabilitation agency. A random sample of 2,000 CRCs meeting the study's edibility requirements were recruited through the national database of the Commission on Rehabilitation Counselor Certification (CRCC), a private, non-profit database that includes all current CRCs. A total of 220 out of the 2,000 recruited individuals started the survey. Of those who started the survey 167 participants completed the survey. The total response rate was 8.4% (167 out of 2000).

Sample Size. An a priori power analysis was conducted for the total R^2 value for a multiple regression analysis with 13 predictor variables, power equal to .80, and an alpha level of .05. G*Power (Faul, Erdfelder, Lang, & Buchner, 2007), a software tool for a statistical power analysis, yielded a required sample size of 131 for a medium effect size ($f2$ =.15; Cohen, 1988). With 13 predictors in the study, the sample size of 167 was considered sufficient with acceptable statistical power to conduct the statistical analyses. The survey was active for 43 days, from

September 16th, 2014 until October 28th, 2014, when the sample size of over 167 CRCs reached the sampling criterion quota for this study. The research survey, including the IRB approval letter (see Appendix A), letter of research support from the CRCC (see Appendix A.1), email recruitment invitation (see Appendix B), research study information and consent (see Appendix C); and online MCM survey (see Appendix D).

Procedures

Upon receiving approval of the University of Wisconsin-Madison Social and Behavioral Sciences Institutional Review Board (IRB) to conduct this study (see Appendix A), the CRCC assisted the investigator in providing current certificate holders' email addresses in order to recruit interested participants (see Appendix A.1). Prospective participants were sent an email invitation that explained the general purpose and procedures of the study (see Appendix B). Interested participants were invited to learn more about the study with the option of participation in the online survey hosted by *Qualtrics* by clicking on a secured link that directed them to the survey's website. Upon arrival at the survey's website, individuals were instructed to read further information regarding eligibility requirements, the anticipated risks and benefits involved with participation, as well criteria for informed consent (see Appendix C for informed consent form).

To be eligible for inclusion in this study, participants were required to meet the following criteria: (1) hold current certification as a Certified Rehabilitation Counselor (CRC); (2) currently practicing as a rehabilitation counselor in a public state/federal vocational rehabilitation agency; and (3) self-report that they were able to make an independent decision to participate in this study. If the eligibility criteria were met, participants could start the survey. Two reminder emails were sent in weekly intervals to individuals who had not yet started and/or completed the survey and who had not opted out of receiving future emails. Participation required respondents

to complete a set of questionnaires based upon a hypothetical case scenario (see Appendix D) followed by a demographic questionnaire. The survey was expected to take approximately 40-50 minutes to complete. Thanks to the generous support of CRCC, participants were offered one CRC continuing education credit for completing the study, and their contact information was kept confidential by automatically transmitting that information to a file separate from their survey data.

Survey Process. Initially, participants were presented with a content specific derived case scenario (in respect to commonly reported consumer motivational characteristics) that provided minimal information about a hypothetical consumer with intentions to simulate levels of information typically seen prior to an initial VR intake session.

After reading the minimal information about the consumer, participants were asked to respond to 15 brief statements made by the hypothetical consumer to simulate an intake interview. Each of the 15 brief consumer statements attempted to reflect varying levels of the hypothetical consumer's motivation/ambivalence to engage in VR services and/or attain competitive employment. After responding to all 15-consumer statements, participants were then asked to rate their perceptions of the hypothetical consumer in terms of the consumer's degree of (1) warmth and competence (Fiske et al. 2007); (2) motivation; and (3) expectations related to the consumer behavior (Chan, McMahon, Shaw & Lee, 2004); and (4) potential to achieve full-time competitive employment. Within this section, participants were also asked to appraise their own level of self-efficacy (confidence) in their ability to work successfully with the hypothetical consumer in achieving successful employment outcomes, as measured by a modified version of Miller & Rollnick's '*Readiness Ruler*' (2002).

After responding to evaluative questions regarding the hypothetical consumer, participants were then asked to respond to a series of demographic questions that queried general personal, educational, and professional factors (i.e., age, gender, race/ethnicity, employment setting, job title, years of rehabilitation counseling experience, years of counseling experience, years with a CRC credential, exposure to MI). Lastly, to avoid transparency of the study's intent, participants were asked to respond to a series of instruments intended to evoke general attitudes and beliefs regarding 'amotivated' consumers in the context of their VR setting (adapted from Willits, 2009), as well as their current level of job burnout (Maslach, 1999). At the conclusion of the survey, participants were encouraged to complete a request for a continuing education credit after receiving a debriefing statement regarding job burnout in relation to practice. The study's website was designed so that participants were able to take as much time as needed to respond to each question/statement, as well as change their answers once they moved on to subsequent sections. The mean completion time of this study was approximately 24 minutes.

Written Stimulus Information. In order to enhance fidelity of written case materials, actual forms from various agencies were used, except for the represented hypothetical consumer profile (i.e., Devon). As mentioned earlier, participants were presented with a content specific case scenario that was specifically derived in respect to commonly reported consumer motivational characteristics to simulate levels of information and client characteristics typically seen prior to an initial VR intake session. As recommended by Veal (2002), content specific vignettes are based on personal experiences or hypothetical situations that are common occurrences faced by respondents. Reputable vignettes usually introduces a description of the participants operating within a specific setting, an explanation of the problem, a description of

the interacting dimensions found in the setting, a dialogue between participants, and a open-ended event worthy of attention by the respondent. The case scenario derived for this present study was conceptualized upon typical client typologies cited within a review of service related vocational rehabilitation literature (Bolton, et al, 2000; Bordieri, et al, 1989; Chan, et al, 2004; Hayward & Schmidt-Davis, 2003; Lustig, Strauser, Rucker; 2002; Maslach & Florian; 1988), as well as from research associated with the SCM model (i.e., Cuddy, et al, 2007; Harris & Fiske, 2006; Wojciszke, 2005; Wu, Ames, Swencionis & Fiske, in preparation). Additionally, aspects of Motivational Interviewing were taken into account when deriving the 'ambivalent' features of the hypothetic consumer portrayed in the case scenario (i.e., documented and expressed client ambivalence, strengths, weaknesses, preferences, needs, and abilities, etc.).

Whenever possible, the actual forms obtained were de-identified and replaced with fictitious names for both agencies and the hypothetical consumer presented within both conditions to ensure confidentiality. The forms used to present minimal information about the hypothetical consumer include: (a) brief background history and intake scenario, and (b) the 15-brief consumer statements based upon the hypothetical initial interview. The presentation of initial information was intended to leave participants free to speculate about the consumer's presentation of motivational characteristics and behavior. All case materials may be found in Appendices D.

Participant Characteristics

Descriptive data for the participants are presented in Table 3.1. Participants ranged in age from 28 to 69 years (M = 48.63, SD = 10.69); 135 (80.8%) participants were female, 31 (18.6%) were male, and 1 (0.6%) was transgender. Most of the participants identified themselves as White/Caucasian (80.8%), followed by African American or Black (7.8%), while smaller

numbers of participants identified themselves as Multi-racial (4.2%), Hispanic (7.0%), Asian American (3%), and of East Indian decent (0.6%). In regard to work experience, the current or most recent job title category most often selected was 'Rehabilitation Counselor' (66.5%), followed by 'Supervisor Administrator/Manager' (26.3%) and 'Other' (4.8%). A large portion (39.5%) of participants reported having an average active caseload of 100 - 200 consumers, followed by 31.1% with a 51 - 100 consumer caseload; 19.8% with a 0 – 50 consumer caseload, while 5.4% reported having an active caseload of over 300 consumers ($M = 2.72$, $SD = 1.5$).

Most of the participants were trained in a CORE accredited rehabilitation counselor education program (86.8%), with 38.3% having been credentialed as a CRC for over 10 years. The majority of participants (74.3%) had over 10 years counseling experience with people with disabilities. Years working as a rehabilitation counselor ranged from 59.3% of participants having over 10 years of experience to 3% having 1 to 2 years. Approximately 20% of participants reported one additional license or certification beyond a CRC, while approximately 4% held two to four additional credentials ($M = 1.37$, $SD = .67$). Additional credentials ranged from Licensed Professional Counselor (LPC), Licensed Mental Health Counselor (LMHC), Life Care Planning (LCP), Licensed Social Worker (LSW), Certified Rehabilitation Provider (CRP); Certified Public Manager (CPM), Professional Vocational Evaluator (PVE), to Certified Alcohol and Drug Counselor (CAODA), amongst others.

Table 3.1. *Frequencies and Percentages for Participant Demographics*

Demographic	*n*	%	*Mean (SD)*
Age			48.63 (10.69)
Gender	167	100%	
Male	31	18.6	
Female	135	80.8	
Transgender	1	0.6	
Race/Ethnicity *	167	100%	
Hispanic, Latino, or Spanish	6	3.6	
Black/African American	13	7.8	
East Indian	1	0.6	
White/Caucasian	135	80.8	
Asian or Asian-American	5	3.0	
Multiracial	7	4.2	
Counselor Experience (*Working with people with disabilities*)	167	100%	
3 to 5 years	10	6.0	
6 to 10 years	33	19.8	
More than 10 years	124	74.3	
Years of experience in rehabilitation counseling	167	100%	
Less than 1 year	1	0.6	
1 to 2 years	5	3.0	
3 to 5 years	20	12.0	
6 to 10 years	42	25.1	
More than 10 years	99	59.3	
Years as a CRC	167	100%	
Less than 1 year	9	5.4	
1 to 2 years	22	13.2	
3 to 5 years	23	13.8	
6 to 10 years	49	29.3	
More than 10 years	64	38.3	
CRC Theoretical Orientation	167	100%	
Person-Centered	83	49.7	
Behavioral	22	13.2	
Eclectic	28	16.8	
Humanistic/Existential	10	6.0	

Interpersonal	11	6.6
Psycho-dynamic/Psychoanalytic	1	0.6
Systems	4	2.4
Reality	4	2.4
Other	4	2.4
Trained in a CORE accredited rehabilitation education program	167	100%
Yes	145	86.8
No	21	12.6
Unsure	1	0.6
Job Title	167	100%
Rehabilitation counselor	111	66.5
Job Placement Specialist	4	2.4
Supervisor Administrator/manager	44	26.3
Other	8	4.8
Work area	165	100%
Urban Area (> 50,000 < 100,000)	72	43.1
Metropolitan (> 100,000 people)	48	28.7
Suburban Area (> 25,000)	25	15.0
Rural Area (< 2,500 people)	22	13.2
Licensures	167	100%
Only CRC	121	72.5
CRC + 1 additional license	34	20.4
CRC + 2 additional licenses	9	2.4
CRC > 4 additional licenses	3	1.8
Average Caseload	167	100%
0 - 50 consumers	33	19.8
51 - 100 consumers	52	31.1
101 - 150 consumers	45	26.9
151 - 200 consumers	21	12.6
201 - 250 consumers	6	3.6
251 - 300 consumers	1	0.6
> 300 consumers	9	5.4

Note. Percentages may not add up to 100 due to rounding error or missing values.
*Participants were given options to select multiple responses for these questions.

Measures and Instrumentation of Motivational Competency

This study intended to learn whether attitudes/beliefs would predict participants' evaluations and behavioral reactions to a hypothetical consumer. The investigator for this study created a new survey instrument specific to the theoretical domains of the proposed Motivational Competency Model in attempts to best capture self-reported perceptions of attitudes/belief and knowledge associated with motivational factors, as well as objective measurement of participant behavior based upon responses to the hypothetical consumers' statements of change, as the literature contends that such item content is largely missing from both MCC surveys, stereotype-bias, and controlled studies of motivation and engagement (Dovidio & Fiske, 2012; Katz & Hoyt, 2014; Moyers & Miller, 1993; Rogers, 1948). Therefore, the current study assessed not only self-reported motivational competency, but also counselor bias toward consumers that may present with stereotypical motivational problems using implicit measures, which assess attitudes indirectly and do not rely on conscious introspection. Some instruments were modified or developed; not only for brevity but also in theoretical coordination with specific constructs this study intended to measure. Details and descriptions of all measurement instruments used in this study are discussed in the following sections. Key indicators of the quality of the measurements (e.g., reliability and validity) of the measures are provided.

Demographics Questionnaire

The following demographic and background data were gathered from each participant. The questionnaire requested information regarding age, gender, race/ethnicity, region of the country, employment setting, job title, years of rehabilitation counseling experience, years of counseling experience, years with a CRC credential, hours of MI education or training completed, whether trained as a rehabilitation counselor in an accredited program, and degree of

satisfaction with current career. Age was assessed as a continuous variable by having the participant report their chronological age by year born, which was then recoded into years. Gender was assessed as a categorical variable by having the participant report whether they was male, female, or transgender. This variable was dummy coded for the statistical analysis (i.e., 1 = male, 2 = female, and 3 = transgendered). Due to the homogeneity in sample proportions of women verses other genders within this study, this variable was not included in the multiple regression analyses. This questionnaire was created specifically for use in this study. See Appendix D for a copy of the survey, which includes described demographic variables.

Caseload Size. Within the present study, caseload size was assessed as a continuous variable using a single-item response. Participants were asked to indicate on average how many consumers are currently on their caseload. The scoring for this item was represented by the numerical value specified by the participant within a choice of given ranges.

Caseload composition. In regard to this present study, disability type appears to be a relevant factor contributing to CRC attitude formation and behavior and will be assessed as a categorical variable where participants were asked to identify the disability group they primarily serve. The five response choices included physical disabilities, sensory disabilities, cognitive disabilities, psychiatric disabilities, and other. Unfortunately, due to investigator error in constructing this question within the survey, this variable was not analyzed and thus, not included within the final analysis or results of this study.

Certification/Licensure. As per the eligibility criteria, all participants were required hold current certification as a Certified Rehabilitation Counselor (CRC). Within this present survey, participants were asked to identify the number of additional licensures or certifications that they currently held beyond the CRC. The response choices included the following: (a)

Licensed Professional Counselor (LPC); (b) Certified Alcohol and Drug Abuse Counselor (CADAC); (c) Certified Career Counselor (CCC); (d) Certified Clinical Mental Health Counselor (CCMHC); (e) National Certified Career Counselor (NCCC); (f) State Counselor Licensure; (g) Only CRC; and (h) other (respondents were provided a space to identify additional certifications/licensures not listed).

Years as a rehabilitation counselor (RC). Although Lambert et al (2004) suggests that counselor years of experience is a weak predictor of outcomes, other research suggests that counselors have an immediate pre-reflective response to ethical and clinical decision making on the basis of the sum of their prior knowledge and experience" (p. 12, Kitchener, 2000). This variable was recorded by asking a single item question, *"How many years and months have you worked as a Rehabilitation Counselor?"* with the following response categories: 0 = '*Less than one year'*; 1 = *1 to 2 years*; 3 = *3 to 5 year*s; 4 = *6 to 10 years*; and 5 = *more than 10 years*.

Types of training. CORE accredited rehabilitation counseling programs teach counseling theories and techniques that emphasize theoretical practices pertaining to developing clinical competency in recognizing and responding to consumer assets, limitation, and preferences related to employment. Perceptions related to knowledge attained through types of training appear to be a relevant factor cited within the rehabilitation literature (Fleming et al, 2012). Participants were asked to respond with (a) yes; (b) no; or (c) unsure to the following question, "*Were you formally trained as a rehabilitation counselor in an accredited rehabilitation education program*? Due to the homogeneity in sample proportions of CRCs trained in CORE accredited programs within this study, this variable was not included in the multiple regression analyses.

Primary Study Variables

The proposed model of Motivational Competency included 13 primary predictor variables as measured by self-report instruments. Aggregated descriptive information (e.g., frequency, central tendency) and group difference testing results for each variable were presented as follows and can be found in Table 3.2. The criterion variables investigated in this study were counselors' evaluation of a hypothetical consumer's potential in participating in VR service delivery in attaining successful employment outcomes and skill-behavior. For the primary (evaluation) criteria, the predictor variables comprised the five major components proposed in the MCM framework: (a) demographic variables; (b) awareness of attitudes/beliefs (c) knowledge; (d) skill-behavior; and (e) perception of warmth and competence). For the expanded MCM model, the predictor variables comprised of four out of the five major components proposed in the MCM framework: (a) demographic variables; (b) awareness of attitudes/beliefs (c) knowledge; (d) perception of warmth and competence).

Table 3.2
Descriptive Statistics for Study Measures ($N = 167$)

Construct	Instrument	Response Range	Mean	SD	Item Means	*SD*	*a*
Participant Demographics:	• Age • Years worked as RC • Caseload Size • Licensure(s)	------	48.3 3.4 2.7 1.4	(10.7) (0.9) (1.5) (0.7)			------
Awareness of Attitudes/Beliefs	• T.O. Person Centered • Modified MI Survey (7) • Maslach Burnout (22) – EE (9) – DP (5) – PA (8)	0-1 0-6 (0-35) (0-54) (0-30) (0-48)	0.5 19.3 18.3 5.2 40.3	(0.54) (4.3) (11.6) (4.6) (6.1)	 (2.8) 2.0 1.0 5.0	 (1.0) (1.7) (1.3) (1.2)	------ .72 .91 .72 .81
Knowledge/Training	Exposure to MI Survey (6)	(1-6)	1.8	(1.7)	(1.8)	(1.7)	------
Skill-behavior	• MI-Adherent (MiA) – The (MITI) Scale – (see table 3.7 for scores)	*15-item response*	48.4	(35.6)	1.5	(1.4)	(ICC) .81
Social Perception (Stereotype Bias)	• Stereotype Content Model (SCM) • *Warmth (10)* • *Competence (15)*	1-7 (0-70) (0-105)	 40.0 58.1	 (6.7) (11.0)	 3.9 4.1	 (1.2) (1.2)	.89 .81 .91
Outcome Variables							
Evaluation of Motivation	• Motivational Capacity Ruler (MCR) (1)	0-7			3.24	(1.2)	.71
Evaluation of consumer employment potential (VR)	• Potential Employment Ruler (PER) (1)	0-7			3.0	(1.6)	.70
Expectations about consumer behaviors	• (EARC) (8)	0 -5 (0-40)	25.5	(5.4)	3.2	(0.7)	.91
*Skill-behavior	• MI-Adherent (MiA)	*15-item response*	48.4	(35.6)	1.5	(1.4)	(ICC) .81

Attitudes and Beliefs

The measurement of participants' *Attitudes/Beliefs* within the MCM framework aims at understanding counselors' awareness of their own assumptions, values, and biases related to motivation and work, while simultaneously examining counselor awareness and behavioral responses to the presentation of consumer-related motivational factors. Pervasive and/or stereotypic attitudes held by clinical professionals have been shown to limit the clinician's diagnostic, assessment, and therapeutic abilities (Kurtz M, Johnson S, Tomlinson T, Fiel, 1985; Peyton, Chaddick & Chaddick & Gorsuck, 1980; O'Neill (1997). When consumers are viewed primarily from a deficit perspective (e.g., malingerer; lacking insight, knowledge, and skills), counselors may be inclined to judge the potential of the consumer prematurely, which has shown to result in negative working alliance, low-service adherence, pre-mature service termination (Dividio & Fiske, 2012), and job burnout.

Theoretical orientation. This is a single-item question located within the demographic questionnaire that asked participants to select one counseling orientation out of 10 choices to which they consider themselves most aligned (e.g., Person-centered, Cognitive-Behavioral, Interpersonal, Behavioral). Due to the homogeneity of scores representing theoretical orientation aligned with Person-centered, this variable was re-coded using the whole sample as a single group (i.e., 1 = person-centered, 2 = other).

Motivational Attitude. The Modified Motivational Interview Survey [MMIS] developed by Willits, Albright, Broidy & Lyons (2009) is 14-item measure that was initially developed as a pre-post instrument to evaluate the effectiveness MI training sessions for the substance abuse division of the New Mexico Department of Corrections (NMDOC) Education Bureau. The MMIS has subsequently been used to assess nurses' attitudes, ability, confidence, and conviction

in using MI to modify patient behavior (O'Brien, 2013). Each item is rated on a 5-point Likert scale (1=strong disagree to 5=strongly agree). The Psychometric properties of this survey were well supported through high internal consistency reliabilities as seen in Willits et al.'s (2009) study. Relevant to this current study, Willits et al.'s (2009) provided pre-post training data to represent the distribution of responses for each of the MMIS questions, which provided inferences about participants' attitudes and knowledge related to motivational constructs, perceptions of correctional clients, value and use of motivational interviewing, as well as more detailed statements about how these perceptions vary across gender, level of education, level of experience, and job type of respondents.

A modified version of Willits et al.'s (2009) initial survey was developed for this study to include questions about VR practitioner's attitudes and knowledge related to motivational constructs, perceptions of VR consumers, and value and use of motivational interviewing (see Appendix D). Six additional items were added to the measure by the investigator of this study and included in the final analysis, which included items: [#9} 'Most of the consumers on my caseload are on time to our sessions'; [#10]: 'Only motivated consumers respond favorably to service provision'; [#11] Unmotivated consumers rarely improve with VR services; [#12]: VR counselors often miss important motivational characteristics in their clients; [#13] Motivational problems are almost always caused by an underlying psychiatric disorder'; and [#14]: 'I am satisfied with my ability in working with consumers with motivational problems'. Because the original MMIS only produces single item correlation scores to represent changes from pre-post trainings, the investigator of this study conducted an inter-item correlation analysis to determine items that best measured the construct of 'Motivational Attitudes'. Results determined that seven out of the 20 items of the modified survey were retained (2, 4, 7, 8,10, 11, 12) retained due to

item-total correlations ranging from above 0.3. The overall Cronbach's alpha for the selected 7-items of 'Motivational Attitude' subscale used in this study was considered 'good' at .72 (Kline, 1999).

Job burnout. Maslach's Burnout Inventory (MBI) (Maslach & Jackson, 1986) was used in this present study to assess for the presence of job burnout related to attitudes-beliefs of vocational rehabilitation working with consumers with disabilities (Appendix D). The 22-item inventory measures three dimensions of burnout on a 6-point Likert scale including: (1) Emotional Exhaustion measured by 9-items; (2) Depersonalization: measured by 5-items; and (3) Personal Accomplishment: measured by 8-items. Participants were asked to respond about how often they experience feeling burnout related items on a 5-point Likert-type scale. For example, on a 5-point scale, where 0 = *Never*, and 5 = *Everyday*, participants were as how often they '*feel frustrated by their job'* or how often they '*feel exhilarated after working closely with their consumers*'.

Because job burnout is a multidimensional construct, the MBI is not designed to create one overall composite score. Instead, the three scales scores are summed for separately in an additive manner to measure levels of job burnout along a continuum, with mean scores representing separate high, moderate, or low degrees of burnout for each domain and (Maslach, Jackson, & Leiter, 1996). Higher sub-scale scores in Emotional Exhaustion (EE) (range = 0-54) and Depersonalization (DP) (range: 0-3) correspond to higher degrees of perceived burnout. For example, Emotional Exhaustion scores falling between 0 – 16 = low emotional exhaustion; 17—26 = moderate emotional exhaustion; and 27 and above = high emotional exhaustion. Similarly, scores for Depersonalization that fall between 0 - 6 = low depersonalization; scores within 7 - 12 = moderate depersonalization; and scores >12 = high depersonalization. However, the Personal

Accomplishment sub-scale (range: 48-0), is inversely interpreted, with higher mean scores indicative of a higher sense of self-efficacy and lower job perceived job burnout (high PA; > 39); (moderate PA; 38 to 32); and (low PA; 0 – 31). Research by Maslach (1996) reported the reliability coefficients (Cronbach's alpha) for Emotional Exhaustion (EE) = .91; Depersonalization (DP) .80 and Personal Accomplishment (PA) = .71. Coefficient alpha reliability estimates based on the responses of the sample in the present study were similar; Emotional Exhaustion (EE) = .91; Depersonalization (DP) = .72; and Personal Accomplishment (PA) = .81.

Knowledge

Therapeutic process research suggests that practitioner exposure and training in MI helps clients resolve their own ambivalence by voicing their own, rather than the counselors' arguments for change (Amrhein et al., 2003). Client arguments or verbalizations for change are commonly termed "change talk," and provide signals about the client's desire, ability, reasons, need, or commitment to change (Miller & Rollnick, 2002). Psycholinguistic analyses of MI session transcripts have recognized the importance of client change talk as a mediator of client behavior change in outcomes (Amrhein et al., 2003). Further MI research has generated convincing support for practitioners to develop their ability to recognize and strategically attend to client expressed language and motivational influencers (Miller & Rose, 2009). Thus, motivational competence requires practitioners to accurately identify and differentiate change talk as it naturally occurs in the context of the client's ambivalence. If unable to recognize change talk when it occurs, the practitioner cannot reinforce and shape it toward commitment. Similarly, without being able to recognize commitment language and differentiate it from change talk, the practitioner may miss key cues of readiness for change (Apodaca & Longabaugh, 2009).

Exposure to motivational interviewing. MI training was used as the unique variable within the analysis of this study to represent the knowledge domain, as research has yet to delineate if trainings in MI are associated with raising counselor awareness of motivational factors related to counselor bias and behaviors. The Exposure to Motivational Interviewing (EMI) questionnaire was created specifically for use in this study in order to ascertain if participants' degree of training or acquired knowledge about MI is related to their attitudes-beliefs, perceptions of warmth and competence, and skill-behavior. Criteria were developed based on the Miller and Moyers (2006) model of eight stages of learning MI. Dimensions of MI exposure were measured on a 6-point Likert scale that asked participants to identify the amount and types of training they have received in MI, and to indicate whether specific trainings attended were conducted by a member of the Motivational Interviewing Network of Trainers (MINT).

The EMI instrument began by asking participants if they had ever heard of Motivational Interviewing by selecting either (a) yes, or (b) no. The Qualtrics survey was created to automatically progress participants to the next section of the survey if they answered 'no'. Participants that answered 'yes' were able to proceed to the remaining questions in identifying their participation in specific levels of MI training (e.g., introductory, intermediate, advanced). Descriptions of training levels and activities corresponded with Miller and Moyers (2006) model of eight stages of learning MI, and were based on descriptions available on the MINT website (MINT, 2009). Participants' responses were tallied and recoded to reflect the highest level of training participation with items ranging from 0 to 6 (i.e., 0 = No MI training; 1 = MI self study; 2 = Introduction to MI; 3 = MI Basics; 4 = Intermediate to Advanced MI; 5 = Ongoing MI supervision; 6 = MINT or Advanced Supervision MI training). Basic descriptive analyses were

conducted with these data. Data collected regarding whether a member of the Motivational Interviewing Network of Trainers (MINT) conducted specific trainings was not included within the analysis of this present study.

Social Perception

Rehabilitation professionals frequently evaluate clients through subjective perceptions in terms of consumer presentation or known personal factors at the time of intake. Throughout the rehabilitation literature, perception appears to strongly influence practitioner decision-making and interactions with consumers (Drieschner, Lammers, van der Staak, 2002; MacLean and Pound (2000). Participant perceptions of the hypothetical consumer were hypothesized to contribute significantly to both criterion constructs of (a) evaluation and (b) behavior. The semantic differential technique has been shown to be a reliably and valid method of observing and measuring the psychological meaning of sociological and individual perceptions (Kerlinger, 1964). Osgood et al. (1957) define the semantic differential method as a combination of controlled association and scaling procedures. Participants are provided a concept to be rated (i.e., in this study "the consumer"), using a set of antonym adjectives. The participants were asked to rate the direction and intensity of each response on a seven-point scale using instructions recommended by Osgood et al. Through a series of factor analyses, Osgood et al. found that the antonym adjective pairs like 'good – bad', 'heavy-light', and 'active-passive' fell into descriptive clusters. The primary cluster of importance seemed to consist of adjectives that were evaluative, such as 'good-bad, 'clean-dirty'. Osgood et al. identified the second and most significant clusters as potency (strength) and activity (motion and action).

Stereotype Content Model (SCM). Examining disability stereotype bias in the context of SCM may prove particularly informative. Perception of warmth and competence has been

shown to predict behavior with respect to stereotyped groups (Fiske, Cuddy, & Glick, 2007; Fiske, Cuddy, Glick, & Xu, 2002). The *warmth* dimension includes judgments about the others' degree of friendliness, helpfulness, sincerity, trustworthiness and morality. The *competence* dimension includes relative evaluations of other's intelligence, skill, creativity, etc. (Fiske, et al, 2007). A recent study using Fiske's competence scale found a significant interaction effect between competence and stereotypical perceptions of people with disabilities, and participant race and ethnicity, (25.292)=2.276, $p<0.0001$ (Boardman, 2012). The SCM model evaluates stereotypes uses similar methodology to Osgood's sematic differential technique, which parses participant responses into four value-laden categories of perceptions about the judged subjects(s): "Pride" (high warmth, high competence); "Disgust" (low warmth, low competence); "Envy" (low warmth, high competence); and "Paternalistic" (high warmth, low competence) (Fiske et al. 2002). According to the theory of the SCM, *warmth* and *competence* should be interrelated. In the model, perceptions of warmth allow the perceiver to make inferences about another's intentions, while competence judgments access another's ability to carry out their intentions (Fiske, Cuddy, & Glick, 2007). Thus, some dimensions of competence may be associated with evaluative processes when making complex warmth decisions.

The evaluation clusters of both warmth and competence factors represent the attitudinal component of semantic meaning, shown to significantly predict stereotype bias and related behaviors (Fiske, 2012) and was a considerable factor of interest in relation to the dependent measures used in the present study. The specific antonym adjective pairs used in the study have been purposefully selected from those pairs with high factor loadings from in the Osgood el al. (1957) 'evaluation' factor (pp. 53-55), which also corresponds to related descriptive factors of warmth and competence within the SCM (Kervyn, Fiske, & Yzerbyt, 2013).

The SCM measures degrees of warmth and competence along a continuum. Perception within this study was assessed by asking participants to rate they hypothetical consumer using a sematic differential technique, with adjective pairs adapted from previous research by Rosenberg et al (1968), and the SCM representing the participants' perceptions of *warmth* and *competence* dimensions (Fiske el al. 2007; Kervyn et al., 2013; Osgood, Suci, & Tannebaum, 1957). Participants were asked to rate their general perceptions of the hypothetical based upon their initial impressions given their review of the presented case information and after completing their responses to the 15 statements (expressed by the hypothetical consumer intended to simulate an interaction during an intake meeting).

Both warmth and competence responses were measured on a 1 to 7 point scale representing points along the continuum that best described participants' perceptions of the hypothetical consumer between the two bi-polar adjective-antonym pair of words. For each of the adjective pairs, participants were asked to rate their perceptions by selecting any point along the continuum that best described their impressions of 'Devon' (the hypothetical consumer; i.e., 1 = 'Cold' and 7 = Warm; 1 = Competent and 7 = Incompetent'). The scores representing warmth (10-items) and competence (15-items) within this survey were summed separately to produce two distinct scores, with higher mean scores representing more positive perceptions of warmth (range: 0 – 70) and competence (range: 0 – 105).

Since this measure was developed specifically for this study, items were examined to identify any that might be deleted in order to improve internal consistency of the measure as a whole. Results revealed acceptable to good internal consistency and reliability across all adjective pairs used in this survey to represent the two separate dimensions of warmth (10-items = 0.756) and competence (15-items = 0.868).

Skill-Behavior

The Skill domain of the proposed Motivational Competency Model (MCM) aims to assess practitioners' ability to effectively elicit client's own internal motivation for change by accurately responding to motivational indicators presented by consumers throughout the rehabilitation process. In order to measure the clinicians' level of competence in delivering an intervention, it is necessary to conduct treatment integrity appraisals that will delineate active therapeutic processes and fidelity variables sufficient to reliably distinguish treatments from each other (Waltz, Addis, Koerner, & Jacobson, 1993). For the purposes of this study, Skill-Behavior was measured through a performance-based assessment based on the hypothetical consumer case scenario and 15-consumer statements. A performance-based assessment measure evaluates the application of knowledge and skills through the performance of a task meaningful to the learner and related constructs being measured. In research and practice, this type of assessment provides valuable information for both the counselors' that are evaluated, as well as for the trainers in understanding of how the trainee understands and applies knowledge (Rudner & Schafer, 2002). The MITI 3.1 was chosen to measure the basic counseling and interview skills mandated by such specialized higher education accreditation organizations, such as The Council on Rehabilitation Education (CORE) (see C.5.3.c. apply basic counseling and interviewing skills (CORE, 2013).

The MITI. The 15-item written responses to the hypothetical consumer's expressed ambivalence about attaining competitive employment was measured using Motivational Interviewing Treatment Integrity (MITI) code, Version 3.1 (Moyers, Martin, Manuel, Hendrickson, & Miller, 2005). The MITI is the standardized MI rating system most often used in scientific MI literature as it focuses exclusively on therapist functioning to elicit client behavior change, and has been shown to yield reliable estimates of MI proficiency that predict

client outcome (Moyers et al, 2005). The MITI has been shown to be a valuable baseline measure to provide information regarding the quality of the clinician's overall interpersonal skills and strategic us use of MI (Carroll, Connors, & Cooney, 1998; Resko, Walton, Chermack, Blow, & Cunningham (2012). The MITI is a condensed, reliable, and economic scale used to assess MI integrity in training, clinical, and research settings. Because the MITI has shown to delineate behavior count rules within a reliable coding system (Moyers et al, 20056), and focuses measurement to include only clinician behaviors and responses towards the client, it has proven to be a useful evidence-based tool for measuring foundational or entry-level competence in MI, rather than advanced or expert skills. Although Moyers et al (2010) recommends the MITI to assess a random 20-minute therapeutic selection within a counseling session, this study applied the MITI 3.1 coding system to evaluated 167 transcribed participant responses to the 15-consumer statements representing a simulated case scenario to determine the degree to which participants are proficient in applying certain skills and knowledge [i.e., Motivational Competence] (Rudner & Schafer, 2002). Please see Appendix D for entire case scenario and 15-consumer responses.

The MITI quantifies clinicians' response or behavior towards a client through the assessment of the clinician's 'Global Spirit' which is a composite average of three evaluation ratings along a 5-point Likert scale: (1) Evocation, (2) Collaboration, and (3) Autonomy/Support, and 5 therapist behavior counts: (a) giving information (GI); (b) Questions, split into Open-ended (OQ) and Closed (CQ); Reflections, split into Simple (SR) and Complex (CR); MI Adherent (MiA); and MI Non-adherent (MiNa) behaviors. The MITI's Global Spirit scale represents the broader domain of Working Alliance and is parsed into five separate, but distinct constructs; (a) Evocation, (b) Collaboration, (c) Autonomy/Support, (d) Direction, and (e) Empathy; however,

only Evocation, Collaboration, and Autonomy/Support are averaged together to create the Global Spirit Score. Global scores and behavior counts may then be combined into summary scores for which expert opinions are established for proficiency cut-offs (Moyers, Martin, Manual, Miller, & Ernst, 2009).

Reliability estimates for the MITI. Moyers et al. (2005) used an exploratory factor analysis (EFA) of the Motivational Interviewing Skills Code (MISC) to test loading factors of 624 20-minute segments of audiotaped therapy sessions (using the parent instrument that measures both counselor and client interactions). Rating scores were delineated to reflect predominant clinician factors of functioning used in the MITI. Out of the original group of 624 coded tapes, Moyers et al (2005), randomly selected 50 session tapes and had them coded by independent raters to assess interrater reliability using Cicchetti's (1994) categorization system for evaluating the usefulness of clinical instruments, using the intra-class correlation coefficient (ICC). The ICC averages range from: poor (< .40), fair (.40 to .59); good (.60 to .74); and excellent (.75 to 1.00). Moyer's et al. results found ICC correlations fluctuated from .5184 (empathy/understanding) to .9681 (closed questions), with 70% of ratings found to be within the 'excellent' range. However, results from this study and in a subsequent study by Forsberg and associates (2008) found that the experience of the coder influences reliability rates, with noticeably higher correlations found in more experienced coder pairings compared to less experienced rater pairings. Moyers and associates (2005) recommend that in order to gain the most reliable results from the MITI, raters should participate in a MITI training course and demonstrate inter-rater agreement with an established rater overtime. Inter-rater reliability estimates are presented in Table 3.3.

Table 3.3 Reliability estimates for the MITI (Moyers, Martin, Manuel, Hendrickson, & Miller, 2005).

MITI Scales	ICC	Lower	Upper	α	r1–2	r1–3	r2–3
Global Spirit Ratings = [Evocation + Collaboration + Autonomy/Support]							
Global Spirit	0.5846	0.4303	0.7195	0.8085	0.6543	0.4861	0.6117
Behavior Counts							
Giving Information	0.758	0.6471	0.8446	0.9038	0.7544	0.7306	0.7927
MI Adherent	0.8092	0.7165	0.8793	0.9271	0.8451	0.7816	0.8202
MI Non-adherent	0.7505	0.6371	0.8394	0.9002	0.8408	0.7315	0.7418
Closed Question	0.9681	0.9496	0.9807	0.9891	0.9791	0.9772	0.9588
Open Question	0.9389	0.9046	0.9627	0.9788	0.9619	0.9311	0.944
Simple Reflection	0.8126	0.7212	0.8815	0.9286	0.8396	0.8094	0.8133
Complex Reflection	0.5764	0.4207	0.7132	0.8032	0.7187	0.6325	0.5154
Total Reflection	0.8592	0.7868	0.9121	0.9482	0.897	0.8646	0.8784

*Note. Inter-rater reliability estimates for the MITI. ICC refers to the intra-class correlation coefficient of three independent raters. Lower refers to the lower 95 percent confidence interval of the ICC. Upper refers to the upper 95 percent confidence interval, α refers to Cronbach's alpha for three independent coders. *r* refers to the Pearson Product moment and subscripts refer to specific coder pairs (as cited from Moyers, Martin, Manuel, Hendrickson, & Miller, 2005).

Estimates of sensitivity. Moyers et al. (2005) also measured the MITI's sensitivity in detecting changes in clinician behavior, which was assessed by evaluating 20 pairs of pre-post (baseline–post training) coded tapes. To obtain this subsample, all available partner tapes were coded (pre or post) for any tape already coded in the reliability sample, which totaled 18 pre-post pairs. Two additional pairs (four tapes) were randomly selected from the original paired sample. Differences between baseline and post-training sessions on all items were assessed with paired

sample t-tests. Compared to the baseline tapes, therapists after training were rated significantly higher in both empathy, $t(18) = 5.99$, $p < .0005$, and spirit, $t(19) = 4.94$, $p < .0005$. Of further significance, there were proportionately more complex reflections noted after training, $t(19) = 3.73$, $p = .001$. Lastly, summary measures varied significantly between baseline and post-training. There were more total reflections, $t(19) = 2.60$, $p = .018$, a higher reflection to question ratio, $t(19) = 3.01$, $p = .007$, and a higher percentage of complex reflections, $t(19) = 2.35$, $p = .03$, after training than at baseline. These findings represent key indicators of MI fidelity and were supported in previous studies to estimate other MI fidelity measures (Miller, Moyers, Martinez, & Pirritano, 2004).

MITI Limitations. Although Miller and Rollncik (1991) suggest that low patient motivation can be thought of as a clinician deficit, the MITI's exclusive focus on therapist competence may perpetuate the myth of the 'therapist as hero' (Bohart, 2000). Mediating client variables are only inferred and not examined in the MITI to indicate how they might influence the process of the MI session or enhance clinician functioning. When needing to more throughout examine how MI works as it does, the use of the MISC will remain a superior choice to the MITI. The MITI is also limited in its ability to gather outlying contextual information that may influence the therapeutic process, since it only captures how well the clinician is using core elements of particular MI strategies. Similar to other coding systems, the MITI not only overlooks the context in which the therapy occurs, it may also be subjected to clinician bias in managing the choice and client within a particular coded segment (Waltz, Addis, Koerner, & Jacobson, 1993). This is important when considering the use of the MITI as a tool to effectively validate empirical research, and during clinical training/supervision. Furthermore, because ambivalent and unmotivated clients may be complex, the MITI may underestimate the ability of

the therapist to use MI, thus several samples of clinician behavior across client caseload will be needed to draw more accurate conclusions about competence. Finally, although the MITI is effective in measuring MI-relevant clinician attributes (such as empathy) and the use of microskills [such as using open rather than closed questions), the intentional and strategic use of MI principles is not as well captured (i.e., a focus on the discrepancy between client behaviors and values, encouraging confidence, and non-confrontational responses to resistance] (Moyers, et, al. 2005).

MITI Scoring Guidelines and Summary Scores

In order to measure the clinicians' level of competence in delivering an intervention, it is necessary to conduct treatment integrity appraisals that will delineate active therapeutic processes and fidelity variables sufficient to reliably distinguish treatments from each other (Waltz, Addis, Koerner, & Jacobson, 1993). Mounting empirical evidence shows that MI can be reliably differentiated from other treatments by measuring either discrete events or a percentage of the therapist's behavior that is consistent with MI. The difficulty involved in identifying competence in the practice of MI is not surprising given the explicit emphasis involved the *spirit* of the method rather than the techniques that comprise it (Moyers, in press and Rollnick & Miller, 1995). Clinician attributes such as empathy and egalitarianism are presumed active ingredients known to influence behavior change within MI, but can be difficult to measure reliably, while more technical elements observed within the counselors ability to evoke change talk through asking strategic open-ended questions and/or offering complex and affirmative statements are somewhat easier to quantify.

MI fidelity. Rigorous MI measurement is crucial to enable research and practice trust practitioners' proficiency in implementing MI to ensure the fidelity to the integrity of MI. MITI

behavior count ratings are categorized by the decision rules ascribed to each behavior count listed in the *Revised global scales: Motivational interviewing treatment integrity 3.1.1 (MITI 3.0)* Manual by Moyers, Martin, Manuel, Miller, & Ernst (2007). It is recommended that coders not only have extensive experience in practicing MI proficiently with clients, but also are sufficiently trained in MITI coding and supervision by members of the Motivational Interviewing Network of Trainers (MINT). The MINT organization is the only recognized organization in the world who sets the standard for Motivational Interviewing training and trainers. See table 3.6 for MI Beginning Proficiency and Competency thresholds (Moyers et al., 2010*)*.

Global Spirit Ratings. The MITI's Global Spirit scale represents the broader domain of Working Alliance and is parsed into five separate, but distinct constructs; (a) Evocation; (b) Collaboration; (c) Autonomy/Support; (d) Direction; and (e) Empathy. The Spirit rating is intended to measure the 'gestalt' or overall extent to which the practitioner conveys an accurate understanding of the client's predicament regarding behavior change, while at the same time, affirms the client's autonomy and control in making self-efficacious decisions and actions towards change. In essence, the practitioner allows the client to be the best 'expert' and change agent of his/her own life by evoking the client's own desire, ability, reason, and need for change relevant to the target goal. Each global measure is rated by assigning a single number from a five-point scale to characterize the entire interaction. Based on the rater's overall impression of the session, a rating from 1 (low) to 5 (high) is made on five areas of MI spirit and practice. However, the MITI 3.1 primarily derives the global spirit ratings by averaging only three out of the five global constructs: (1) Evocation; (2) Collaboration; (3) Autonomy/Support to determine basic proficiency (M >3.5) or competency (M > 4) levels. See Table 3.4 for MI skill thresholds.

Table 3.4 *MI Beginning Proficiency and Competency Thresholds (Moyers et al., 2010)*

MITI Behavior-Count or Summary Score of MI Thresholds	Low MI-Proficiency n (%)	Beginning Proficiency	Competency
Global MI Spirit Ratings	Average of <3.5	Average of 3.5	Average of 4
Behavior Counts			
Reflections to Questions Ratio (R:Q)	< 1	1	*2*
Giving Information (GI)	---	---	---
Percent Open Questions (%OC)	< 50%	50%	*70%*
Percent MI-Adherent (%MIA)	< 90%	90%	*100%*
Percent Complex Reflections (%CR)	< 40%	40%	*50%*
Percent MI-Non-Adherent (%MiNa)	> 10%	10%	*< 10%*

Clinician Behavior Counts. Raters count specific MI behaviors (i.e., open-ended/close-ended questions, simple/complex reflections, and MiA/MiNa), as well as Giving Information (i.e., asking permission prior to giving information/advice). Each behavior count is subsequently tallied and converted them into ratios or percentage values, (i.e., reflection to question ratio). The MITI 3.1.1 manual (Moyers et al., 2009) provided score thresholds that are suggested for beginning proficiency and competency in MI.

Reflections to Questions Ratio (R:Q). Questions are sub-classified as closed questions and/or open questions. Research has demonstrated that counselors who rely on asking series of questions (especially closed-ended questions), instead of following with accurate empathetic listening has been shown to actually evoke client defensiveness, while active listening enhances the therapeutic alliance by lowering resistance through communicating with understanding and respect, which reinforces motivation (Miller et al., 1992; Norcross & Wampold, 2011). Skillful counselors (not just in MI) are shown to ask on average, one question per every two to three empathetic reflections (Miller & Rollnick, 2013, Tollison, Lee, Neighbors, Neil, Olson, & Larimer, 2008; Cormier, Nurius, & Osborn (2009). For basic MI proficiency, it is recommended

that for every question asked, a reflective listening statement be offered on average to achieve a one-to-one ratio of questions to reflections. This ratio is calculated by dividing the total number of questions into the number of total reflections. For example, a one-to-one ratio score of "1.0" on this scale means that for every 10 questions asked, 10 reflections were offered; a score of ".70" means that for every 10 questions, 7 reflections were offered, and so on.

*Open questions***.** The percentage of open questions is calculated by taking the number of open questions asked divided by the total number of questions asked (closed questions + open questions). Open questions are questions that leave room for the client to share or elaborate their experience, perspective, or ideas (i.e., '*What are your concerns about getting a job*?'; '*What do you think is holding you back from pursuing that interview'?;'Where do you see yourself if the disability (SSDI)goes through?'*). Closed questions have been shown to lead to shorter, often one word responses; [i.e*., 'How are you feeling?'; 'If your disability goes through, are you still wanting to find work?';* or, '*So you are not interested in working?']*.

Simple and Complex Reflections. Reflections are a form of active listening in the form of making meaningful responses to client statements. This category classifies reflections as simple and complex Simple reflections convey basic understanding, but do not necessarily capture the deeper elements of client motivation, such as values, needs, and client/clinician exchanges. Whereas complex reflections convey a deeper understanding of the client's point of view, not just what has been explicitly stated, but what the client means but has not explicitly stated. Complex reflections demonstrate an accurate understanding of the client's perceptions, situation, meaning, and feelings.

MI non-adherent behaviors (MiNa): MiNa behaviors are more indicative of the clinician conveying himself or herself as the expert over the client's life (rather than the client). MiNA

behaviors typically are categorized as confronting, directing, and providing information or advice without the client's permission. Research has shown that more frequent uses of behaviors classified as MiNas are associated with higher levels of client resistance and lead to more negative client outcomes (Moyers el al. 2005). For example, a MiNa would likely be coded if the clinician (a) gives advice, makes a suggestion, offers a solution or possible action prior to asking permission to do so (i.e., *Why don't you; consider; try; You should*… etc.). Responding to client request for information would not be considered a non-adherent response; (b) *confronts*-- directly disagrees, argues, corrects, shames, blames, seeks to persuade, judges, or questions client's honesty.

Giving information (GI). Behavior counts related to Giving information are typically seen when clinicians are observed giving information to clients in the form of education, assessment or performance feedback, and/or explaining concepts related to service provision *without* advising. The category of Giving Information is different and hence, less harmful than MI Non-Adherent behaviors, as it typically offers information with a tone of respect, rather than debasement. The category of Giving Information does not have a reported standardized MITI competency threshold, and is not typically included in the overall reporting of MI Proficiency levels (Moyers et al 2010). Within this study, GI was tallied, and of particular interest in this study, as the rehabilitation counseling role and functions literature posits that that VR counselors report that giving information to consumers is one of the primary functions of their job (Leahy, Muenzen, Saunders & Strauser, 2010).

MI-Adherent (MiA). MI-Adherent behaviors convey clinicians' respect for the client by honoring and supporting their autonomy and sense of control by asking permission before sharing information or advice; validating the clients' position in respect to behavior change, and

providing affirmations that evoke clients strengths or activation (Moyers et al, 2003; Moyers el al. 2005). A MiA was coded when participants provided clear evidence of efforts to actively collaborate with the hypothetical consumer; emphasized the hypothetical consumer's freedom of choice and autonomy; actively evoke or validate the hypothetical consumer's strengths (values, knowledge, preferences and abilities) to enhance change exploration), and offered statements of support or compassion. It should be noted that the total percentage counts of MI adherent and non-adherent responses equal 100 percent, and are reciprical. Within the MITI 3.1, MI-Adherent (MiA) behaviors are represented by a percentage score computed by the ratio between the sum of MiA + MiNa counts (i.e., MiA % = MiA/ (MiA + MiNA). It should be noted that the total percentage counts of MI-adherent (MiA) and MI-non-adherent (MiNa) responses equal 100%, and demonstrate a reciprocal relationship.

MiA: primary skill-behavior outcome variable. Research suggests that using an optimal combination of MI skills predicts more beneficial outcomes among patients, independent of their perception or expression of ability to change (Miller, Moyers, Arciniega, Ernst, & Forcehimes, 2005). Further research by Gaume et al (2009) found that practitioners that have adopted an overall "MI attitude" that displays higher frequencies of MI-adherent behaviors are related to patient reduction in alcohol consumption at a post year follow-up, whereas poorer outcomes were related to more frequent use of MI-Non-adherent (MiNa) behaviors, with similar findings reported by Moyers et al, (2007). Moreover, Gaume and associates' findings revealed that counselors with better overall MI performances (i.e., consistent use of MI-Adherent skills (MiA) and avoidance of MI-nonadherent skills (MiNA) were associated with better patient outcomes seen across all levels of patient reported behavior change goals. Although analyzing a single counselor behavior in respect to MI proficiency thresholds is not ideal or sufficient in

understanding the MI process related to outcomes (Madson et al, 2009), research by Gaume et al (2009) found that a single summary score (e.g., percent of MI- Adherent (MiA) behaviors) was predictive of reduction in alcohol use. Taken together, these findings suggest that counselor who possessing an overall "MI attitude" that affirms clients' self-efficacy and worth as a human being, conveys acceptance, avoids confrontation, judgment, giving unsolicited advice, etc. appears useful in producing beneficial outcomes among most client populations. Therefore, the MI-Adherence (MiA) has been selected as the primary outcome variable used to represent Skill-Behavior within the four primary hierarchical regression analyses (HRA) described in chapter 4 of this study.

MI Fidelity within current study. Three MINT coders were used to established reliability of 20 (12%) out of 167 randomly selected participant responses (i.e., 15 hypothetical consumer statements) using intra-class correlation coefficient (ICC) estimates (Cicchetti, 1994; Shrout & Fleiss, 1979). The MITI requires a trained person (coder) to score audio and/or transcriptions of MI sessions according to a specific set of criteria designed to reflect counselor adherence to and competence in the delivery of MI (Moyers, Martin, Manuel, Miller, & Ernst, 2010). One of the MINT raters was the investigator for this study, and is a Certified Rehabilitation Counselor (CRC). The two other MITI coders were not members of this investigative team, and were purposefully chosen as independent, blind, and non-partial raters. In addition to MINT membership, all three raters had (a) extensive experience within fields related to rehabilitation, (b) had demonstrated proficiency in MI with actual clients, (c) had had extensive training in the MITI Coding System (i.e., more than 40 hours of training with regular follow-up training and review), and (d) had extensive coding experience (i.e., more than 100 hours).

ICCs are known to be a more conservative measure of inter-rater reliability than Cronbach's alpha or Pearson's *r* because ICC takes into account both systematic difference between raters and chance (Miller, Yahne, Moyers, Martinex, & Pirritano (2004). ICCs were calculated for each MITI criterion and typically range from 0 to 1. ICC scores closer to 1.0 indicate higher correlation of scores between raters. ICCs closer to 0 (or negative) mean poor reliability, indicative of divergent or inconsistent scores among coders. The following ICC value ranges was established by Cicchetti (1994) to evaluate the usefulness of clinical instruments: < .40 = poor; 0.49 – 0.50 = fair; 0.60 – 0.74 = good, and 0.75 – 1.00 = excellent.

Inter-rater reliability results. Each of the three raters coded the same 20 MITI transcripts. According to Cicchetti's (1994) criteria, all three coders demonstrated '*good'* to '*excellent'* reliability across the 20 coded transcripts. The intra-class correlations (ICC) ranged from .69 (*good*) to .95 (*excellent*) across all scales except Direction (-.11*)*, which was significantly discrepant and can be interpreted as '*no agreement'* (see Cohen, 1960; p. 37-46). ICC data and mean scores for the 20 inter-rated coded transcripts using the MITI 3.1 coding system are presented in Table 3.5.

Table 3.5
Intra-class correlations for rater agreement of 20 coded transcripts (i.e., 15-hypothetical consumer statements).

MITI Behavior-Count or Summary Score of MI Thresholds	*M (SD)*	*ICC*
Global MI Spirit Ratings		
-Evocation:	*2.79 (.*96)	*.71*
-Collaboration	*2.79 (1.12)*	*.84*
-Autonomy Support	*2.88 (.92)*	*.78*
-Direction	*3.73 (0.81)*	*-.11*
-Empathy	*3.08 (1.27)*	*.85*
Behavior Counts		
# Open Questions	*2.1(3.1)*	*.95*
# Closed Questions	*2.6(2.5)*	*.89*
# Complex Reflections	*3.7(3.9)*	*.93*
# Simple Reflections	*1.9 (2.2)*	*.79*
# MI-Adherent	*1.5(1.4)*	*.69*
# MI-Non-Adherent	*2.6 (3.5)*	*.84*
Giving Information	*4.2 (3.3)*	*.83*

Instrumentation of Outcome Variables

Perception of consumer motivation

Participant perceptions of the hypothetical consumer's level of motivation to engage productively in VR services an/or attain employment was measured by a developed instrument based upon the *Readiness Ruler* (Miller & Tonigan, 1996). This measure is typically used by MI clinicians to evaluate their clients' level of importance regarding behavior changes as well as how confident they are about making those changes on a 0 to 10 scale, where '0' represents '*not ready at all'* and '10' '*represents, extremely ready'*.

The Motivational Capacity Ruler (MCR). The MCR is a 3-item instrument developed specifically for use in this study. It uses a zero-to-7 Likert-type scale that asks participants to rate their perceptions of the hypothetical consumer's degree of (a) motivation to actively engage in relevant rehabilitation services; and (b) potential to attain competitive employment as the result of VR service provision. The third question is directed at measuring the participants' appraisal of their own degree of confidence in their ability (i.e., self-efficacy) to work successfully with the hypothetical consumer in achieving successful rehabilitation outcomes (i.e., where '0' is not confident at all, and '10' is extremely confident); Although this construct has typically been used to measure client engagement based upon the stages of change (SOC) model (Prochaska et al. 2005; i.e., Pre-contemplation, Contemplation, Preparation, Action, Maintenance, and Relapse), items within the MCR were designed to simplify the participant rating process and were not intended to produce a single aggregate score, but rather internal consistency within the separate domains of participant perceptions related to (a) consumer motivation; (b) potential to attain employment; and (c) the participants sense of self-efficacy regarding motivational competency. Chronbach's (1951) coefficient alpha demonstrated a 'good'

internal consistency for this 3-item measure (MCR) at .826. Within individual items used as two of the three DVs, inter-item 'Perceived consumer motivation' and 'Perceived potential to successfully attain full-time competitive employment', revealed acceptable internal consistency and reliability at .71 and .70 respectively (See Appendix D).

Expectations About Rehabilitation Counseling Scale (EARC) (Chan, McMahon, Shaw & Lee, 2004). *Component 2*: *Expectations about consumer behaviors*. This is an 8-item sub-factor measure that can be found within the original 44-item EARC instrument. The *Expectations About Consumer Behaviors* (EACB) uses a 5-point Likert scale: *1=Strongly disagree*, *2 = Somewhat disagree*, *3 = Neutral*, *4 = Somewhat agree*, *5 = Strongly agree* to measure counselor expectations regarding consumers' motivation, commitment, and involvement within the VR process. Typical examples of items within this form include: "The consumer will actively participate in planning his or her rehabilitation program with me," "the consumer will be realistic about his or her strengths and limitations," and "the consumer will complete his or her rehabilitation program successfully." Phrasing of the corresponding consumer items is in the first person. The alpha coefficient computed for the total sample is .85, indicating high internal consistency of the items constituting this component. For the counselor sample, the mean perceived importance rating for this component is 4.03 (SD = 0.60). A confirmatory factor analysis demonstrated that EARC measure in its entirety has a high internal consistency (.94). The *Expectations about consumer behaviors* (i.e., behavior expectations) domain alpha coefficient computed for this present study was .91.

Data Analysis

To assess for the unique construct contributions proposed within Motivational Competency Model (MCM), 13 predictor variables (IVs) were analyzed within the first three

hierarchical regression analyses, which consisted of 4 counselor demographic variables, including age, caseload size, total years as a rehabilitation counselor, and number of certifications and licensures; 7 Attitude/belief variables of job burnout constructs of emotional exhaustion (EE), depersonalization (DP), personal achievement (PA), motivational attitudes, and theoretical orientation; 1 Knowledge variable of Exposure to MI; 1 Skill-behavior variable of MI-Adherence (MiA); and 2 SCM variables of perceptions of warmth and competence. The three dependent variables within the first three HRAs comprise factors related to participant evaluation of the hypothetical consumer's degree of (a*)* motivation, (b) potential to attain competitive employment and (c) behavioral expectations to successfully participant in VR services.

Research by Wampold (2001) has determined that at least 70% of psychotherapeutic effects are due to common factors (i.e., working alliance, empathic listening, collaborative goal setting). Because the MiA captures the gestalt of the common-factors associated with not only working alliance, but with enhancing motivation (Gaume et al (2009), Skill-Behaviors can be considered a causal outcome mediated by the corresponding predictive factors within the proposed MCM model. Therefore, the fourth HRA was conducted to determine how the unique contributions of the IV's of attitudes/beliefs, knowledge, and perceptions of warmth and competence (SCM) would account for the variance in predicting the quality of participant skill-behaviors (DV).

Preliminary Data Screening and Analysis

Data entry and transformation

Scores on all measures were computed using the mean on individual response items for each instrument in order to facilitate understanding and interpretation of participant responses. Data for all predictor and outcome variables were screened using SPSS 20.0 for accuracy,

multivariate outliers, and normality. Data were analyzed using descriptive statistics, preliminary screening procedures, hierarchical regression, and analysis of variance (ANOVA) to test research hypotheses. Frequency tables were used to identify cases in which data had been entered in error. Multicollinearity was determined by examining the variance inflation factors (VIF) and tolerance. None of the VIF values exceeded 5.00 for any variables in the analyses (range, 1.02 to 3.89), and none of the tolerance values was less than .10 (range = .25 to .98), suggesting that there was no multicollinearity in the data and that no large changes in the coefficients would result from adding or deleting variables from the dataset. With the use of 13 predictors and $p < .01$ criterion for Mahalanobis distance, no outliners were deleted from the hierarchical multiple regression analysis, resulting in retaining the full sample size of 167. Histograms, residual scatter plots, and skewness and kurtosis statistics were used to assess normality and linearity; the assumptions for multiple regression within the analyses of this study were found to be met. Coefficient alphas were used to estimate internal consistency of scores on each measure.

Missing data. A simple imputation method using regression was applied to handle the few points of missing data. The imputation method computes estimations based on the values of other related item variables in the same measure to replace missing data. This method is preferred over case deletion, since it will not decrease the sample size (i.e., statistical power loss) or affect the sample representativeness. In this study, 156 of 167 survey items had no missing values and 8 variables had a few missing values, less than 5% missing (27 values, out of 167 cases). According to Fox-Wasylyshyn and El-Masri (2005), simple imputation and multiple imputation methods will yield similar results when the missing data are less than 5%.

Sample size. As mentioned earlier, a priori power analysis was conducted for the total R^2 value for a multiple regression analysis with 13 predictor variables, power equal to .80, and an

alpha level of .05. G*Power (Faul, Erdfelder, Lang, & Buchner, 2007), a software tool for a statistical power analysis, yielded a sample size of 131 for a medium effect size ($f2$ =.15; Cohen, 1988). With 13 predictors in the study, the sample size of 167 was considered sufficient statistical power to conduct the statistical analyses.

Descriptive statistics. To summarize all descriptive information about distributions and tendencies of variables means, standard deviations, and full ranges of all demographics and observed variables were computed.

Hierarchical regression analyses. Hierarchical regression analysis (HRA) is particularly beneficial when, as in this study, there is more than one IV measuring a construct (Hoyt, Imel, & Chan, 2008), because the change in R^2 (ΔR^2) shows the combined contributions of the set of IVs within the same construct to explain the accounted variance in the criterion variable, while sr^2 indicates the unique variance shared by the specific IV. Therefore, HRA was used in this study to determine the correlation of each predictor variable and the unique contribution and predictive ability of each predictor relative to the variance across dependent variables. A correlation /coefficient matrix was also reported to indicate the bivariate correlational relationships among observed variables. Again, all data was screened for missing information, outliers (Mahalanobis distances), and multicollinearity. Tests of regression assumptions, including normality (kurtosis and skewness), linearity, and homoscedasticity, were examined and achieved for both IVs and DVs.

In this study, three hierarchical multiple regression analyses were used to examine the relationships between the proposed MCM constructs and CRC's evaluation of the hypothetical consumer. Each set of IVs was entered into the regression model in an order based on the theoretical expectations of thought to influence the criterion variable. This was assessed in terms

of what each set of IVs added to the equation at its own point of entry (Tabachnick & Fidell, 2001). The significance was set at $p < .05$. The HRA included the following a priori specifications:

In step 1, a set of demographic variables was entered in the model, which includes the demographic variables of age, caseload size, total years as a rehabilitation counselor, and number of licensures or certifications).

In step 2, the predictors entered into the analysis were the MCM factors related to the Attitudes/Beliefs of the job burnout constructs of emotional exhaustion (EE), depersonalization (DP), and personal achievement (PA); Motivational Attitudes; and theoretical orientation. In this step, the effect of Attitudes/Belief variables on CRC's evaluation of the hypothetical consumer's degree of (a) motivation, (b) potential to attain competitive employment; and (c) behavioral expectations to successfully participant in VR services were determined after controlling for the effect of demographic variables.

In step 3, factors related to Knowledge of exposure level to MI was entered as a predictor. In this step, the effect of the Knowledge variable of Exposure to MI on CRC's evaluations of the hypothetical consumer's degree of (a) motivation, (b) potential to attain competitive employment, and (c) behavioral expectations related to participation in VR services were determined after controlling for the effect of demographic and Attitudes/Beliefs variables.

In step 4, Skill-behavior, as measured by the MITI (Moyers et al. 2005), measuring participant level of proficiency in basic Motivational Interviewing, a counseling technique that enhances motivation was entered as a predictor. In this step, the effect of Skill-behavior variables on CRC's evaluations of the hypothetical consumer's degree of (a) motivation, (b) potential to attain competitive employment, and (c) behavioral expectations to successfully

participate in VR services was determined after controlling for the effect of demographic, Attitudes/Beliefs, and Knowledge variables.

In step 5, the SCM variables of warmth and competence were entered last (and separate from the other attitudinal/belief variables due to the researcher's expectancy in these variables to account for a large proportion of the variance within the overall model). In this step, the effect of warmth and competence variables on CRC's evaluation of the hypothetical consumer's degree of (a) motivation, (b) potential to attain competitive employment, and (c) behavioral expectations to successfully participate in VR services were determined after controlling for the effect of demographic, Attitudes/Beliefs, Knowledge, and Skill-behavior variables.

The fourth and final HRA was conducted to determine how the unique contributions of attitudes/beliefs, knowledge, and perceptions of warmth and competence (IVs) would account for the variance in predicting the quality of participant skill-behaviors (DV).

In step one, a set of demographic variables was entered in the model, which included age, caseload size, total years as a rehabilitation counselor, and number of licensures or certifications.

In step two, the predictors entered into the analysis were the MCM factors related to Attitudes/Beliefs of theoretical orientation (OC), the 3 job burnout constructs of emotional exhaustion (EE), depersonalization (DP), personal achievement (PA), and Motivational Attitudes. In this step, the effect of Attitudes/Belief variables on participant skill-behaviors towards the hypothetical consumer was determined after controlling for the effect of demographic variables.

In step three, predictor variables related to Knowledge variable of exposure level to MI was entered into the analysis. In this step, the effect of the Knowledge variable on participant skill-behaviors towards the hypothetical consumer was determined after controlling for the effect

of demographic and Attitudes/Beliefs variables.

In step four, the SCM variables of warmth and competence were entered last (and separate from the other attitudinal/belief variables due to the researcher's expectancy in these variables to account for a large proportion of the variance within the overall model). In this step, the effects of perceptions of warmth and competence variables on participant skill-behaviors towards the hypothetical were determined after controlling for the effect of demographic, Attitudes-Beliefs, and Knowledge variables.

CHAPTER FOUR

Results

The primary purpose of this study was to employ a Motivational Competency Model (MCM) based upon Sue's (1992) theory of Multicultural Counseling Competency (MCC) to further understand rehabilitation counselor attitudes related to aspects of consumer motivation and how these perceptions effect subsequent decisions related to service delivery. Hierarchical regression analysis (HRA) was used to determine the variance accounted for by five sets of predictor variables representing the proposed theoretical model of Motivational Competency when working with diverse client populations who present with amotivational characteristics, which included four counselor demographic variables of age, caseload size, total years as a rehabilitation counselor, and number of licensures and certifications; five attitude/belief variables of job burnout constructs of emotional exhaustion (EE), depersonalization (DP), and personal achievement (PA), motivational attitudes, and theoretical orientation; one knowledge variable of Exposure to MI; one Skill-behavior variable of MI-Adherence (MiA)]; and two SCM variables of perceptions of warmth and competence. A fourth and final multiple regression analysis was conducted to further determine whether predictors within the proposed model (i.e., attitudes/beliefs, knowledge, and social perception) mediated the relationship between counselors' skill-behavior towards the hypothetical consumer. All descriptive statistics and Hierarchical regression analyses (HRA) results are reported in this chapter.

Primary Descriptive Statistics

In addition to participant demographic related variables, self-reported instruments filled out by participants measured thirteen primary study variables in the proposed model. Aggregated descriptive information (e.g., frequency, central tendency) and group difference testing results

for each variable were presented as follows:

Attitudes-Beliefs

Job Burnout. For each of the three-burnout domains (Maslach, Jackson, & Leiter, 1996), scores were summed separately, with mean scores representing separate high, moderate, or low degrees of burnout. According to Maslach's sub-scale ranges associated with severity of burnout, participants' group mean scores indicate low to moderate job burnout. Specifically, participants' mean scores for Emotional Exhaustion (EE) is considered moderate (M =18.35; SD = 11.62), while Depersonalization (DP) was considered low (M = 5.2; SD = 11.62). Counselors' overall mean score for Personal Accomplishment (PA) was high (M = 40.3; SD = 6.1), indicating low burnout with a greater overall sense of self-efficacy and satisfaction in their work. See table 4.1 for participants' group means in respect to job burnout domains.

Theoretical Orientation. In respect to theoretical orientation, nearly half of the participants reported identifying themselves as practicing most closely within a Person-centered framework (49.7%), while 16.8% identified themselves as Eclectic (assuming multiple theoretical orientations simultaneously), 13.2% reported belonging to Behavioral orientation, with the remainder of participants reported practicing from the following theoretical orientations: Interpersonal (6.6%), Humanistic/Existential (6%), Systems (2.4%), Reality (2.4%), Other (2.4%), with the fewest participants identifying themselves with a Psycho-dynamic/Psychoanalytic orientation (0.6%). Due to the homogeneity of scores representing theoretical orientation aligned with Person-centered, this variable was re-coded using the whole sample as a single group (i.e., 1 = person-centered, 2 = other).

Table 4.1

Participant Summary Scores for Job Burnout (Maslach, et al. 1996): (22-items) (n = 167)

Job Burnout (BO):	**Low BO**	**Moderate BO**	**High BO**
Emotional Exhaustion (EE) **α**=.91	0-16	17-26 **(M= 18.3; SD = 11.6)**	27+
Depersonalization (DP) **α**=.72	0-6 **(M= 5.2; SD = 14.6)**	7-12	13+
Personal Achievement (PA) (**α**=.81)	39+ **(M= 40.3; SD = 6.1)**	32-38	0-31

*Note. Participants' group scores are represented in **bold**, and are displayed within the respective columns of Burnout domains represented in Maslach's Burnout Inventory (MBI).*

Motivational Attitude. The four out of the 7-item Modified Motivational Attitude items were derived from The Motivational Interview Survey [MMIS] developed by Willits, Albright, Broidy & Lyons (2009) , while three items were created specifically for this study. As mentioned earlier, the summed 'Motivational Attitude' score ranged from 0 to 35, with higher scores indicative of more negative or biased attitudes in their work with consumers, while lower scores are related to more positive and empirically derived conceptualizations of motivation in relation to their work with consumers. Participants' averaged Motivational Attitude score was relatively moderate (M = 19.29, SD = 4.3), a little above the mid-point of 19.0. Analysis of individual items suggest that over half of participants (n = 84) may particularly feel consumer motivation for change is a significant frustration in their work (M= 3.5; SD = 1.1) and that some consumers will never change regardless how they interact with them (M= 3.6; SD = 1.) To see example items of the Modified Motivational Interview Survey [MMIS] (see Appendix D).

Knowledge

Exposure to MI. Participants' responses were tallied and recoded to reflect the highest level of training participation with items ranging from 0 to 6 (i.e., 0 = No MI training; 1 = MI self study; 2 = Introduction to MI; 3 = MI Basics; 4 = Intermediate to Advanced MI; 5 = Ongoing MI supervision; 6 = MINT or Advanced Supervision MI training). Basic descriptive analyses were conducted with these data. Data collected regarding whether a member of the Motivational Interviewing Network of Trainers (MINT) conducted specific trainings was not included within the analysis of this present study.

Twenty-seven of 167 participants (16.2%) indicated that they had never heard of MI. Out of those 27 participants who had never heard of MI, four (2.4%) performed within the MI competency range (>99%) on the primary MI outcome variable used in this study [MI-Adherent (MiA)]. As expected, the remaining 23 (13.8%) participants that had never heard of MI, performed below the Beginning MI Proficiency range (<90%). Conversely, the majority of participants (n = 140; 83.8%) indicated some familiarity with MI, while 45 (32.1%) had heard of MI, but have not received any training in MI. Ninety-five (67.9%) participants had heard of MI and had some form of MI training, but, only 25 (17.9%) of those who had received some form of MI training performed within the MI Competency range on the primary Skill-Behavior outcome variable (i.e., MiA). The majority of participants that indicated receiving some sort of MI training (n = 70; 50%), performed below the Beginning MI Proficiency range on the (<90%) as measured by the MiA. Results describing the relationship between Exposure to MI and Attitudes-Beliefs and perceptions of Warmth and Competence are further explained within the findings from the hierarchical regression analyses. See Table 4.2 for MiA proficiency thresholds.

Table 4.2
Frequencies and Percentages for Participant MiA Thresholds and Levels of Training

	Exposure to MI (n = 167)						
	No MI training	Intro to MI	MI Basic Training	Intermt./ Advanced MI Training	Ongoing MI supervision & coding	MINT or Advanced Supervision MI training	Total
MI Competency (MiA)	*n* =12 (7.2%)	*n* = 4 (2.4%)	*n* = 11 (6.6%)	*n* = 7 (4.2%)	*n* = 3 (1.8%)	*n* = 0 (0%)	*n* = 37 (22.2%)
Low MI Proficiency (MiA)	*n* = 62 (37.1%)	*n* = 17 (10.2%)	*n* = 37 (22.2%)	*n* = 8 (4.8%)	*n* = 2 (1.2%)	*n* = 4 (2.4%)	*n* = 130 (100%)

Skill-Behavior

The MITI. The 15-item written responses to the hypothetical consumer's expressed ambivalence about participating in VR services and attaining competitive employment was measured using Motivational Interviewing Treatment Integrity (MITI) code, Version 3.1 (Moyers, Martin, Manuel, Hendrickson, & Miller, 2005). Descriptive statistics for participants' performance using the MITI are provided in Table 4.2.

Table 4.3
Frequencies and Percentages for Participant MI Beginning Proficiency and Competency Thresholds

Participant Scores MITI Behavior-Count Summary ***n* = 167**				
MITI Summary Scores	**Mean (SD)**	**Low MI-Proficiency** ***n (%)***	**Beginning Proficiency** ***n (%)***	**Competency** ***n (%)***
Global Spirit Ratings	2.8 (.64)	138 (82.6)	22 (13.2)	7 (4.2)
Reflections to Questions	1.1 (1.8)	109 (65.3)	32 (19.2)	26 (15.6)
% Open Questions	38.3 (29.74)	103 (61.7)	37 (22.2)	27 (16.2)
% Complex Reflections	47.5(34.6)	69 (41.3)	9 (5.4)	89 (53.3)
% MI-Adherent (%MIA)	48.4(35.6)	130 (77.8)	--------	37(22.2)
% MI-Non-Adherent	49.3(35.6)	126(74.4)	14(24.6)	--------
#Giving Information	4.2(2.4)	(5 < n = 67) (40%)	(4 > n = 100) (60%)	-------

MI Spirit. Each global measure is rated by assigning a single number from a five-point scale to characterize the entire interaction. Based on the rater's overall impression of the session, a rating from 1 (low) to 5 (high) is made on five areas of MI spirit and practice. However, the MITI 3.1 primarily derives the global spirit ratings by averaging only three out of the five global constructs: (1) Evocation; (2) Collaboration; (3) Autonomy/Support to determine basic proficiency (*M* >3.5) or competency (M > 4) levels. Within this study, overall global spirit scores were M = 2.8; SD (.64), with the majority of participants (83%) falling below the basic MI proficiency level (n = 138). Whereas 13% (n = 22) scored within the Beginning Proficiency range, and 4% (n= 7) scored within or above the MI Competency range.

Reflections to Questions Ratio (R:Q). Skillful counselors (not just in MI) are shown to ask on average, one question per every two to three empathetic reflections (Miller & Rollnick, 2013, Tollison, Lee, Neighbors, Neil, Olson, & Larimer, 2008; Cormier, Nurius, & Osborn (2009). For basic MI proficiency, it is recommended that for every question asked, a reflective listening statement be offered on average to achieve a one-to-one ratio of questions to reflections. The average reflection to question ration score of participants within this study was 1.1 (SD =1.8). However, the majority of participants within this study (63%), scored below the basic MI proficiency level (n = 109). Whereas 19% (n = 32) scored within the Beginning Proficiency range, and 16% (n= 26) scored within or above the MI Competency range.

*Open questions***.** The percentage of open questions is calculated by taking the number of open questions asked divided by the total number of questions asked (closed questions + open questions). There was broad variability in participants' open-ended question scores (M = 38.3)(SD =29.74). The majority of participants within this study (62%), scored below the basic MI proficiency level (n = 103). Whereas 22% (n = 37) scored within the Beginning Proficiency range, and 16% (n= 27) scored within or above the MI Competency range.

Simple and Complex Reflections. Reflections are a form of active listening in the form of making meaningful responses to client statements. This category classifies reflections as simple and complex. Simple reflections convey basic understanding, but do not necessarily capture the deeper elements of client motivation, such as values, needs, and client/clinician exchanges. Examples of participant reflections within this study that were coded as simple include: (i.e., '*School wasn't a good experience for you, but you got your GED*/'; '*Your family is concerned about you'*, '*I understand*', '*It sounds like you don't want to work*). Whereas complex reflections

convey a deeper understanding of the client's point of view, not just what has been explicitly stated, but what the client means but has not explicitly stated.

Complex reflections demonstrate an accurate understanding of the client's perceptions, situation, meaning, and feelings. Examples of reflections that were coded as complex in this study include complex reflection: '*You know what types of jobs will work for you, and what won't'*; '*You want to have choice in where you work'; 'Being independent will help you with your self confidence and your ability to spend quality time with your son'; or 'You want to go back to work but are worried how that will affect your SS application'.* Overall, participants demonstrated their strongest performance within this category, with the majority of participants scoring within or above the MI Competency range (53%) (n =89) (M = 47.5; SD = 34.6). Five percent of participates (n = 9) scored within the Beginning Proficiency range, and 41% (n= 69) scored below the basic MI proficiency level.

Giving information (GI). Behavior counts related to Giving information are typically seen when clinicians are observed giving information to clients in the form of education, assessment or performance feedback, and/or explaining concepts related to service provision *without* advising. The category of Giving Information is different and hence, less harmful than MI Non-Adherent behaviors, as it typically offers information with a tone of respect, rather than debasement. Examples of participant coded GI responses within this study included, '*We do help people who have disabilities and need some assistance to be able to find jobs that will work for them. We help each person write an employment plan that includes things they need in order to work. We do have limits on what we can pay for*.'; '*I agree with you that working at a fast food restaurant is not the best place for you. The pain in your back will probably be a problem for any physical job. Once we have your medical information and can make you eligible for*

services, we can pin-pint your goals.'; '*We don't purchase cars, but we can help with the cost of training, if that is something you may be interested in pursuing'*. Within this study, the group mean for Giving Information was 4.2 (SD = 2.4) or roughly 28% of the responses to the 15-consumer statements. The median GI score was 4., which was the determined proficiency threshold within this study (n = 67; 40%).

MI non-adherent behaviors (MiNa): MiNa behaviors are indicative of the clinician conveying himself or herself as the expert over the client's life (rather than the client). Miller & Rollnick describe the attitude conveyed in MiNa behaviors as, "one of judgment, placing conditions of worth: 'I will decide who deserves respect and who does not" (pg. 17). Within this study, a MiNa was coded when participants' responses conveyed a judgmental, patronizing, authoritarian, or advising tone, or provided personal information, education, feedback, or an opinion without explicitly asking for the hypothetical consumer's permission prior to sharing that information; and/or if the response discounted, ignored, or over-rode the consumer's expressed concern. Examples of participant responses that were coded as MI Non-Adherent (MiNa) include; '*I understand but I wish you would have called me since you knew you were going to be late. You already missed an appointment with me and did not call to cancel or reschedule until after the fact. This behavior and the fact that you never followed through year ago after meeting with your VR counselor to provide requested information makes me question your sincerity and desire to work with VR.*'; *'You may want to work on obtaining the paperwork required to become eligible for VR so you can become employed and this will add value to your life.*'; '*I would recommend that you undergo psychological testing.'* Participants' overall group MI Non-Adherent (MiNa) score was 48.4; (SD =35.6). The majority of participants within this study (74%), scored below the basic MI proficiency level (n = 126); 25% (n= 14) scored within the

Beginning Proficiency range, and no participants scored within or above the MI Competency range.

MI-Adherent (MiA). A MiA was coded when participants provided clear evidence of efforts to actively collaborate with the hypothetical consumer; emphasized the hypothetical consumer's freedom of choice and autonomy; actively evoke or validate the hypothetical consumer's strengths, values, knowledge, preferences and abilities in relation to target behavior change, and offered statements of support or compassion. Examples of participant responses that were coded as MI-Adherent (MiA) in this study include, '*You sure are a survivor; I understand how hard it is for you to come in'; 'Would you like more information about that*?'; '*You completed your GED, that is good, students drop out of school, that is the reality, but you earned your GED!*' ; '*You know what types of jobs will work for you, and what won't. You want to make your own decisions about what kinds of jobs you apply for.'* There was a wide variation in participants' MI-Adherent scores (M = 48.4)(SD =35.6). The majority of participants within this study (78%), scored below the basic MI proficiency level (n = 130), while 22% (n= 37) scored within or above the MI Competency range, and no participants scored within the Beginning Proficiency range.

SCM warmth and competence. Within this present study, participants' general warmth perceptions related to the hypothetical consumers' was (M = 39.57, SD = 6.73), which is just below the median score of 40. Participants'' overall perception of the hypothetical consumer's degree of competence was (*M* = 58.1 *SD* = 10.8), which is also just above the median score of 55. Median scores were used to determine perception scores along the low to high continuum within each of the SCM quadrants. For example, warmth scores falling below 40, were considered 'low warmth'; warmth scores of 40 > were considered 'high warmth. The

competency continuum was scored similarly, with competency cut-off scores falling below 55 = 'low competency', and scores falling 55 > = 'high competency'.

Correlational Analysis

Several demographic variables were considered for the analyses including counselors' age, gender, race, work experience, level of education and licensures achieved, and consumer caseload characteristics. Findings from prior studies were considered as the primary determiner to which demographic variables would be included. Additionally, results from bivariate correlations suggested that age, caseload size, the number of licensures and certifications, and total years working as a rehabilitation counselor were significantly correlated to at least on criterion variable. Specifically, age was positively correlated with behavior expectations ($r = .14$, $p < .01$), and licensure was correlated with perceived motivation ($r = .14$, $p < .05$), and employment potential ($r = .22$, $p < .001$). Although caseload size and total years working as an rehabilitation counselor were expected to play a stronger role throughout the model, results of the analysis indicate that they are both weakly correlated to the criterion variables. However, as one may expect, age was significantly correlated to total years as an RC ($r = .41$, $p < .001$) and personal accomplishment ($r = .20$, $p < .01$), yet negatively related to motivational attitudes ($r = -.24$, $p < .001$), emotional exhaustion ($r = -.17$, $p < .01$), and depersonalization ($r = .17$, $p < .01$).

Overall, variables related to Attitudes-Beliefs were significantly related to all of the criterion constructs. Specifically, Motivational Attitudes was found to have a negative relationship with perceived motivation ($r = -.41$ $p < .001$); employment potential ($r = -.40$, $p < .001$); behavior expectations ($r = -.51$, $p < .001$); and skill-behavior ($r = -.21$, $p < .01$). However, Personal Accomplishment was found to be positively related to all of the outcome variables except for skill-behavior ($r = .05$, $p < .25$), perceived motivation and employment potential ($r =$

.23, p < .001); and behavior expectations (r = .38, p < .001). Interestingly, theoretical orientation (person-centered) had a negative relationship with employment potential (r = -.13, p < .05) and skill-behavior (r = -.21, p < .05). Knowledge (i.e., exposure to MI) was also found significantly related to the outcome variables of perceived motivation (r = .27, p < .001); employment potential (r = .21), p < .01); behavior expectations (r = .24, p < .001); and skill-behavior (r = .21, p < .001).

The predictor variables with the strongest significant relationship to the outcome (and other variables) within this study were social perception (i.e., warmth and competence). Specifically warmth was found positively related to perceived motivation (r = .61, p < .001); employment potential (r = .50), p < .001); behavior expectations (r = .63, p < .001); and skill-behavior (r = .33, p < .001). Competence was found to have even stronger relationships with perceived motivation (r = .64, p < .001); employment potential (r = .61), p < .001); behavior expectations (r = .70, p < .001); and skill-behavior (r = .31, p < .001). Participants were found more homogeneous than heterogeneous among race, gender, and theoretical orientation variables. Hence, using the whole sample as a single group for each of homogeneous variables to run the hierarchal regression models was supported by the data.

Hierarchical Regression Analyses

The primary purpose of this study is to employ a Motivational Competency Model (MCM) based upon Sue's (1992) theory of Multicultural Counseling Competency (MCC) to further understand CRC's attitudes related to aspects of consumer motivation and how these perceptions effect subsequent decisions related to service delivery. Hierarchical regression analysis (HRA) was used to determine the amount of variance in participants' evaluation and skill-behavior that could be accounted for by sets of predictors representing the proposed

theoretical construct of Motivational Competency (i.e., attitudes/beliefs, knowledge, skill-behavior, and social perception of warmth and competence) when working with diverse client populations who present with amotivational characteristics. Based on the results of the primary HRA analysis, a follow-up regression analysis was conducted to further identify casual predictors within the proposed model to account for outcomes seen in participant behavior.

Perceived Motivation. Within the analysis, Perceived Motivation was the dependent variable, with five sets of MCM related variables entered as predictors in sequential steps: (1) demographic variables of age, caseload, total years as a rehabilitation counselor, and number of licensures and certifications; (2) Attitudes/Beliefs of the job burnout constructs: of emotional exhaustion (EE), depersonalization (DP), personal achievement (PA), Motivational Attitudes, and theoretical orientation; (3) Knowledge variable of Exposure to MI; (4) Skill-behavior, based on the single MITI variable of Adherence to MI (MiA); and (5) perceptions of warmth and competence. These two variables were entered last, and separate from the other attitudinal/belief variables due to the researcher's expectancy in warmth/competence to account for a large proportion of the variance within the overall model. Hierarchical regression analysis was used to examine the relative contributions of the five sets of MCM variables as predictors of perceived motivation of the hypothetical consumer to successfully participate in VR services. The results of the analysis, including values of change in R^2 (ΔR^2), along with unstandardized regression coefficients (B), standard errors ($SE\ B$), and standardized coefficients (β) for the predictor variables at each step and in the final mode are presented in Table 4.5.

The correlations among the dependent variable and the predictor variables ranged from small to large. Significant relationships (i.e, Pearson product-moment correlation coefficients in the 20s to 60s were found between perceived motivation and the following predictor variables:

motivational attitudes (Pearson $r = .41$, $p < .001$); personal accomplishment (Pearson $r = .23$, $p < .001$); MI-Adherence (MiA) ($r = .27$, $p < .001$); warmth ($r = .61$, $p < .001$); and competence ($r = .64$, $p < .001$). The correlation matrix and the means and standard deviations for all variables are presented in Table 4.4.

Table 4.4: Correlation Matrix for Variables Used to Predict *Perceived Motivation* to Successfully Participant in VR Services

Var.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
1	1.00	.02	-.03	.14*	-.05	-.41***	-.03	-.04	.23***	-.08	.04	.27***	.61***	.64***
2		1.0	-.11	.04	.41***	-.24***	-.17**	-.16**	.20***	.11	-.05	-.07	.07	.11
3			1.00	-.10	-.02	.17**	.07	.04	.02	.01	-.02	-.11	-.06	-.05
4				1.00	.11	-.22***	-.07	-.09	.04***	.07	.08	.06**	.22***	.20***
5					1.00	-.08	-.08	-.15*	.20***	-.03	.05	.01	-.04	-.03
6						1.00	.34***	.41***	-.43***	-.07	-.31***	-.18**	-.41***	-.41***
7							1.00	.64***	-.37***	-.17*	-.01	.10	-.21**	-.14*
8								1.00	-.41***	-.16*	-.09	.11	-.12	-.09
9									1.00	.01	.21***	.06	.31***	.29***
10										1.00	-.05	-.16*	.01	-.06
11											1.00	.21**	.07	.07
12												1.00	.33***	.26***
13													1.00	.82***
14														1.00
Mean	3.23	48.63	2.7	1.37	3.40	19.28	18.35	5.18	40.25	0.54	1.77	48.36	39.57	58.11
SD	1.20	10.7	1.49	.67	.86	4.35	11.62	4.64	6.05	0.50	1.74	35.62	6.73	10.78

Note. 1= *Perceived Motivation,* 2=Age, 3= Caseload size, 4= Licensures, 5= Total years as a RC, 6= Motivational Attitudes, 7= Emotional exhaustion (EE), 8= Depersonalization (DP), 9= Personal accomplishment (PA), 10 = Theoretical orientation, 11= Exposure to MI, 12= MI Adherent (MIA), 13= Warmth, 14= Competence.

$^{*}p \leq .05$; $^{**}p \leq .01$; $^{***}p \leq .001$

Table 4.5

Hierarchical Regression Analysis for Prediction of *Perceived Motivation* to Successfully Participant in VR Services ($N = 167$)

			At Entry Into Model			Final Model		
Variable	R^2	ΔR^2	B	*SE* B	β	B	*SE* B	β
Step 1	.02	.02						
Age			.01	.01	.05	-.01	.01	-.06
Caseload Size			-.01	.06	-.02	.02	.05	.02
Licensure(s)			.26	.14	-.14	-.02	.11	-.01
Years as Rehab Counselor			-.12	.12	-.08	-.03	.10	-.02
Step 2: Attitudes/Belief	.19	.17***						
Motivational Attitude			-.10	.02	-.37***	-.05	.02	-.19*
Emotional Exhaust			.01	.01	.06	.01	.01	.09
Depersonalization			.03	.03	.12	.01	.02	.03
Personal Accomplish.			.03	.02	.17	.01	.01	.06
Person-Centered			-.20	.18	-.08	-.08	.15	-.03
Step 3: Knowledge	.20	.01						
Exposure to MI			-.06	.05	-.09	-.04	.04	-.06
Step 4: Skill-Behavior	.23	.03*						
MI-Adherent			.01	.00	.19*	.00	.00	.06
Step 5: Stereotype-Bias (SCM)	.46	.23***						
Warmth			.02	.02	.11			
Competence			.05	.01	.48***			

Note. $\Delta R^2 = R^2$ change. F (13, 153) =8.56, $p < .001$, for the full model; for step 1, $F(4, 162) = 1.05$, $p = .39$; for step 2, ΔF (5, 157)=6.40, $p<.001$; for step 3, $\Delta F(1, 156)=1.47$, $p=.23$; for step 4, $\Delta F(1, 155)=6.41$, $p < .05$; for step 5, $\Delta F(2, 153)=33.22$, $p<.001$.

*$p < .05$, **$p < .01$, *** $p < .001$

In the first step of the regression analysis, demographic variables of age, caseload, total years as a rehabilitation counselor, and number of licensures and certifications were entered as predictor variables. The model was not statistically significant as F (4, 162) = 1.046, p = .385. The demographic covariates were unable to explain the variance in perceived motivation to successfully participate in VR services. Specifically, the age, caseload, and license of rehabilitation counselors were not found to have anything to do with the variation in perceived motivation.

In the second step of the regression analysis, Attitudes/Beliefs variables of job burnout constructs of emotional exhaustion (EE), depersonalization (DP), and personal achievement (PA), Motivational Attitudes, and theoretical orientation were entered. These variables accounted for a significant amount of variance (14%) in perceived motivation beyond that explained by the demographic covariates entered in the first step; F (9, 157) = 4.11, $p < .001$, $R^2 = .19$, $\Delta R^2 = .14$. Among these variables, motivational attitudes was found to contribute significantly to the change in variance in perceived motivation scores, with $\beta = -.40$, t (157) = -.424, $p < .001$, indicating that each standard deviation unit increase on motivational attitudes could predict a 0.40 standard deviation unit drop on perceived motivation scores. This relationship between motivational attitudes and perceived motivation was negative, with higher levels of negative motivational attitudes associated with lower counselor' perceptions of consumer motivation to successfully participate in VR services (Pearson $r = .41$, $p < .001$). The correlation between personal accomplishment and perceived motivation was significant ($r = .23$, $p < .001$) was also a significant contributor to the change in variance in perceived motivation scores, with $\beta = .17$, $t(157) = 2.1$, $p = .05$. Since no other contextual variables within Attitudes/Belief were found to be significant contributor to perceived motivation, it is highly likely that the strong bivariate

correlation significance of motivational attitudes and personal accomplishment balanced perceived motivation.

Knowledge (i.e., exposure level to MI) was entered in the third step of the regression analysis. The model was significant *(F* (10, 156) = 3.85, $p < .001$), results of $\Delta R^2 = .01$, F (1, 156) = 1.4, $p < .23$ indicate Knowledge could not account for any portion of the variance in outcome of perceived motivation to successfully participate in VR services beyond that explained by the demographic covariates and attitude/belief variables entered in the first and second steps. Although not significant, Knowledge was negatively correlated with motivational attitudes ($r = -.31$, $p < .01$). Motivational attitudes were also found to contribute inversely to the change in variance in perceived motivation scores, with $\beta = -.40$, $t(156) = -4.42$, $p < .001$. Additionally, after adding Knowledge (the exposure to MI) to the regression model, the variable of Personal Accomplishment became a significant predictor of perceived motivation; $\beta = .18$, t (156) = 2.08, $p < .05$. In other words, higher endorsement of personal accomplishment is related to more favorable perceptions of consumer motivation. There is a possibility that the exposure to MI could moderate the relationship between personal accomplishment and perceived motivation.

Skill-behavior variable of MITI-Adherence to MI (MiA,was entered in the fourth step of the regression analysis. This variable accounted for additional 3% variance in perceived motivation scores beyond that explained by the previous predictor sets, F (11, 155) = 4.20, $p <$ .001 and $R^2 = .23$, $\Delta R^2 = .03$, F (1, 155) = 6.41, $p < .01$. Skill-Behavior was also found to contribute significantly to the change in variance perceived motivation, with $\beta = .19$, $t(155) =$ 2.54, $p = .012$. Motivational attitudes were also found to contribute significantly to the change in variance of perceived motivation, with $\beta = -.40$, $t(166) = -4.42$, $p < .001$. However, the relationship between motivational attitudes and perceived motivation was negative, indicating

that each standard deviation unit increase on motivational attitudes could predict a 0.40 standard deviation unit drop on perceived motivation scores. Thus, the more negative motivational attitudes are associated with lower perceived motivation scores. The other contextual factors did not significantly contribute to the variance in perceived motivation. Personal accomplishment also remained a significant predictor of perceived motivation within this step, with $\beta = .18$, $t(155) = 2.08$, $p < .05$.

Lastly, the SCM variables of perception of warmth and competence were entered for the final step. Results found that when adding these two variables to the model, competence was the only SCM variable that accounted for a significant amount (i.e., 23%) of further variance explained in Perceived Motivation scores beyond that explained by the variables entered in previous steps, $F(13, 153) = 10.14$, $p < .001$ when $R^2 = .46$, $\Delta R^2 = .23$, $F(2, 153) = 33.22$, $p < .001$. The finding shows perceptions of competence (rather than warmth) strongly explain a large portion of the variance in perceived motivation, revealing that competence trumps warmth on perceived motivation. More specifically, competence was found to be a strong predictor of perceived motivation scores, with $\beta = .48$, $t(153) = 4.48$, $p < .001$, whereas warmth was not with $\beta = .11$, $t(153) = 1.0$, $p = .32$. Thus, the results suggest that higher degrees of perceived competence towards the typical consumer was more highly associated with more positive perceptions of motivation with each standard deviation unit increase of competence predicting a 0.48 standard deviation increase in perceived motivation scores. The final regression model accounted for 46% (or 42% after adjusted) of the variance in perceived motivation scores. According to Cohen's standards for the behavioral sciences, this is considered a large effect size (f^2) of 0.85 (Cohen, 1988; 1992).

Employment Potential. Within the proposed Motivational Competency Model (MCM), CRC's evaluation of consumers' potential to attain full-time competitive employment is considered an important outcome evaluation within the context of VR service decisions. A second HRA was conducted to determine participants' general evaluation of the hypothetical consumer's potential to attain full-time competitive employment was predicted by (1) demographic variables of age, total years as a rehabilitation counselor, and number of licensures and certifications; (2) Attitudes/Beliefs of job burnout constructs of emotional exhaustion (EE), depersonalization (DP), personal achievement (PA); Motivational Attitudes, and theoretical orientation; (3) Knowledg*e* variable of exposure to MI; (4) Skill-behavior variable of MITI-Adherence to MI (MiA); and (5) warmth and competence. The correlations among the dependent variable (i.e., potential to attain employment) and the predictor MCM variables ranged from small to large, with Pearson correlation coefficients ranging between the medium and large range (-.20. to .85). The correlation matrix and the means and standard deviations for all variables are presented in Table 4.6. This secondary analysis can provide useful information on how attitudes/beliefs, knowledge, skill-behavior, and perceptions of warmth and competence are related to participants' general evaluation of consumers' potential to attain full-time competitive employment. The HRA results of this secondary analysis are presented in Table 4.7.

Table 4.6: Correlation Matrix for Variables Used to Predict CRC's Evaluation Of Consumers' Potential To Attain Full-Time Competitive Employment

Var.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	1.00	.10	.01	.22***	.06	-.40***	-.03	-.03	.23***	-.13*	.02	.21**	.50***	.61***
2		1.00	-.11	.04	.41***	-.24***	-.17**	-.17**	.20***	.11	-.05	-.21	.11	.11
3			1.00	-.09	-.02	.17**	.066	.05	.024	.01	-.02	-.11	-.11	-.05
4				1.00	.11	-.22***	-.065	-.10	.039	.07	.08	.06	.22***	.20***
5					1.00	-.08	-.080	-.149*	.20***	-.03	.05	.01	-.04	-.03
6						1.00	.34***	.41***	-.43***	-.07	-.31***	-.21**	-.37***	-.41***
7							1.000	.64***	-.41***	-.21**	-.09	.10	-.21*	-.14*
8								1.00	-.43***	-.16**	-.11	.11	-.12	-.10
9									1.00	.018	.21**	.05	.31***	.31***
10										1.000	-.05	-.21*	.01	-.06
11											1.00	.21**	.11	.07
12												1.00	.33***	.31***
13													1.00	.82***
14														1.00
Mean	2.85	48.63	2.72	1.37	3.40	19.29	18.35	5.18	40.25	.545	1.77	48.36	39.57	58.11
SD	1.63	10.69	1.49	.67	.86	4.35	11.62	4.64	6.05	.50	1.74	35.62	6.73	10.78

Note. 1= Potential for Employment, 2=Age, 3= Caseload size, 4= Licensures, 5= Total years as a RC, 6= Motivational Attitudes, 7= Emotional exhaustion (EE), 8= Depersonalization (DP), 9= Personal accomplishment (PA), 10 = Theoretical orientation, 11= Exposure to MI, 12= MI Adherent (MIA), 13= Warmth, 14= Competence.

$^{*}p \leq .05$; $^{**}p \leq .01$; $^{***}p \leq .001$

Table 4.7

Hierarchical Regression Analysis for Prediction of perceived E*mployment Potential* ($N = 167$)

			At Entry Into Model			Final Model		
Variable	R^2	ΔR^2	B	*SE* B	β	B	*SE* B	β
Step 1	.06	.06						
Age			.01	.01	.09	.00	.01	-.01
Caseload Size			.05	.11	0.4	.11	.11	.11
Licensure(s)			.52	.19	.22**	.22	.21	.11*
Years as Rehab Counselor			.00	.16	.00	.12	.13	.06
Step 2: Attitudes/Belief	.21	.15***						
Motivational Attitude			-.13	.03	-.34***	-.11	.03	-.21**
Emotional Exhaust			.00	.01	.03	.01	.01	.06
Depersonalization			.05	.04	.15	.03	.03	.11
Personal Accomplish.			.03	.02	.17	.02	.02	.11
Person-Centered			-.51	.24	-.14	-.32	.21	-.11
Step 3: Knowledge	.22	.01						
Exposure to MI			-.11	.07	-.12	-.11	.06	-.08
Step 4: Skill-Behavior	.22	.01						
MI-Adherent			.00	.00	.11	.00	.00	-.03
Step 5: Stereotype-Bias (SCM)	.43	.20***						
Warmth			.00	.03	-.02			
Competence			.08	.02	.53***			

Note. $\Delta R^2 = R^2$ change. F (13, 153) =8.76, $p < .001$, for the full model; for step 1, $F(4, 162) = 2.4$, $p = .05$; for step 2, $\Delta F(5, 157) = 6.01$, $p < .001$; for step 3, $\Delta F(1, 156) = 2.41$, $p = .12$; for step 4, $\Delta F(1, 155) = 1.1$, $p < .32$; for step 5, $\Delta F(2, 153) = 27.00$, $p < .001$.

*$p < .05$, **$p < .01$, *** $p < .001$

In the first step of this hierarchical regression analysis with evaluation of employment potential as the criterion variable, counselor demographic variables of age, total years as a rehabilitation counselor, and number of licensures and certifications were entered within the MCM. This model was found significant, F (4, 162) = 2.38, $p < .05$. The model is significant and accounts for 6% of the variance in outcome ($R = .25$, $R^2 = .06$). The results of $\Delta R^2 = .06$, F (4, 162) = 2.38, $p < .05$, indicates counselor-related demographic variables could account for significant portions of the variance in outcome. Additionally, after adding counselor-related demographic variables to the regression model, the variable of number of licensures and certifications became a significant predictor of perceived employment potential, $\beta = .22$, $t(162) = 2.8$, $p = .01$, indicating that the more licenses and certifications that participants held, the higher the participants' evaluation of the consumer's employment potential. Age, caseload size, and total years as a rehabilitation counselor were not significantly associated with the variation in participants' evaluation of Employment Potential.

In step two, the Attitudes/Belief variables of job burnout constructs of emotional exhaustion (EE), depersonalization (DP), personal achievement (PA), motivational attitudes, and theoretical orientation, were entered into the regression analysis. These variables accounted for an additional 6% variance in the amount of variance in the employment potential criterion variable beyond that explained by the demographic variables entered in the first step of the analysis, $\Delta R^2 = .15$, F (4, 157) = 6.01, $p < .001$ The model was significant and accounted for 21% of the variance in outcome, F (9, 157) = 4.56, $p < .001$, $R = .46$, $R^2 = .21$. Motivational attitudes remained a significant contributor to the change in variance in employment potential scores, with with $\beta = -.34$, $t(162) = -4.11$, $p < .001$, ($r = -.41$, $p < .001$), indicating that each standard deviation unit increase on motivational attitudes was predicted to correspond to a 0.34

standard deviation unit drop on evaluation of Employment Potential scores. This relationship between motivational attitudes and Employment Potential was negative, indicating more negative levels of motivational attitudes are associated with less favorable evaluations of consumer potential to attain full-time competitive employment. Licensures and certifications was again found to be correlated to Employment Potential ($r = .22$, $p < .001$), and was a significant contributor to the to the change in variance in Employment Potential scores, with $\beta = .17$, $t(157) = 2.25$, $p < .05$, indicating that more licensures and certifications were associated with more favorable evaluations of consumers' Employment Potential.

Knowledge (i.e., exposure level to MI) was entered in the third step of the regression analysis. Although the model in itself was found to be significant, $F\ (10, 156) = 4.41$, $p < .001$, the results of $R^2 = .22$, $\Delta R^2 = .012$, $F\ (1, 156) = .2.41$, $p < .122$ indicate Knowledge could not account for any portion of the variance in outcome beyond that explained by the demographic covariates and attitude/belief variables entered in the first and second steps. However, Motivational attitudes continued to contribute inversely to the change in variance in Employment Potential scores, with $\beta = -.37$, $t(156) = -4.23$, $p < .001$, while licensures and certifications were found to contribute positively to the change in variance in Employment Potential ($\beta = .17$, $t(156) = 2.23$, $p < .05$) and theoretical orientation ($\beta = -.15$, $t(156) = -2.10$, $p < .05$) inversely contributed to the change in variance in employment potential-- indicating that lower scores in motivational attitudes and identifying with person-centered theoretical orientation is related to less favorable evaluations of Employment Potential, while having more licensures and certifications were related to more favorable evaluations of employment potential. No other contextual factors appeared to significantly contribute to the variance in evaluation of employment potential scores.

Skill-Ability (MI-Adherence (MiA-MITI) was entered in the fourth step of the regression analysis. Again, this model was found to be significant (F (11, 155) = 4.08, $p < .001$, however results of the $R^2 = .22$, $\Delta R^2 = .01$, F (1, 155) = .980, $p < .324$ indicate Knowledge could not account for any portion of the variance in outcome associated with Employment Potential scores beyond that explained by demographic covariates and contextual variables entered in the first, second, and third steps. When examining the standardized partial regression coefficients, Motivational attitudes continued to inversely contribute to the change in variance in the evaluation of Employment Potential scores, with $\beta = -.46$, $t(155) = -4.11$, $p = .001$, indicating that each standard deviation unit change on Motivational Attitudes was predicted to correspond to a 0.46 standard deviation unit drop in the evaluation of Employment Potential scores within this step of the equation. Licensure and certification were again found to significantly contribute to the change in variance in the evaluation of Employment Potential scores, with $\beta = .21$, $t(155) = 2.31$, $p = .025$, further indicating that the more licensure and certification participants hold were related to more favorable evaluations of the consumer's Employment Potential. The other contextual factors analyzed within this step did not significantly contribute to the variance in evaluation of Employment Potential scores.

In the final step, SCM perception variables of warmth and competence were entered into the regression As seen in the previously with Perceptions of Motivation, competence, rather than warmth accounted for a significant amount of further variance (i.e., 27%) in Employment Potential scores beyond that explained by the variables entered in previous steps, F (13, 153) = 8.76, $p < .001$ when $R^2 = .43$, $\Delta R^2 = .20$, F (2, 153) = 27.0, $p < .001$. The finding shows perception of Competence strongly explained a substantial portion of the overall variance in Employment Potential. Although perceptions of warmth ($r = -.50$, $p < .001$) and competence ($r =$

.61, $p < .001$) are strongly related to evaluations of employment potential, competence was found to be the strongest predictor of Employment Potential scores, with $\beta = .53$, $t(153) = 5.10$, $p = .001$, whereas warmth was not, with $\beta = -.02$, $t(153) = -.148$, $p = .88$. Thus, these results suggest that higher degrees of perceived competence towards the typical consumer was highly associated with more favorable evaluations of Employment Potential scores. More interestingly, although not significant, warmth was actually negatively associated with evaluation of Employment Potential. The final regression model accounted for 43% (or 40% after adjusted) of the variance in Employment Potential scores and is considered a medium to large effect size (f^2) of 0.75 (Cohen, 1988; 1992). Again, motivational attitudes was found to contribute inversely to the change in variance in Employment Potential scores, with $\beta = -.21$, $t(153) = -2.62$, $p < .01$, further indicating that lower scores in motivational attitudes is related to less favorable Employment Potential. The other contextual factors did not significantly contribute to the variance in Employment Potential scores.

Behavior Expectancies. Within this analysis, Behavioral Expectations to successfully participate in VR services *(EARC)* was the criterion variable. Five sets of MCM related variables entered as predictors in sequential steps: (1) demographic variables of age, total years as a rehabilitation counselor, and number of licensures and certifications; (2) Attitudes/Beliefs of job burnout constructs of emotional exhaustion (EE), depersonalization (DP), and personal achievement (PA), motivational Attitudes, and theoretical orientation; (3) Knowledge variable of exposure to MI; (4) Skill-behavior of MITI single Adherence to MI (MiA); and (5) perceptions of warmth and competence. The correlation matrix and the means and standard deviations for all variables are presented in Table 4.8.

Similar to research question 1 & 2, the correlations among the dependent variable and the predictor variable ranged from small to large, with Pearson correlation coefficients falling within the -.20. to .82 range among the MCM variables. The results of the hierarchical regression analysis used to examine the relative contribution of the five sets of MCM variables as predictors of behavioral expectations to successfully participant in VR services *(EARC*), is provided in Table 4.9.

Table 4.8: Correlation Matrix for Variables Used to Predict Behavioral Expectations (*EARC*).

Var.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
1	1.00	.14**	-.10	.11	.02	-.51***	-.13*	-.21***	.38***	.04	.12*	.24***	.63***	.70***
2		1.00	-.11	.04	.40***	-.23***	-.17*	-.16**	.20***	.09	-.05	-.06	.09	.11
3			1.00	-.09	-.02	.17**	.07	.04	.02	.00	-.02	-.10	-.07	-.05
4				1.00	.11	-.22**	-.07	-.08	.04	.06	.08	.06	.22***	.20***
5					1.00	-.08	-.08	-.15*	.20***	-.02	.04	.00	-.04	-.03
6						1.00	.34***	.41***	-.43***	-.07	-.31***	-.21**	-.40***	-.41***
7							1.00	.64***	-.37***	-.17**	-.09	.10	-.21*	-.14*
8								1.00	-.41***	-.16*	-.08	.11	-.12*	-.09
9									1.00	.01	.21***	.05	.31***	.31***
10										1.00	-.04	-.16*	.03	-.06
11											1.00	.21**	.09	.07
12												1.00	.33***	.31***
13													1.00	.82***
14													.	1.00
Mean	25.52	48.63	2.72	1.37	3.40	19.29	18.35	5.18	40.25	.545	1.77	48.36	39.57	58.11
SD	**5** .41	10.69	1.49	.67	.86	4.35	11.62	4.64	6.05	.50	1.74	35.62	6.73	10.78

Note. 1= Behavioral Expectations (*EARC*), 2=Age, 3= Caseload size, 4= Licensures, 5= Total years as a RC, 6= Motivational Attitudes, 7= Emotional exhaustion (EE), 8= Depersonalization (DP), 9= Personal accomplishment (PA), 10 = Theoretical orientation, 11= Exposure to MI, 12= MI Adherent (MIA), 13= Warmth, 14= Competence.

$^{*}p \leq .05$; $^{**}p \leq .01$; $^{***}p \leq .001$

Table 4.9

Hierarchical Regression Analysis for Prediction of Behavior Expectations (EARC) ($N = 167$)

			At Entry Into Model			Final Model		
Variable	R^2	ΔR^2	B	*SE* B	β	B	*SE* B	β
Step 1	.03	.03						
Age			.07	.04	.14	.00	.03	.01
Caseload Size			-.31	.28	-.11	-.22	.20	-.04
Licensure(s)			.61	.63	.07	-1.11	.51	-.11
Years as Rehab Counselor			-.31	.54	-.05	.02	.39	.00
Step 2: Attitudes/Belief	.31	.31***						
Motivational Attitude			-.51	.10	-.40***	-.31	.11	-.21**
Emotional Exhaust			.11	.04	.13	.07	.03	.21*
Depersonalization			-.03	.11	-.02	-.12	.11	-.11
Personal Accomplish.			.23	.07	.31**	.12	.06	.14*
Person-Centered			.25	.75	.02	.68	.62	.06
Step 3: Knowledge	.29	.01						
Exposure to MI			-.11	.22	-.03	.02	.18	.00
Step 4: Skill-Behavior	.31	.31*						
MI-Adherent			.03	.01	.16	.00	.01	.02
Step 5: Stereotype-Bias (SCM)	.55	.24***						
Warmth			.19	.11	.24**			
Competence			.18	.05	.36***			

Note. $\Delta R^2 = R^2$ change. F (13, 153) =14.3, $p < .001$, for the full model; for step 1, $F(4, 162) = 1.3$, $p = .27$; for step 2, $\Delta F(5, 157) = 11.40$, $p < .001$; for step 3, $\Delta F(1, 156) = 2.1$, $p = .69$; for step 4, $\Delta F(1, 155) = 5.3$, $p < .02$; for step 5, $\Delta F(2, 153) = 40.11$, $p < .001$.

$^{*}p \leq .05$; $^{**}p \leq .01$; $^{***}p \leq .001$

In the first step of this hierarchical regression analysis, participant Behavioral Expectations of the consumer to successfully participant in VR services was set as the criterion variable, and the counselor-related demographic variables of age, caseload size, total years as a rehabilitation counselor, and licensures and certifications were entered as predictors. This model was not statistically significant, $F (4, 162) = 1.31$, $p = .273$. Specifically, the age, caseload size, and number of licensures and certifications of rehabilitation counselors appeared to have little to do with the variation in Behavioral Expectations. Although, age was strongly correlated with licensures towards Behavioral Expectations ($r = .40$, $p < .001$), these variables were not significant contributors to the change in variance in Behavioral Expectation scores. Instead, it is highly likely that the effect of age on Behavioral Expectations was balanced by other counselor-related demographic variables owing to their strong bivariate correlation.

In step two, the Attitudes/Belief variables of job burnout constructs of emotional exhaustion (EE), depersonalization (DP), and personal achievement (PA), Motivational Attitudes, and theoretical orientations were entered into the regression analysis. This model was found significant $F (9, 157) = 7.11$, $p < .001$. Results found attitudes/beliefs to account for 31% of the variance in Behavioral Expectations beyond that explained by the demographic covariates entered in the first step of the analysis, $F (5, 157) = 11.4$, $p < .001$; $R2 = .31$, $\Delta R2 = .31$. Motivational attitudes was found to contribute significantly to the change in variance in Behavioral Expectation scores, with scores, with $\beta = -.40$, $t (157) = -5.11$, $p < .001$, indicating that each standard deviation unit of change in motivational attitudes was predicted to correspond to a 0.40 standard deviation unit decline in the Behavioral Expectations scores. In addition, there is a strong inverse relationship between motivational attitudes and participants' Behavioral Expectations ($r = -.51$, $p < .001$), further indicating that more negative motivational attitudes are

associated with less favorable Behavioral Expectations scores. Although depersonalization ($r = .-21$, $p < .001$) was negatively related to Behavior Expectations, personal accomplishment ($r = .40$, $p < .001$) was found to be positively correlated with behavioral expectations. Personal accomplishment was the only other variable besides motivational attitudes found to contribute positively to the to the change in variance in Behavioral Expectations scores, with $\beta = .31$, $t(157) = 3.21$, $p < .001$. Thus, higher levels of personal accomplishment scores were associated with more positive Behavioral Expectations. Age, caseload size, and total years as a rehabilitation counselor were not found to be significant contributors of variance in Behavioral Expectations of the hypothetical consumer to successfully participant in VR services.

Exposure to MI (Knowledge) was entered in the third step of the regression analysis. Although the model was significant, $F (10, 156) = 6.41$, $p < .001$, the results of $\Delta R2 = .00$, $F (1, 156) = 1.60$, $p = .69$ indicate Knowledge (Exposure to MI) could not account for any portion of the variance in outcome beyond that explained by the demographic covariates entered in the second step ($R = .54$, $R2 = .29$). More negative motivational attitudes remained a significant contributor to the variance in Behavioral Expectation scores, with $\beta = -.409$, $t(156) = -4.84$, $p < .001$; while higher scores in personal accomplishment remained a positive contributor to behavioral expectations, with $\beta = .26$, $t(156) = .3.23$, $p < .001$. The other contextual factors analyzed within this step did not significantly contribute to the variance in evaluation of Behavior Expectations.

Skill-Behavior variable of MI-Adherence (MiA) was entered in the fourth step of the regression analysis. This new variable accounted for an additional 5% variance of additional variance in Behavioral Expectation scores beyond that explained by the other three variable sets entered in previous steps, $F (1, 155) = 5.302$, $p < .05$; $\Delta R2 = .024$. The model was significant and

skill-behavior was found to contribute 31% to the change in variance in Behavioral Expectations scores, $F (11, 155) = 5.306$, $p < .023$, $R = .56$, $R2 = .31$. When examining the standardized partial regression coefficients, Skills-Behavior [MI-Adherence (MiA)] and was also found to contribute significantly to the change in variance in Behavioral Expectations scores, with $\beta = .16$, $t(155) = 2.304$, $p < .01$. As seen in previous steps, motivational attitudes remained a significant inverse contributor to the variance in Behavioral Expectation scores, with $\beta = -.37$, $t(155) = -4.403$, $p < .001$; while higher levels of personal accomplishment remained a positive contributor to Behavioral Expectations with $\beta = .25$, $t(155) = 3.20$, $p < .001$. The other contextual factors analyzed within this step did not significantly contribute to the variance in Behavioral Expectations of the hypothetical consumer to successfully participant in VR service scores.

Lastly, SCM perception variables of warmth and competence were entered in the fifth and final step. After controlling for the counselor-related characteristics, attitudes/beliefs, knowledge/training, and skill-behaviors variables, both perception variables of warmth and competence accounted for the greatest increase additional increase in the amount of variance in Behavioral Expectation scores (i.e., 40%), beyond that explained by the variables entered in any of the previous steps, $F (2, 153) = 40.11$, $p < .001$; $F (13, 153) = 14.304$, $p < .001$ when $R2 = .55$, $\Delta R2 = .24$. More specifically, perceptions of competence ($\beta = .36$, $t(153) = 3.724$, $p < .001$) trumped perceptions of warmth ($\beta = .24$, $t(153) = 2.421$, $p < .01$) in the amount of significant contribution of the change in variance in Behavioral Expectations scores, indicating a standard deviation change in perceived competence scores, is predicted to correspond to a .36 standard deviation increase in Behavioral expectations of the hypothetical consumer to successfully participant in VR services scores. Remarkably, perceptions of warmth ($r = -.63$, $p < .001$) demonstrated a negative relationship with Behavior Expectations, while perceptions of

competence ($r = .70$, $p < .001$) demonstrated a strong positive relationship with Behavioral Expectations. This final regression model accounted for 55% of the variance in participants' Behavioral Expectations, which is considered a large effect size (f2) of 1.22 within the behavioral sciences (Cohen, 1988; 1992). Controlling for all other factors, motivational attitudes remained a significant inverse contributor to the variance in Behavioral Expectations of the hypothetical consumer to successfully participant in VR services with $\beta = -.213$, $t(153) = -3.10$, $p < .003$. Emotional exhaustion $\beta = .16$, $t(153) = 2.21$, $p < .05$ and personal accomplishment $\beta = .14$, $t(153) = 2.11$, $p < .05$ were also found to be a significant predictors of Behavioral Expectations. The rest of the variables in the model did not mediate CRC's Behavioral Expectations.

Skill-Behavior. Based on the results of the primary HRA analysis, a follow-up regression analysis was conducted to further identify casual mediation predictors within the proposed MCM model to account for outcomes seen in participant skill and behaviors when communicating with the hypothetical consumer. Hierarchical regression analysis (HRA) was used to determine the amount of variance in participants' skill-behavior that could be accounted for by four sets of predictors within the proposed theoretical constructs within the Motivational Competency Model (MCM). The following MCM variables were entered as predictors in sequential steps: (1) demographic variables of age, caseload size, total years as a rehabilitation counselor, and number of licensures and certifications; (2) Attitudes/Beliefs variables of job burnout constructs of emotional exhaustion (EE), depersonalization (DP), and personal achievement (PA), motivational attitudes, and theoretical orientation; (3) knowledge variable of exposure to MI; and (4) perceptions of warmth and competence.

Similar to the previous analyses, the correlations among the dependent variable (Skill-Behavior) and the predictor variables ranged from small to large, with Pearson correlation coefficients ranging between small and large (-.20. to .82) among the MCM variables. The results of the hierarchical regression analysis, including values of change in R^2 (ΔR^2), along with unstandardized regression coefficients (*B*), standard errors (*SE B*), and standardized coefficients (β) for the predictor variables at each step and in the final mode are presented in Table 4.11. The correlation matrix and the means and standard deviations for all variables within this model analysis are presented in Table 4.10.

Table 4.10: Correlation Matrix for Variables Used to Predict CRC's Skill-Behavior (i.e., Adherence to MI (MiA).

Var.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
1	1.00	.07	-.11	.06	-.01	-.21**	-.10	-.11	.05	-.21*	.21**	.33***	.31***
2		1.00	-.11	.04	.41***	-.24***	-.17**	-.17**	.20***	.11	-.05	.11	.11
3			1.00	-.09	-.02	.17**	.07	.05	.02	.01	-.02	-.11	-.05
4				1.00	.11	-.22***	-.07	-.11	.04	.07	.08	.26***	.20***
5					1.00	-.08	-.08	-.15*	.20***	-.03	.05	-0.4	-.03
6						1.00	.34***	.41***	-.43***	-.07	-.31***	-.40***	-.41***
7							1.00	.64***	-.41***	-.21*	-.11	-.21*	-.14*
8								1.00	-.43***	-.16*	-.11	-.12	-.10
9									1.00	.02	.21***	.278***	.31***
10										1.00	-.05	-.14	-.06
11											1.00	.10	.07
12												1.00	.82***
13													1.00
Mean	48.36	48.63	2.72	1.37	3.40	19.29	18.35	5.18	40.25	.545	1.77	39.57	58.11
SD	35.62	10.69	1.49	.67	.86	4.35	11.62	4.64	6.05	.50	1.74	6.75	10.78

Note. 1= Adherence to MI (MiA), 2=Age, 3= Caseload size, 4= Licensures/Certifications, 5= Total years as a RC, 6= Motivational Attitudes, 7= Emotional exhaustion (EE), 8= Depersonalization (DP), 9= Personal accomplishment (PA), 10 = Theoretical orientation, 11= Exposure to MI, 12= Warmth, 13= Competence.

$^{*}p \leq .05$; $^{**}p \leq .01$; $^{***}p \leq .001$.

Table 4.11

Hierarchical Regression Analysis for Prediction of counselors' *Skill-Behavior* (i.e., Adherence to MI (MiA) towards the hypothetical consumer ($N = 167$)

			At Entry Into Model			Final Model		
Variable	R^2	ΔR^2	B	*SE* B	β	B	*SE* B	β
Step 1	.02	.02						
Age			-.31	.31	-.09	-.32	.31	-.09
Caseload Size			-2.72	.19	-.11	-2.09	1.8	-.11
Licensure(s)			3.1	4.2	.05	-.51	4.0	-.03
Years as Rehab Counselor			1.41	3.6	.03	2.7	3.4	.11
Step 2: Attitudes/Belief	.11	.09***						
Motivational Attitude			-2.12	.75	-.31**	-.114	.77	-.14
Emotional Exhaust			.24	.31	.11	.29	.29	.11
Depersonalization			1.26	.80	.16	.95	.77	.12
Personal Accomplish.			.41	.53	.06	-.11	.52	-.01
Person-Centered			-8.83	5.51	-.12	-8.41	5.3	-.12
Step 3: Knowledge	.12	.01						
Exposure to MI			2.08	1.63	.10	2.46	1.5	.12
Step 4: Stereotype-Bias (SCM)	.20	.08***						
Warmth			1.90	.67	.35***			
Competence			-.15	.43	-.05			

Note. $\Delta R^2 = R^2$ change. F (12, 154) =3.25, $p < .001$, for the full model; for step 1, $F(4, 162) = .92$, $p = .51$; for step 2, $\Delta F(5, 157) = 3.21$, $p < .001$; for step 3, $\Delta F(1, 156) = 1.64$, $p = .20$; for step 4, $\Delta F(2, 154) = 7.72$, $p < .001$.

*$p < .05$, **$p < .01$, *** $p < .001$

In the first step of the regression analysis, demographic variables of age, caseload, total years as a rehabilitation counselor, and number of licensures and certifications were entered as predictor variables. The model was not statistically significant, F (4, 162) = .916, $p < .456$. The demographic variables were unable to explain a significant proportion of variance in Skill-Behavior (i.e., MiA).

Attitudes/Beliefs variables of theoretical orientation, job burnout constructs of emotional exhaustion (EE), depersonalization (DP), and personal achievement (PA) and motivational attitudes were entered in the second step of the regression analysis. These variables accounted for a significant amount of variance in Skill-Behavior beyond that explained by the demographic covariates entered in the first step, F (9, 157) = 2.22, $p < .05$. $R = .34$, $R^2 = .11$, $\Delta R^2 = .09$. After controlling for demographics variables, the set of attitudes/beliefs variables could account for 9% of the variance in F (5, 157) = 3.214, $p < .01$. Motivational attitudes was the only predictor in this step found to contribute significantly to the change in variance in Skill-Behavior scores, with $\beta = -.31$, $t(157) = -2.82$, $p < .005$, indicating that each standard deviation unit change on motivational attitudes was predicted to correspond to a 0.31 standard deviation unit drop on Skill-Behavior scores. However, this relationship between motivational attitudes on Skill-Behavior was negative, indicating that more negative levels of motivational attitudes were associated with lower counselor Skill-Behavior (i.e., MiA) scores.

Knowledge (i.e., exposure level to MI) was entered in the third step of the regression analysis. Although this model was found to be significant *(*F (10, 156) = 2.171, $p < .022$), after controlling for demographics variables, Knowledge (i.e, MiA) could *not* account for the increase in variance in Skill-Behavior, F (1, 156) = 1.64, $p < .208$; $\Delta R^2 = .009$ beyond that explained by the demographic variables and attitude/belief variables entered in the first and second steps.

Although knowledge was found to be significantly correlated with Skill-Behavior (Pearson r = .21, $p < .01$), it was not found to be a significant contributor to the change in variance in Skill-Behavior scores. Motivational attitudes was the only predictor in this step found to contribute significantly to the change in variance in Skill-Behavior scores, with β = -.23, $t(156)$ = -2.45, $p <$ .01, indicating that each standard deviation unit change on motivational attitudes was predicted to correspond to a 0.23 standard deviation unit drop in Skill-Behavior scores. In other words, and as the literature confirms (Fiske et al, 2007; Gaume, 2009), more negative motivational attitudes is associated with lower levels of knowledge (i.e., Exposure to MI); and that lower exposure to MI is related to lower levels of Skill-Behavior scores (i.e., MI-Adherent (MiA).

Lastly, the SCM variables related to perceptions of warmth and competence were entered for the final step. Unlike the previous models, warmth was the only SCM variable to account for a significant amount of the variance (i.e., 20%) in Skill-Behavior scores (an 8% increase) beyond that explained by the variables entered in previous steps, F (2, 154) = 8.02, $p < .001$; R^2 = .20, ΔR^2 = .08. The model was significant, with F (12, 154) = 3.251, $p < .001$. More remarkably, and different from the previous HRA results, perceptions of warmth were found to be the strongest predictor in the final model and its effect, r = .82, β = .35, $t(154)$ = 2.75, $p <$ .001. Conversely, perceived competence was not found to contribute significantly to the change in variance in Skill-behavior scores, with β = -.045 $t(154)$ = -.351, p = .726; indicating higher degrees of perceived competence towards the hypothetical consumer was inversely related to Skill-Behavior scores (although not significant). The final regression model accounted for 20% of the variance in Skill-Behavior scores. According to Cohen's standards for the behavioral sciences, this is considered a small to medium effect size (f^2) of 0.25 (Cohen, 1988; 1992). The other contextual factors did not significantly contribute to the variance in Skill-Behavior scores.

CHAPTER FIVE

Research Summary

Motivational Competency, or the ability to motivate the ambivalent or unmotivated, is an important and primary role of rehabilitation counselors, as they themselves have rated motivation as the most important factor leading to successful employment outcomes over any other variable (Hayward & Schmidt-Davis, 2005). Moreover, VR counselors have long reported the prevalence of consumers with motivational problems accounting for a significant proportion of their active caseload (Hayward & Schmidt-Davis; 2005; Olshansky, 1964). With the high unemployment rate (66%) among working age people with disabilities (DSA, 2013), the urgency to improve to improve consumer engagement in attaining successful employment outcomes appears critical. Moreover, research has shown the adverse effects related to negative stereotypes and behaviors towards consumers deemed as unmotivated by rehabilitation counselors (i.e., restricted inclusion, participation in VR services, and increased unsuccessful closure rates to due to 'failure to cooperate' (Hayward & Schmidt-Davis, 2005; Manthey, Jackson, & Evans-Brown, 2011; Mwachofi, 2008; Wagner & McMahon, 2004).

Research further shows that initial clinical impressions are resistant to change (Mohr, Israel, & Sedlacek, 2001) and that biased impressions persist throughout service delivery, even in the face of contradictory information (Rosenthal, 2004; Sharf & Bishop, 1979). More importantly, rehabilitation counselors have been found more attuned to negative client factors (e.g., disagreeableness and incompetence) that are concurrent with more unfavorable evaluations of client status and rehabilitation outcomes, even when presented with more positive client factors (Strohmer & Leierer, 2000). While current

studies advance researchers' knowledge of intervention factors affecting employment among people with disabilities, a significant deficit remains in terms of a thorough understanding of the complex factors of client motivation and the effects that VR counselors have in influencing motivation and employment (Cook, 2005; Larson, 2008; Manthey, Jackson, & Evans-Brown, 2011; Wagner & McMahon, 2004). Moreover, the rehabilitation outcome literature implies a respective link between the perceptions of motivation and service acceptance and outcomes (Salomone, 1972; Sharf & Bishop, 1979; Strohmer & Shivy, 1994.

This study is significant and unique in a number of respects. First, and foremost, this study is the first to expand Sue's Multicultural Counseling Competency (MCC) model with Fiske's Stereotype Content Model (SCM) in operationalizing a theoretical framework to address clinical competence in facilitating motivation in people with disabilities. The variables that distinguish motivational competence have been determined, as well as those variables that are independently associated with negating consumer motivation. Additionally, clinical perception has been shown to be susceptible to stereotypes and bias early in the rehabilitation process, when only limited client information is available (Dovidio, & Fiske, 2012).

Moreover, research indicates that clinical perceptions of motivation are associated with clinical judgments of consumers' service potential, with proportionately more consumers closed for reasons of failure to cooperate and/or locate (Hayward and Schmidt-Davis, 2005; Mwachofi, 2008). Thus, this study's rational for examining how CRC's perceptions and behaviors related to consumer' motivation, within the context of the Motivational Competency Model appears is highly relevant and merited.

Specifically, the relationship among the proposed Motivational Competency Model (MCM) predictor variables (i.e., related counselor demographic factors, attitudes/beliefs, knowledge, skill-behavior, and social perception variables), were examined using hierarchical regression analysis to systematically control for variables that contribute to motivational competency. This study is novel because it is the first study to use aspects of Sue's Multicultural Counseling Competency (MCC) model with Fiske's Stereotype Content Model (SCM) to investigate the variables that contribute to enhancing practitioners' understanding and ability to motivate people with disabilities in attaining successful rehabilitation outcomes within the context of state and federally funded vocational rehabilitation programs. In this chapter, a summary of the research findings and explanations are provided. Implications for the field of psychiatric rehabilitation, the limitations of this study, suggestions for future research and implications for clinical practice are discussed.

Findings

Primary Analyses

The preliminary analyses provided statistical evidence for the reliability of the measures used in operationalizing the integrative Motivational Competency Model (MCM) constructs. The internal consistency estimates obtained yielded high alpha coefficients for each measure of the predictor variables, with the range of .70 to .91, demonstrating strong support for the internal consistency reliability of scores. Internal consistency could not be computed for the measurement instruments of Exposure to MI because it is not a standard rating instrument, and may be more identified as a demographic-type question due to objective nature of the items asked. Additionally,

because the MCR, PER, and three of the four items within the 7-item Modified Motivational Interview Survey were created by the investigator in this study, test-retest reliability estimates are further warranted for these instruments. Overall, the findings support the tested model and the application of the traditional multicultural counseling competency model in conjunction with the integration of warmth and competence perceptions involved within the stereo-type content Model's (SCM) process theory within the context of serving consumer populations who present with amotivational characteristics.

A correlational analysis was conducted to examine the interrelationships among the 13 predictors and four outcome variables from the proposed Motivational Competency Model. Multiple significant relationships were found. Various relationships were found within the total number of years working as a rehabilitation counselor and numbers of licensures and certifications held. However, the direction and strength of those relationships varied depending on interacting variables. For example, medium positive relationships were found between the greater number of licensures and counselors' own sense of job related personal accomplishment, and perceptions of warmth and competence. Conversely, a medium negative relationship was observed between licensures held and motivational attitudes, indicating that having more licensures and certifications is related to more negative attitudes about consumer motivation. Additionally higher degrees of emotional exhaustion and depersonalization were more negatively related to all of the criterion constructs, including appraisal of consumer motivation, employment potential, behavior expectancies, as well as poorer counselor skill-behavior, while higher levels of personal accomplishment were more positively

related to the described criterion constructs. Furthermore, positive relationships were observed between higher levels of counselor skill-behavior (MI-Adherent MiA) and all of the dependent variables, indicating that greater adherence to MI related skill-behaviors are indicative of more favorable evaluations of consumer motivation, employment potential, and behavior expectancies.

Moderate to large negative relationships were also observed between motivational attitudes and the entire set of criterion constructs, indicating that more negative motivational attitudes are related to less favorable appraisal of consumer motivation, employment potential, behavior expectancies, as well as poorer counselor skill-behavior. The strongest and most significant positive relationships were observed between participants' perceptions of warmth and competence and all outcome related variables, indicating more positive perceptions of warmth and competence were strongly associated with more favorable appraisal of consumer motivation, employment potential, behavior expectancies, as well as greater adherence to MI related skill-behaviors. Conversely, colder and less competent perceptions of the hypothetical consumer were strongly associated to more negative motivational attitudes held by counselors. Additionally, emotional exhaustion was also negatively related to counselors' perceptions of the hypothetical consumer's warmth and competence, indicating that greater degrees of emotional exhaustion is significantly related to less favorable perceptions of warmth and competence.

Perceived motivation. In the primary analysis, hierarchical regression analysis (HRA) was used to investigate the unique contribution of each of the MCM constructs of 4 demographic variables of age, caseload size, total years as a rehabilitation counselor,

and numbers of licensures and certifications; 7 attitude/belief variables of job burnout constructs of emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA), motivational attitudes, and theoretical orientation; 1 knowledge variable of Exposure to MI; 1 skill-behavior variable of MI-Adherence (MiA); and 2 SCM variables of perceptions of warmth and competence in predicting the evaluation of perceived motivation related to the hypothetical consumer presented in the case scenario. Results from this analysis found that several MCM factors were found to make significant contributions to counselor appraisal of consumer motivation, including general attitudes about motivation related to working with consumers, their adherence to motivational interviewing skill-behaviors, and their perceptions of the hypothetical consumer's degree of warmth and competence. Specifically, variables within counselor's attitudes-beliefs contributed to approximately 14% of the overall variance in perceived motivation. More negative motivational attitudes related to preconceived stigma of consumer motivation and behavior change was found to be a significant predictor of participant's appraisal of the hypothetical consumer's degree of motivation to successfully engage in VR related services.

The findings between counselors' negative motivational attitudes and less favorable appraisal of client motivation is consistent with prior research (Miller, 1983; Moyers & Miller, 1993). Additionally, as hypothesized, counselor skill-behavior was also found to be a significant predictive factor related to participant evaluation of the hypothetical consumer, in that higher observed adherence to principals of Motivational Interviewing (MiA) of expressions of empathy, encouragement, autonomy, and support were indicative of more favorable evaluations of consumer motivation, while lower

observed counselor proficiency in MI was related to more negative appraisal of the consumer's motivation. The single predictor of Adherence to Motivational Interviewing (MiA) in representing participants' skill-behavior captured a significant amount of the common-factors notably found in working alliance (Gaume et al, 2009; Pruett, et al, 2008; Wampold, 2001). Thus, results within this present study are further indicative of the significant contribution that counselors' skill-behavior may have upon clinical judgment and the evaluations of consumer motivation to participant in VR services, which has shown to determine aspects of service delivery and outcomes (Chan, Shaw, McMahon, Koch, & Strauser, 1997).

The SCM variables were found to be the most powerful predictors of participant evaluation of the hypothetical consumer's motivation, accounting for approximately 46% of the variance in perceived motivation within this model. More specifically, perceptions of the consumer's competence were the single greatest predictor of perceived motivation, where perceptions of consumer's warmth were not found to play a significant role in this evaluation. Although SCM research has found similar results (see Cuddy et al, 2008), warmth is typically judged before competence and tends to carry more weight in affective and behavioral reactions, while perceptions of competency are shown to take longer to establish, but are considered a more salient factor in solidifying enduring social judgments (Wojciszke & Abele, 2008; Wojciszke, Bazinska, & Jaworski, 1998).

Table 5.1

HRA Summary of Significant Predictors in Final Model for the Four Dependent Variables

Dependent Variables	Perceived Motivation	Perceived Employment Potential	Expectations of Consumer Behaviors in VR	Counselor Skill-behaviors
	Counselor Evaluation of Consumer			[with consumer]
	Attitudes/Beliefs	Attitudes/Beliefs	Attitudes/Beliefs	Attitudes/Beliefs
	Stereotype-Bias: ▪ Competence	Stereotype-Bias: ▪ Competence	Stereotype-Bias: ▪ Warmth ▪ Competence	Stereotype-Bias: ▪ Warmth
	Skill-behaviors		Skill-behaviors	
% Explained Variance in Final Model	**46%**	**43%**	**55%**	**20%**

Employment potential. Similar predictor variables within this regression model were found to contribute significantly to employment potential, with attitudes-beliefs accounting for 21% of the total variance in perceived employment potential scores, and SCM perceptions accounting for 43% of the total variance of employment potential within this model. In regards to attitudes-behaviors, licensures and motivational attitudes were again significant contributors to counselors' appraisal of the hypothetical consumer's potential in successfully attaining employment. Specifically, more licensures and certifications held by participants moderately contributed to more positive perceptions of the consumer's employment potential, which appears to validate Leahy's et al. (1999) assumption that assumed that additional licenses beyond the CRC may contribute to enhanced recognition of consumer potential due to more specialized knowledge in complex rehabilitation counseling and vocational issues.

As seen in the previous model, motivational attitudes made a large contribution in counselor appraisal of the hypothetical consumer's employment potential, with more negative attitudes about consumer motivation predictive of less favorable over employment potential. This is consistent with similar research findings by Moyers and Miller (1993) that reflects counselors' tendency to credit moralistic and negative characterological attributions in justifying value-laden construct bias related to moral weakness endorsed by the general public (Drake, 2013, Fiske, 2012, Wojciszke, 2005). Lastly, as seen in the previous model, perception of the consumer's competence was the single greatest predictor of consumer' employment potential, whereas perceptions of consumer's warmth was not. The individual contributions of the SCM variables were found to be the most powerful predictors of participants' evaluation of the hypothetical consumer's motivation, accounting for approximately 43% of the variance in perceived employment potential within this model. Forty-three percent is considered a large effect size and provides strong evidence for the use of the proposed Motivational Competency Model in predicting counselor evaluations of consumer employment potential. This finding is important as it provides information as to how perceptions of warmth and competence are inferred to predict the direction of target resource allocation and use (Cislak & Wojciszke, 2008), which may be useful to inform rehabilitation counselor determinations related to service provision (Scholer & Higgins, 2008).

Behavior expectancies. Counselor attitudes-beliefs, knowledge, skill-behavior, and perceptions of warmth and competence were all found to be significant predictors of evaluations of behavioral expectations of the hypothetical consumer to successfully participate in VR services, although knowledge was the only variable within this model

that did not predict a significant amount of the change in variance in behavior expectations. Specifically, Attitudes-beliefs continued to contribute to a significant portion of the variance (30%) in the overall model, as did counselors' skill-behavior (31%). Within the domain of attitudes-beliefs, counselor negative motivational attitudes continued to significantly influence their overall expectations of consumer behaviors. However, unique to this regression model was counselor sense of personal accomplishment was also found to be a significant factor related to behavior expectations across all levels of the model. One possible explanation for this finding is that, given counselor level of tenure within this study's population sample was found related to their high self-reported personal accomplishment (i.e., capacity to work successfully with consumers in achieving successful VR outcomes). Thus, due to their extensive work experience, participants may feel confident in their ability to assist amotivated consumers to persist in successfully accomplishing VR related goals. This is consistent with previous research that theorizes the importance of one's personal expectations being congruent with job related goals and actual accomplishments with enhancing job satisfaction and staving off burnout (Maslach & Jackson, 1984a; Stevens & O'Neill, 1983). Moreover, participants' high endorsement of personal accomplishment in this study suggests that they may feel influential within the VR agency in which they are currently employed, as well as feeling a sense of greater autonomy and control over the work they do with consumers (see Maslach & Florian, 1998).

Counselors' skill-behavior was also found to contribute a large portion of the variance (31%) in behavior expectations. This finding further suggests that counselors' ability to facilitate counselor-client interactions in a MI-consistent manner is predictive of

more favorable expectations of consumer behavior to effectively participate VR related services. Thus, as noted repeatedly in the literature, the counselor's general attitude about motivation when working with consumers, as well as their ability to actively facilitate MI-adherent skill-behaviors are important factors in formulating counselor's expectations about consumer behaviors.

As seen within the previously discussed models, the SCM constructs of warmth and competence appeared to have the strongest relationship to behavior expectancies, accounting for the highest amount of variance (55%) in this model. Results indicated that although competence continued is the strongest predictor in counselors' behavior expectations, warmth also was found to be a tangible contributor. Given VR counselors' need to rapidly assess consumer capacity in successfully attaining employment, the self-profitability distinction between warmth and competence, respectively, may make sense within the context of VR, as individuals tend to prefer accepting others who possess more of the traits that benefits the self (i.e., competence in attaining a successful case-closure) than the traits that may not meet that end (i.e., warmth, but not competent) (see p. 77 in Cuddy et al, 2011).

Skill-Behavior. The literature on the relationships of counselors' attitudes-beliefs, knowledge, and social perceptions in influencing their skill-behavior with clients are overwhelmingly consistent. Specifically, results from this study are consistent with prior research suggesting that attitudes and beliefs held by counselors predict stereotype bias and resulting behaviors towards specific target populations (Dovidio & Fiske, 2012; Moyers & Miller, 1993; Rudman et al., 2001; Samerotte & Harris, 1976; Strohmer & Lehear, 2000). Specifically, this present study found that lower counselor skill-behavior

(i.e., expressions of empathy, encouragement, autonomy, and support) was indicative of more negative motivational attitudes in their work with consumers. Although attitudes-beliefs and perceptions of warmth and competence were the main MCM domains found to contribute significantly to the variance in skill-behavior within this model, negative attitudes persisted as a stable, yet powerful mediator in participant skill-behavior within each step of this regression model except for the last entry of perceptions of warmth and competence.

Intriguingly, unlike the previous regression models, only perceptions of warmth were found to significantly influence counselors' skill-behavior, in that higher perceptions of warmth were positively associated with higher counselor skill-behavior (i.e., MI-Adherence), whereas, competence (although not found significant) was actually negatively associated with counselor skill-behavior (lower levels of MI-Adherence). Specific to this analysis, participants' warmer perceptions of the hypothetical consumer were indicative of lower perceptions of consumer competence. At the same time, warmer perceptions of the hypothetical consumer was associated with higher quality expressions of empathy, encouragement, autonomy, and support (i.e, MI-Adherent) behaviors, whereas perceptions of higher competence were associated with lower perceptions of warmth and lower levels of MI-Adherent behaviors. These findings are consistent with Fiske's work and other SCM research (Judd, Hawkins, Yzerbyt, & Kashima, 2005) concluding that fundamental judgments on either dimension of warmth and/or competence are often negatively correlated – perceivers often infer that an apparent surplus of one dimension implies a deficit of the other. This is a very important finding that provides insight into the unique dichotomy of warmth and competence perceptions

upon counselors' behavioral responses to consumers' presentation of warmth (higher relatedness) or competence (agency) characteristics.

Knowledge was the only primary variable within the MCM model not found to contribute significantly to any of criterion outcomes within the four separate regression models (i.e., perceptions of motivation, employment potential, behavior expectations, and (d) skill-behavior. This finding is similar to results found in knowledge/training within the Multicultural Counseling Competency (MCC) literature (see Bellini, 2002) and cumulating research on training/supervision outcomes with Motivational Interviewing (Martino, Canning-Ball, Carroll, & Rounsaville, 2001; Miller et al., 2004; Miller & Mount, 2001).

Although Knowledge (i.e., exposure to MI) was not found to make significant contributions to the variance in criterion outcomes, it was found to be significantly negatively related to motivational attitudes, suggesting that greater number of trainings in Motivational Interviewing was actually detrimental in influencing counselors' attitudes-beliefs in respect to evidence-based principals involved with consumer motivation. Although this finding was unexpected, it does call for further investigation about the reasons behind this result; whether more negative attitudes were the result of issues pertaining to content, duration, and follow-up of MI trainings, and/or organizational attitudes regarding trainings (i.e., mandated verses optional), or whether participants own professional experience with amotivated consumers trumped personal relevance to new information and/or way of being with consumers consistent with MI principals, etc.

Discussion

Rehabilitation counselors identify consumer motivation as the most important factor leading to successful employment outcomes over any other variable (Hayward & Schmidt-Davis, 2005). Conversely, low consumer motivation is associated with poorer service related outcomes as a result of 'failure to cooperate' or comply with counselor appointed service provision, and has been historically seen as under control of the consumer (Miller, 1983; Hayward & Schmidt-Davis, 2005; Rogers, Embree, Masoudi, Huber, Ford, & Moore, 2011). Yet growing research has shown that motivation is strongly influenced by how the clinician chooses to perceive and interact with the consumer (Dovidio & Fiske, 2012; Friedberg, 1996; Jensen, 2003; Miller & Rollnick, 2013; Prochaska, Rossi, & Wicox, 1991; Wampold, 2001).

This present study provides evidence for the applicability of the Motivational Competency Model in predicting evaluations of consumer motivation, employment potential, and behavior expectancies to successfully participate in VR services to attain employment. Four out of the five primary predictor variables were found to significantly contribute to the variance in outcomes within the current MCM model. Specifically the most important and robust findings involved the power of warmth and competence perceptions in predicting counselors' evaluations of consumer motivation, employment potential, behavior expectation, and in influencing their clinical responses when interacting with the presented hypothetical consumer. The significance of warmth and competence to influence social judgments, decision-making, and behavior has been demonstrated throughout the literature (Ackerman, Nocera, & Bargh, 2010; Asbrock, & Cuddy 2015; Wojciszke et al, 2007). Even non-verbal communications of warmth and

competence reinforced through body language has been shown to produce strong, meaningful, and self-reinforcing outcomes in workplace interactions (Cuddy et al, 2011).

Substantial rehabilitation research has previously demonstrated concern about the job burnout in rehabilitation counselors (Maslach et al, 1978), especially pertaining to their clients' role in instigating job burnout. As this study hypothesized, aspects of job related burnout played a significant role in influencing outcomes within this study. Interestingly, participants within this study did not endorse significant feelings related to job burnout (i.e., emotional exhaustion and depersonalization), but rather indicated, as a whole, endorsed a greater sense of personal accomplishment in their work as rehabilitation counselors. Additionally, research by Kleijweg, Verbraak, and Van Dijk, (2013) warn that the specified domain ranges used to indicate burnout within the MBI lack empirically validated cutoff points, and thus, caution should be taken when interpreting the existence or severity of self-reported job burnout across human service providers.

Although specific variables within attitudes-beliefs were found inversely related to perceptions of warmth and competence, this study demonstrated that they might be distinct constructs in themselves, as perceptions of warmth and competence appeared to be primarily influenced by negative motivational attitudes-beliefs in predicting skill-behavior. This may also signify the need to alter the content and duration of MI trainings to better address the relationship between stereotype bias associated with consumer motivational issues and counselors' skill-behavior. However, group responses indicated that on average, counselors within this study hold more negative attitudes and beliefs about consumer motivational issues and their own ability to influence consumer

motivation, which appeared unaffected by exposure to motivational interviewing via various trainings; and in some cases, exposure to MI appeared to actually perpetuate negative motivational attitudes.

Remarkably, the only results within this study in which warmth was stronger than competence were seen in counselors' Skill-behavior. Specifically, higher ratings of warmth were predictive of higher MiA scores or behaviors (i.e, expressions of empathy, encouragement, and respect towards the hypothetical consumer). Conversely, lower perceptions of warmth were associated with lower MiA scores, (i.e, responses that conveyed a judgmental, patronizing, authoritarian, or advising tone, or that discounted, ignored, or over-rode the consumer's expressed concern). Within the context of VR, this information is particularly valuable in appropriate provision and protection of services related to VR resources.

For example, a counselor may interface with a prospective consumer that may actually present with ambivalence or low motivation to attain employment due to particular psychosocial or subsidy disincentives (as in the case of 'Devon' the hypothetical consumer portrayed in this study). On one hand, good clinical judgment may signal that this consumer's intent to attain VR services may not only be misguided, but dubious. Yet on the other hand, compelling cues within the case scenario and throughout the 15-consumer statements reflect that Devon possesses both assets and limitations in terms of employment potential. Overall, counselors within this study recognized Devon's employment potential by rating him more favorably in terms of possessing the motivation and follow-through necessary to successfully participate in VR services. Although participants rated Devon as relatively competent, they did not rate him

highly in terms of warmth. This dichotomy has been widely observed throughout the SCM research in that warmth and competence judgments illicit active and passive behaviors, respectively (Dovidio & Fiske, 2012; Harris & Fiske, 2006). While being perceived as competent has definite advantages in terms of attaining VR eligibility and securing employment, the competent, but cold dichotomy also entails consequences, as those who are judged as lacking warmth often elicit harm (i.e., attack) as they represent a potential threat to educational and economic resources (Maddox et al, 2008). Nevertheless, lower counselor skill-behavior (MiA) towards consumers is highly associated with poorer working alliance, service related outcomes, and dropout rates (Roessler, 1989; Saarnio, 2002, Wampold & Bolt, 2006). This may be especially true with an ambivalent individual such as someone similar to Devon.

As mentioned previously, results seen in this study necessitates the collection of additional empirical data in order to generalize findings. However, the preliminary outcomes seen within this study suggest that applying awareness to triggered value-laden biases regarding consumer motivation along with proficient practice in MI, may decrease consumer resistance and conflict, while enhancing goal attainment. Within the medical field, this phenomenon has demonstrated positive results in terms of patient satisfaction and lower instances of lawsuits. For example, Ambady, LaPlante, Nguyen, Rosenthal, et al, (2002) found physicians were less likely to be sued for malpractice if they conveyed genuine warmth and concern toward their patients through active listening, humor, and expressions of hope in healing. Although such genuine expressions of accurate empathy are only part of equation in developing a collaborative and motivating working alliance,

actively demonstrating warmth behaviors appears to benefit both the practitioner and the client.

Limitations

Although the instruments used in this study to measure aspects of the proposed Motivational Competency Model demonstrated strong internal validity, there are several limitations that should be considered in interpreting the results of this study. First and foremost is the generalizability of the findings due to limitations with external validity and fidelity (realism) as a result of the contrived nature involved with the analog methodology. Essentially, fidelity was compromised by imposing two primary factors: (1) the experimental condition did not allow subjects to actually interact in real time and in a routine way with the hypothetical consumer typical of actual clinical practice; and (2) participants within this study were homogeneous in nature in respect to age (i.e., 55% > age 50); gender (i.e., 81% = female); race (i.e., 81% = white); experience as an RC (i.e., 59% > 10 years), and theoretical orientation (i.e., 50% = person-centered), limiting the generalizability to those that have a similar demographic pattern.

Secondly, due to the expansive and time-sensitive demands placed up rehabilitation counselors in dealing with the overwhelming task of maintaining an applied knowledge base in serving all persons with disabilities, along with case-closure quota demands, rehabilitation counselors may not feel they are allotted the luxury of time to apply evidence-based counseling skills and active-listening techniques long valued as important and essential functions of their jobs (see Leahy, 2009). In a review of rehabilitation counseling roles/functions by Zanskas and Leahy (2008), state-federal rehabilitation counselors identified ‘information giving’ or providing consulting services

as an important and frequently used role in their direct work with consumers (e.g.,VR service provision, benefits counseling, job accommodations and techniques, etc.). As a result, MI-Adherent (MiA) scores may have been suppressed, which may additionally explain the high observance in participants 'giving information' to the hypothetical consumer within the study's case scenario. However, research by Merrell and Weigel (1998) cited within the same article, emphasizes the importance of a "consultant's character, experience, values, intuition, and relationship building skills" (p. 60) in effectively delivering information verses solely supplying facts and theories (Zanskas & Leahy, 2008).

Additionally, due to time and funding restraints within this study, experimental controls exploring other disability related factors could not be explored properly. For example, participants were not given other relevant information about the hypothetical consumer that may further impact measured constructs with the Motivation Competency Model such as race, attractiveness, visible, congenital verses acquired disabilities that may influence judgment reactions of cause and responsibility, etc. Additionally, a comparative control stimulus (i.e., hypothetical consumer with similar or different disability and/and or motivational presentations) was not provided that would have assisted in comparing the individual effects on outcomes between the control groups.

Finally, assuming that the present model of Motivational Competency can be replicated with other similar samples, further development of the measurement tools within this study need to be refined in order to ensure reliability and validity involved within the subsequent studies assessing MCM constructs. Model testing should be expanded to controlled real-time consumer case scenarios, and eventually to apply to

measuring and operationalizing constructs involved within service process and outcomes.

Training Implications

As seen across both the multicultural counseling competency literature, and in MI training/dissemination research, basic introductory trainings appeared to have little to know effect on improving counselors' motivational attitudes and/or skill-behavior towards the hypothetic consumer within this present study. It should be noted that similar findings regarding stereotype bias and behaviors has been widely demonstrated across perceivers, stimuli, and cultures (Caprariello et al, 2009). Considerable empirical evidence identifies warmth and competence as universal dimensions of social judgment, which suggests that organizations, individuals, and social groups, judge and are judged along these two dimensions. In practice, this is an important aspect of social perceptions that appears to merit further attention. Specifically, raising practitioner awareness in recognizing their personal warmth and competence reactions have been shown to assist in not only suppressing stereotype bias, but may also assist in modifying practitioner behavior in relation to the perceived (see Dovido & Fiske, 2012).

Therefore, continued investigation into improving MI training content that addresses stereotype-bias associated with work and motivation as well as counselor proficiencies in MI is merited.

Specifically, because addressing stereotype bias and clinical competencies are sensitive and deeply personal topics assessment and training should be conducted in a respectful and confidential manner. Katza & Hoyt recognize that attitudes-behaviors are challenging to assess through self-report alone, "as respondents are (a) not always aware of those attitudes (despite behavioral manifestations) and (b) they are not always honest about those of which they are aware. For training, this suggests the value of interpersonal feedback" (p. 303). Thus, creating an organizational and training environment in which counselors feel safe to not only explore and recognize their own value-laden motivational attitudes-beliefs that may be associated with stereotype bias appears crucial in allowing counselors the room to adopt alternative mindsets and behaviors.

Additionally, Fiske (2000) emphasizes that trainings should focus on 're-humanizing' consumers who are perceived as being both low in warmth and low in competence. Specifically, this entails mindful attendance to the other as an individual of worth, in additions to seeking out others' unique strengths. Similar suggestions by Pettigrew and Tropp, (2006) call this deliberate recognition of the other's humanity as *"attending to the other's mind"* (p. 98). Lastly, Fiske has found that recognizing cooperative interdependence facilitates the humanization of another individual. In other words, humanizing is a bi-product of a counselor's recognition that he or she is on the same team as the consumer. Miller and Rollick offer similar recommendations, in that, regardless of counselors' longstanding beliefs and skill, "practicing MI over time teaches

one the underlying spirit if MI (pg. 23)"; or a way of being with people from all walks of life that exudes genuine acceptance collaboration, compassion, and evocation.

Implications for Future Research

The proposed study is the first to implement a theory-driven model to examine VR counselor's perceptions related to aspects of consumer motivation and how these perceptions may affect decisions related to service delivery. Implications of motivational competence within research and practice have been outlined and appear highly relevant in hiring and training practices to improve agency culture and consumer outcomes. Additionally, the considerable contributions of social perceptions related to appraisal of warmth and competence within the Motivational Competency Model adds to the continuing conversation in the extant literature about its merit and further application as a potent construct within the MCM shown to significantly influence clinical judgment and counselor related behaviors. Although Pruett et al. (2008) indicate that "it is not possible to conduct randomized controlled clinical trials with state-run VR services as an independent variable (p. 58)", ongoing research to demonstrate the effectiveness of rehabilitation interventions on employment outcomes of people with disabilities is encouraged by the Rehabilitation Service Administration (RSA). With this future research, investigators should aim to utilize a longitudinal design to better determine the direction, course, and long-lasting effects of the theoretical constructs within the Motivational Competency Model. Another consideration would be to implement qualitative research to directly involve consumers, counselors, and VR organizations and agencies in further investigation of counselor motivational attitudes, burnout, organizational expectations and culture, to better inform trainings in Motivational

Competence in improving employment outcomes.

Perhaps the largest and most disappointing determiner for VR eligibility and achieving an employment outcome is race (Hayward & Schmidt-Davis, 2003; Mwachofi; 2008). As seen throughout the rehabilitation literature (Rosenthal, Ferrin, Wison, & Frain, 2005), White consumers had higher overall rates of achieving employment outcomes than did black consumers. Specifically, Wilson (2000) found that African-Americans were accepted at rate of 91.2% after application while European-Americans were accepted at a rate of 92.2%. While these results are less significant than previous studies, they provide evidence that race can play a factor in eligibility determination.

A more recent study analyzing 2007 RSA-911 data by Mwachofi (2008) also found significant disparities in eligibility and successful outcome rates between White and African American VR applicants. This study also noted African American consumers received lower quality of services for lower cost and shorter periods of time than their white counterparts. Moreover, compared to White consumers, African American 's who did achieve an employment outcome, received less education/training from VR, earned less in the job they did attain, and were more dependent upon non-employment based public support. Most importantly, these findings indicated that there was an even wider employment and earnings gap at the time of closure than at application. In terms of motivational variables, Mwachofi's (2008) analysis found proportionally more African American consumers were not only closed 'without an employment outcome, but for reasons of 'non-cooperation", or 'failure to be located or contacted' than White consumers, and respectively more than any other race. In light of Mwachofi's (2008) and Hayward and Schmidt-Davis's (2003) analysis of RSA-911 data

and other rehabilitation literature documenting VR outcome disparities among consumer characteristics, it seems critical to examine not only how consumer variables effect counselor perceptions, eligibility determinations, and service delivery, but also how strong race may be associated with perception of motivation and outcome potential.

Research in investigating proficient, efficient, and meaningful dissemination of Motivational Interviewing competencies is currently underway (Moyers et al, 2005; Miller & Rollnick, 2013). Future research in this investigation should further examine the relevance of Motivational Competencies within this model (i.e., counselor related attitudes, beliefs, knowledge, perceptions of warmth and competence in relation to training proficiencies across human service fields). Additionally, future studies investigating VR counselors should aim to recruit a higher percentage of male participants, minorities, theoretical orientations, and individuals with varying levels of tenure, and caseload diversity in relation to Motivational Competency. In addition, the integrative Motivational Competency Model can be explored as a predictive model within other human service or rehabilitation related fields such as in social work, corrections, education, and/or rehabilitation practitioners work with severe and persistent mental illness, progressive disabilities and chronic illness.

Conclusion

'Motivation' in itself has been a robust, yet illusive construct to define, measure, and operationalize across rehabilitation settings. The proposed study is the first to implement a theory-driven model to examine VR counselor's perceptions related to aspects of consumer motivation and how these perceptions may affect decisions related to service delivery. The findings of the present study provide solid support for the utility of

an integrative Motivational Competency model in predicting both clinical judgment related to consumer motivation, employment potential, and behavior expectations related to successful participation in VR services and employment. Implications of motivational competence within research and practice have been outlined and appear highly relevant in hiring and training practices to improve consumer outcomes. Additionally, this model proved useful in understanding the causal contributions of counselors' attitudes-beliefs, knowledge, and social perception in predicting counselor skill-behaviors towards consumers presenting with low motivational or ambience. Moreover, several of the integrative MCM constructs were found to be significant in predicting the outcomes related to counselor evaluations and behaviors. This study provides initial support for the validation of this model as a predictor of Motivational Competency in influencing clinical judgment and service related behaviors. Future research of the Motivational Competency Model may provide further theoretical guidance in dispelling stereotype bias and promoting clinical competency with diverse consumer populations that present with variable motivational characteristics.

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Chinese university students. Manuscript submitted for publication consideration: *Journal of Rehabilitation.*

Education and Social/Behavioral Science IRB
7/22/2014

Submission ID number:	2014-0710
Title:	CRC's Conceptualization of Consumer Ambivalence: Measurement and Implications for Service Decisions
Principal Investigator:	DAVID AARON ROSENTHAL
Point-of-contact:	CELESTE ANNE HUNTER, DAVID AARON ROSENTHAL
IRB Staff Reviewer:	CASEY PELLIEN

A designated ED/SBS IRB member conducted an expedited review of the above-referenced initial application. The study was conditionally approved pending receipt of agreement from CRCC allowing researcher access to their database for recruitment purposes. The study qualified for expedited review pursuant to 45 CFR 46.110 and, if applicable, 21 CFR 56.110 and 38 CFR 16.110 in that the study presents no more than minimal risk and involves:

Category 7: Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, or quality assurance methodologies.

Please upload agreement from CRCC to the supplemental page of the application (see my note in the application for further instructions).

To access the materials approved by the IRB, including any stamped consent forms, recruitment materials and the approved protocol, if applicable, please log in to your ARROW account and view the documents tab in the submission's workspace.

If you requested a HIPAA waiver of authorization, altered authorization and/or partial authorization, please log in to your ARROW account and view the history tab in the submission's workspace for approval details.

Prior to starting research activities, please review the Investigator Responsibilities

guidance (http://go.wisc.edu/m0lovn) which includes a description of IRB requirements for submitting continuing review progress reports, changes of protocol and reportable events.

Please contact the appropriate IRB office with general questions: Health Sciences IRBs at 608-263-2362 or Education and Social/Behavioral Science IRB at 608-263-2320. For questions related to this submission, contact the assigned staff reviewer.

Commission on Rehabilitation Counselor Certification

Accredited by the National Commission for Certifying Agencies

August 1, 2014

David A. Rosenthal, PhD, CRC
Associate Dean
Professor, Rehabilitation Psychology & Special Education
School of Education
University of Wisconsin-Madison
1000 Bascom Mall, Room 377D
Madison, WI 53706

Dear Dr. Rosenthal:

The Standards and Examination Committee of the Commission on Rehabilitation Counselor Certification (CRCC) has had an opportunity to consider your request for the following:

- project sponsorship in the amount of $500 to obtain a random sample of 2,000 CRCs currently working with consumers at state/public VR agencies to participate in a survey associated with the study;

- project sponsorship in the amount of $1,000 to fund the hiring of four (4) professionally-trained Motivational Interviewing Network of Trainers (MINT) coders to ensure inter-rater reliability for MI fidelity as measured by the Motivational Interviewing Integrity (MITI) scale; and

- two (2.00) clock hours of CRC continuing education in order to award to CRC certificants who complete the survey.

While CRCC has minimally sponsored funds in the past, it has been for CRCC-initiated projects. Therefore, the Standards and Examination Committee has denied your request for project sponsorship in the amounts of $500 and $1,000, as requested. The Committee has approved your request to obtain use of the CRCC database, thus obtaining a random sampling of 2,000 CRCs at your cost. In addition, the Committee has denied your request for 2.00 clock hours of CRC continuing education, based on CRCC's current continuing education requirement which states a program must be no less than one clock hour in duration (one clock hour is defined as 60 minutes of instruction time). As the information provided clearly notes the average completion time for the survey is approximately 45-50 minutes, the Committee has approved to award 1.00 clock hour.

Enclosed you will find a CRCC Mailing List Rental Agreement. Upon receipt of the executed contract, CRCC will provide the requested data and continuing education.

Thank you for the opportunity to respond to your inquiry.

Very truly yours,

Cindy A. Chapman
kag

Cindy A. Chapman, CAE
Executive Director

CAC/kag
Enclosure

APPENDIX B: EMAIL INVITATION TO PARTICIPATE IN RESEARCH

Dear Certified Rehabilitation Counseling Professional,

My name is Celeste A. Hunter, MS, CRC. I am a doctoral candidate at the University of Wisconsin-Madison in the Department of Rehabilitation Psychology and Special Education.

I am writing to ask for your valuable participation in a dissertation research study that is being conducted to investigate the clinical perceptions and decision making processes used by Certified Rehabilitation Counselors' (CRCs) serving consumers within State Vocational Rehabilitation agencies. Eligible participants for this study were identified and provided by the Commission on Rehabilitation Counselor Certification (CRCC). As a CRC who is currently working with consumers in a state/federal vocational rehabilitation agency, you have posses a unique and influential role in promoting the growth of individual rehabilitation counselors, and agency culture within the field of Vocational Rehabilitation.

This study offers you the opportunity to participate in a brief, hypothetical consumer scenario, and then share your professional thoughts, feelings, and attitudes about consumer engagement and counselor/agency influence upon successful service provision. Specifically, your participation will help us identify potential facilitators and barriers involved in service delivery and consumer engagement that may translate into better professional training support at both individual counselor and agency levels.

Your participation in this study is voluntary and confidential and would require only about 45-50 minutes to complete using an on-line survey. By completing this survey, you have the option to earn two free clock hours of continuing education credit from CRCC.

Although this study does not ask direct identifiable information, some specific demographic questions regarding your age, caseload size, location of employment, etc., may potentially pose a risk to breeching confidentiality, however this risk is minimal as all identifiable information is blind to study researchers. If you do feel uncomfortable answering any of the demographic questions, please feel free to skip the question and only answer those questions you would like to endorse. You may leave the research survey at anytime without penalty.

If you are interested in participating in this research study, please click on the hyperlink below, which will take you to our study's confidential survey website. Upon the completion of the survey, participants will be given an option to receive two credits of continuing education credits (CEUs) by the CRCC through an external weblink. The survey link to the study will be separated from the survey link to document your earned CEU credits in order to maintain anonymity by avoiding any association or identification of participants' responses to the present survey.

Thank you for your consideration, and taking the time and effort to participate in this survey. Your opinions are very important to us!

APPENDIX C: RESEARCH INFORMATION AND CONSENT FORM

Dear Professional,

You are being asked to participate in a research study on that is being conducted to investigate the clinical perceptions and decision making processes used by Certified Rehabilitation Counselors' (CRCs) serving consumers within State Vocational Rehabilitation agencies. More specifically, we are attempting to better understand the types of information, which influence clinical perceptions, and how these perceptions are translated into judgments about a consumer's potential for training and employment.

1. PARTICIPATION: Your participation would require only about 45-50 minutes to complete using an on-line survey. By completing this survey, you have the option to earn two free clock hours of continuing education credit from CRCC. Participation is voluntary and you may leave the research survey at anytime without penalty. Please only complete this survey one time.

2. POTENTIAL RISKS & BENEFITS: Your participation in this study will help identify areas of strength and improvement, as well as lead to constructive discussions related to the clinical decision making processes used by vocational rehabilitation counselors in serving their consumers. The research will assist policy makers and government managers in their efforts to build the capacity of the public VR system to improve service delivery and customer engagement. There are no foreseeable risks associated with participation in this study.

3. PRIVACY AND CONFIDENTIALITY: The data from this project will be reported with complete anonymity; no identifying information will be collected. The results of this study may be published or presented at professional meetings, but the identities of all research participants will remain anonymous. Any personal identification related to documentation of earned CEU's will be entered through a external website that cannot be traced to your survey responses.

4. YOUR RIGHTS TO PARTICIPATE, DECLINE, OR WITHDRAW: Participation in this research project is completely voluntary, and declining to participate will involve no negative consequences of any kind. In addition, if you decide to withdraw prior to the completion of the survey, you are entirely free to do so.

5. COSTS AND COMPENSATION FOR BEING IN THE STUDY: There are no perceived costs of participating in this study, beyond the expected 40-50 minutes needed to complete the survey. As mentioned previously, you will be able to receive two free continuing education credits from CRCC for participating in this study.

6. CONTACT INFORMATION FOR QUESTIONS AND CONCERNS: If you have concerns or questions about this study, such as scientific issues, how to do any part of it, technical problems completing the survey, or to report an injury, please contact the researchers: Celeste Hunter by email cahunter@wisc.edu. Dr. David Rosenthal, a faculty member and professor will supervise this research project due to my status as a doctoral candidate. You may also contact Dr. Rosenthal with any additional questions or comments about this study

at drosenthal@education.wisc.edu or (608) 262-1763; School of Education, 377 Ed Bldg., 1000 Bascom Mall, Madison, WI 53706.

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have not been honored during the course of this project, you may contact the office for the Education and Social/Behavioral Science Institutional Review Board office, 608-263-2320, lmlarson@ls.wisc.edu.

Thank you for your consideration, and taking the time and effort to participate in this survey. Your opinions are very important to us!

Most sincerely,

Celeste A. Hunter, CRC
Doctoral Candidate;

Department of Rehabilitation Psychology
University of Madison-Wisconsin

David A. Rosenthal, CRC, PhD
Advising Professor and Co-chair

Department of Rehabilitation Psychology
University of Madison-Wisconsin

Appendix D:

The Motivational Competency Survey:
An Exploration Of Clinical Perceptions Towards The 'Ambivalent Or Unmotivated'

Dear Certified Rehabilitation Counseling Professional,

Thank you for your interest in participating in this study. The aim of this study is to explore CRC perceptions toward a hypothetical consumer in whom they are likely to work with in daily practice.

By completing this survey, you have the option to **earn one free clock hour** of continuing education credit from CRCC.

PARTICIPATION
Participants will include Certified Rehabilitation Counselors (CRC) who work for state VR agencies and are engaged in direct VR service delivery. Your participation would require only about 45-50 minutes to complete. Participation is voluntary and you may leave the research survey at anytime without penalty, but will not be able to receive the CEU offered for completing this survey. Please only complete this survey one time.
If you do not currently meet the eligibility requirements of this study, please do not participate.

*Before proceeding, please verify that you currently hold a valid Certified Rehabilitation Counselor (CRC) license and work as a Vocational Rehabilitation Counselor for a state VR agency.

◉ **Yes**: *I hold a current Certified Rehabilitation Counselor (CRC) license and work as a Vocational Rehabilitation Counselor for a state VR agency.*

○ **No**: One or both qualifications do not apply to me.

YOUR RIGHTS TO PARTICIPATE, DECLINE, OR WITHDRAWAL:
Participation in this research project is completely voluntary, and declining to participate will involve no negative consequences of any kind. After reading the information on this entire page, if you agree to take part in this survey, click on the **'I consent. Continue'** button to start of the survey. Clicking on the **'I consent. Continue'** button assumes that you have read and agreed to participate within study's perimeters' outlined within this consent form. However, if you decide to withdraw prior to the completion of the survey, you are entirely free to do so without penalty.

Upon the completion of the survey, participants will be given an option to receive one credit of continuing education credit (CEU) by the CRCC. Clicking on the '**Submit**' button found at the end of this survey will direct you to an external link where you can enter your name and email address to receive verification of your earned credit. The survey link to the study will be separated from the survey link used to document your earned CEU credit in order to maintain anonymity by avoiding any association or identification of participants' responses to the present survey.

All unsubmitted surveys will be destroyed.

AGREEMENT TO PARTICIPATE
After reading the information on this page, if you agree to take part in this survey, click the "**I consent. Continue**" button below.

INSTRUCTIONS:

This survey is broken up into two sections that will ask you to: (a) rate your perceptions and responses to a hypothetical case scenario, and (b) provide basic demographic information related to your employment and experience working with consumers.

When you begin the survey, you will be presented with a brief hypothetical consumer case scenario that includes a referral report from a previous DVR counselor and initial application. After reading the initial case materials, you will be asked to respond to 15-statements made by the consumer throughout your initial in-take session with him.

After providing your response to each consumer statement, you will be asked a series of questions about your perceptions of the consumer's related characteristics and potential for successful VR service provisions and outcomes.

Although the hypothetical consumer portrayed in the study may not be an unusual client seen by vocational rehabilitation counselors, you are encouraged to assume that this is a actual consumer that you are meeting today for his initial intake. After finishing this hypothetical consumer activity, you will be asked to complete a demographic questionnaire about your employment and experience with consumers.

If you would like to receive continuing education credits for your participation in this study, you will be directed to an outside confidential link to receive a debriefing about the nature of this study and to receive your credits for your participation.

This study is designed so that you may go back and review case materials. However, you are not allowed to change your responses after going on to subsequent parts.

Thus, you may review Devon's case materials at anytime throughout the survey by selecting the following link which will download the proceeding case information:

Appendix A_Consumer Scenario

Otherwise, Devon's consumer materials are provided in the following two pages for your careful review prior to proceeding to the study questions.

Thank you!

Initial DVR Consultation

Name: Devon Baxter

Social Security Number: ###-##-####

Date of Birth: 7/20/1978 **Age**: 36 years-old

Address: P.O. Box 21463
Be lleville, WI 98462 (Gray County)

Resides with: Staying at a friend's place—use above P.O. Box for mailings

Consumer Scenario:

Devon Baxter is a 36-year old male with a history of chronic back pain and fatigue who recently moved into your service area and is seeking Vocational Rehabilitation Services (VR) services to help him find a job.

Devon initially sought VR services a year ago after a friend told him that he might be eligible for services. Prior to this initial meeting with you, Devon had only met with his previous DVR counselor once; at his initial intake session. At that time, his VR counselor informed him that, although he did appear eligible to receive services under **Category 3** [Disability], he needed to provide DVR with an official referral letter from his doctor documenting his disability and potential for employment; and that he would most likely be put on a waiting list, if in fact, he was determined eligible.

Since this initial intake meeting, Devon has not provided the necessary referral information, and has since relocated to your service area, and is looking to re-initiate service determination.

The following case materials were provided by his previous VR counselor. Please read these materials carefully to help you complete the proceeding study activities.

Referral Source: Charles Frain from Queen County DVR: Transfer due to relocation to Gray County

Disability: Application to receive SSDI pending review

- Arthritis
- Back Injury
- Chronic Pain
- Possible Cognitive Disability
- Possible Learning Disability
- Possible Alcohol or other drug disorder
- Possible Attention Deficit Disorder
- Undiagnosed history of depression/ possible co-morbid diagnosis
- Possible Brain Injury
- Hip/Knee/other joint Dysfunction
- Unknown

Significance of disability affecting the consumer's ability to work:

Devon is a 36-year old male seeking services from DVR to help him find a job that he is able to perform despite significant issues with chronic pain and fatigue as a result of back injury caused by a car accident in 2004. Devon was formerly a taxi driver and can no longer sit for long periods of time. He has held various jobs since his accident, and was recently 'laid off' from a part-time job delivering pizzas for a local pizzeria. Devon reports that he recently applied for social security and is not confident about his ability or desire to work again.

Prior to the accident, Devon reports having pre-existing back problems and multiple potential head injuries from playing football in high school. Devon cannot recall the name of the hospital he went to following the accident, and does not have access to the medical records from that hospitalization. Following his car accident, Devon reports that his back issues/symptoms worsened.

He did receive chiropractic services following the accident, but discontinued because he feels it made his symptoms worse. He has seen Dr. Wu, a spinal specialist at Queen County Hospital. Devon reports that he did receive some sort of head/neck imaging, although we have not been able to attain those records since requesting them as of 8/1/2013.

Current Medications: Unknown. Devon had to leave for work at this point in the interview. Have sent request for medical backgrounds and medication list from Queen County Health System.

Insurance: Devon does not currently have any health insurance coverage.

Current Employment Status: Unemployed

Education History: Devon dropped out of high school during his second semester of 11th grade, but did eventually earn his GED the following year. Although he says that he was never formally diagnosed with ADHD, he suspects, and has been told by others that he has it. He reports attending the local community college on and off for two years, but never completed a degree program due to struggles in balancing his need to work with going to school full-time. Since then, Devon indicates that he has worked in odd jobs as a carpenter, in various restaurants related jobs, as a massage therapist. Devon reports that he always was a fast and good learner, excelling in math, English, and 'being social'.

He describes doing better in subjects that he was interested in and had trouble maintaining attention and achievement if he feels bored.

Income: He reports that his mother is currently lending him money to pay for daily living expenses.

Additionally, Devon tries to earn extra money by doing odd jobs for friends and family such as yard work and household repairs. He expressed significant concern about not being able to pay child support.

Medical History: Devon reports significant family history of severe mental illness and AODA issues. He denies experiencing any long-term problems in these areas, although he did report going to marriage counseling briefly with his now estranged wife, in whom he is currently separated from. Together they have a 5-year old son who resides with his mother in Queen County.
He also reports having multiple sports related concussions from wrestling and playing football while in high school (although not documented in past medical records).

Initial Assessment: Devon missed our first in-take meeting and arrived 20-minutes late to our first in-take appointment. He appeared to have great difficulties with his memory and admits often forgetting appointments and following through with other important daily life activities, such as paying bills.

Despite this, during the in-take interview, he did attend well to questions and was able to articulate his responses clearly. However, he does appear somewhat despondent with what he has done with his life up until this point. He present with moderate feelings of low self-esteem and belief that his life circumstances will improve. However, he does indicate wanting and needing to work full-time at a higher paying job to support his son, although he admits to being unsure of how he will be able to do this with the unstable nature of his chronic back pain and fatigue. Overall, Devon expressed some disappointment in himself and his overall academic and vocational achievements during today's interview; feeling unsatisfied in his past and current career status.

Current Status: Since our in-take appointment, we have spoken on the phone twice to follow-up with him about not yet receiving the referral information from his doctor. While talking with him on the phone, he appeared to have difficulty responding clearly to questions; he may have been distracted or concerned about having to leave for work on time; he had difficulty recalling or relaying a response in full.

**To download this information for your review throughout the survey, click on the following link:
Appendix A Consumer Scenario

Consumer Statements:

Instructions: The following 15 statements were made by Devon during your first meeting together. For each statement, imagine that Devon is actually talking to you and explaining his reasons, barriers, and/or preferences in pursuing VR services to get a job.

Think carefully, but quickly about each statement, and then type the *next thing* you might say to Devon in the space below each statements. Write only one or two sentences for each situation.

Thank you for your flexibility and persistence throughout this activity.

"Sorry I'm late… My buddy was supposed to pick me up, but never showed...so I had to take the bus. I hate the bus."

"It was hard for me to come here... I'm no freeloader, but my friend told me that you help people with medical problems get back to work... She said that you may even be able to buy me a car or help pay for schooling, and things like that. That's what I need."

"I'm kinda down on my luck right now... Sometimes I feel like everyone is working against me."

" I was working as a taxi driver for almost three years before my accident… making good money. Now I'm in so much pain that I can barely make it for 15-minutes to deliver a pizza across town. But, I guess that doesn't matter since my boss laid me off a few months ago... business was kind of slow. I just can't catch a break."

My ex-wife and mom are also on my case to get off my butt and get back to work. They're always on me about everything!

"Well they're worried I am going to just play computer games all day long and not do anything of value with my life."

"I'm just hoping my disability goes through... then no worries."

"I heard that looking for work might hurt my chances to get SSDI. I'm not sure how that all works."

"Well my last DVR counselor was kind of a jerk. He seemed pretty full of himself... and sure about me... and what jobs he thinks I should have. The last thing I want to do is to be forced to work at a fast food place, a thrift store, or loading boxes in the back of a truck! I feel bad about myself as it is. I have some pride, ya know. You can't force me to work in a fast food place..."

"I dropped out of school in the 11th grade. Maybe I'd be better off if I 'd stuck it out, but I lost interest, and I think they were just as happy to see me go. I don't think they cared about me

"I mean I've thought about going back to school for awhile, but I just don't know if I can do it now. I think I'm smart enough... I just don't know what job area to go into, with my back as bad as it is. I don't know if I have the stamina for it, even if I could afford it."

"That car accident messed everything up. I have three ruptured discs and hit my head real hard into the windshield. My headaches are better now, but my back is still bothering me a lot, and I'm tired all of the time. I wish I could go back in time..."

"The worst thing is that I'm not able to pick my son up anymore and play with him like I should. He's the most important thing in my life... I want to feel better, so I can be the dad I know he deserves... I want to make him proud."

"Honestly? I don't do much right now... My pain is so bad, and the pain pills they have me taking make me feel pretty tired all of the time. I just end up sitting around at home, doing a bunch of nothin'... It was better when I was driving the taxi... I always had somewhere new to go, someone new to meet. But, maybe those days are over now..."

"Man... I don't even know what I'm doing here... I guess that if I could get a job, I can work on saving some money and looking for a place."

PERCEPTION OF THE CONSUMER SCM

Please indicate your general perception of this consumer, whose case materials you have just reviewed, using the following rating scale.

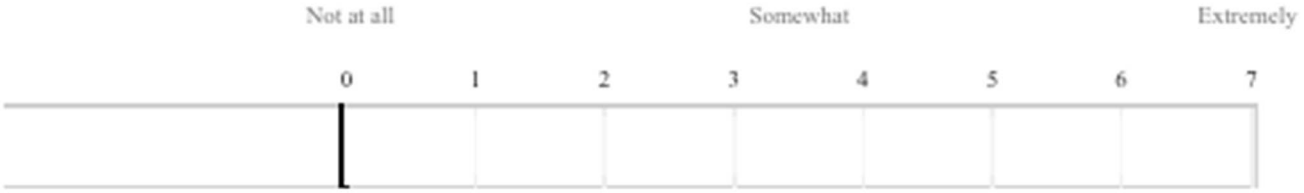
For each pair of adjectives extremes , please rate your perceptions of Devon by selecting any point along the continuum that best describes him.

Cold	○ ○ ○ ○ ○ ○ ○	Warm
Bad	○ ○ ○ ○ ○ ○ ○	Good
Honest	○ ○ ○ ○ ○ ○ ○	Dishonest
Incompetent	○ ○ ○ ○ ○ ○ ○	Competent
Worthy	○ ○ ○ ○ ○ ○ ○	Unworthy
Uncooperative	○ ○ ○ ○ ○ ○ ○	Cooperative
Unsuccessful	○ ○ ○ ○ ○ ○ ○	Successful
Responsible	○ ○ ○ ○ ○ ○ ○	Irresponsible
Insignificant	○ ○ ○ ○ ○ ○ ○	Important
Likable	○ ○ ○ ○ ○ ○ ○	Dislikable
Insincere	○ ○ ○ ○ ○ ○ ○	Sincere
Able	○ ○ ○ ○ ○ ○ ○	Unable
Unhappy	○ ○ ○ ○ ○ ○ ○	Happy
Unreliable	○ ○ ○ ○ ○ ○ ○	Reliable
Optimistic	○ ○ ○ ○ ○ ○ ○	Pessimistic
Impulsive	○ ○ ○ ○ ○ ○ ○	Self-controlled
Passive	○ ○ ○ ○ ○ ○ ○	Assertive
Determined	○ ○ ○ ○ ○ ○ ○	Ambivalent
Lazy	○ ○ ○ ○ ○ ○ ○	Productive
Unstable	○ ○ ○ ○ ○ ○ ○	Stable
Confident	○ ○ ○ ○ ○ ○ ○	Insecure
Ignorant	○ ○ ○ ○ ○ ○ ○	Sophisticated
Driven	○ ○ ○ ○ ○ ○ ○	Apathetic

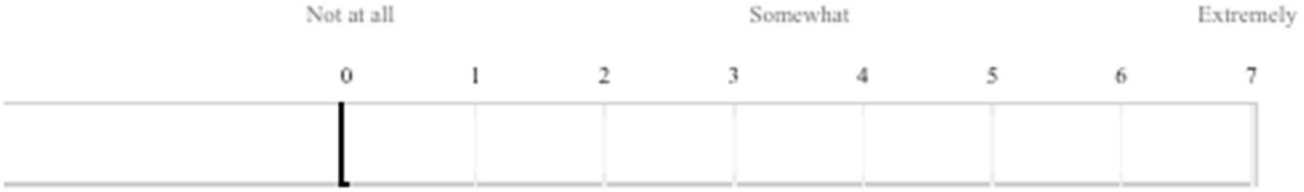
Perceptions of the Consumer

In a similar manner, for the next set of questions, please click on and slide the bar with your mouse to rate the extent you perceive the client to be characterized by each of the following items, where '0' is "Not at all" and '7' is "Extremely".

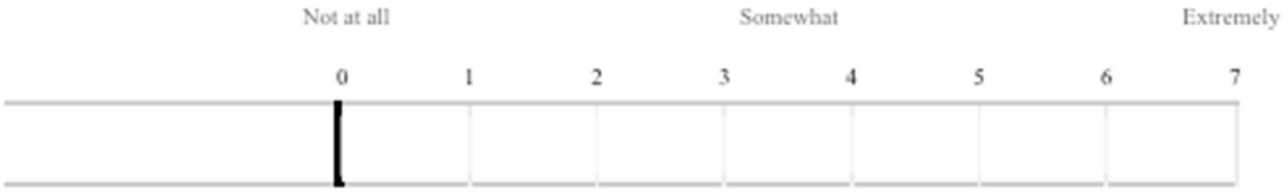
- How motivated is this consumer towards successfully engaging in VR related services, where "0" is *not motivated at all*, and "7" is *extremely motivated.*



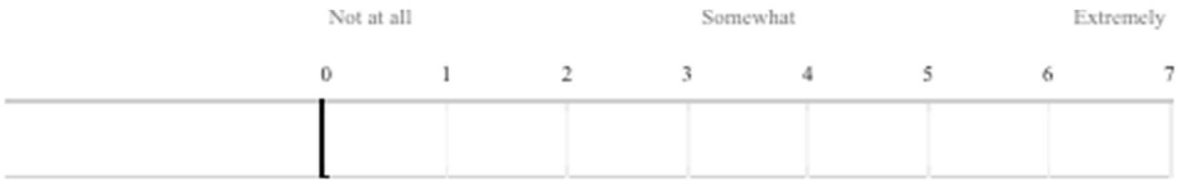
- How successful is this consumer going to be in attaining ***part-time***, ***non-competitive*** employment, where "0" is *not successful at all*, and "7" is *extremely successful.*



- How successful is this consumer going to be in attaining ***full-time***, ***competitive*** employment, where "0" is *not successful at all*, and "7" is *extremely successful.*



- How *confident* are you that you will be successful in working with this consumer in achieving successful employment outcomes, where "0" is *Not confident at all* and "7" is *extremely confident*?



Expectations About Rehabilitation Counseling Scale (EARC)

(Chan, McMahon, Shaw & Lee, 2004)

Component 2: *Expectations about consumer behaviors*

Please take a moment to consider each question, and answer as honestly as possible, the following questions about your expectations related to Devon's potential to engage in VR services . Thank you!

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This consumer will complete his or her rehab program successfully.	○	○	○	○	○
This consumer will follow-through with his or her assignments and rehab activities.	○	○	○	○	○
This consumer will be open and honest with me.	○	○	○	○	○
This consumer will be open to suggestions and feedback.	○	○	○	○	○
This consumer will show up on time for appointments related to my rehab program.	○	○	○	○	○
This consumer will actively participate in planning his or her rehabilitation program with me.	○	○	○	○	○
This consumer will be gainfully employed upon completion of my rehab program.	○	○	○	○	○
This consumer will be realistic about his strengths and limitations.	○	○	○	○	○

–

MASLACH BURNOUT INVENTORY HUMAN SERVICE SURVEY

On the following page there are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way ***about your job.*** If you have ***never*** had this feeling, write a"0" (zero) before the statement. If you have had this feeling, indicate ***how often*** you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way.

How often:	0 = Never	1 = A few times a year	2 = Once a month or less	3 = A few times a a month	4 = Once a week	5 = A few times a week	6 = Everyday

HOW OFTEN: (0 – 6) Statements:

1. ____ I feel emotionally drained from my work.
2. ____ I feel fatigued when I get up in the morning and have to face another day on the job.
3. ____ I can easily understand how my consumers feel about things.
4. ____ I feel I treat some consumers as if they were impersonal objects.
5. ____ I deal very effectively with the problems of my consumers.
6. ____ I feel burned out from my work.
7. ____ I feel I'm positively influencing other people's lives through my work.
8. ____ I've become more callous toward people since I took this job.
9. ____ I worry that this job is hardening me emotionally.
10. ____ I feel very energetic.
11. ____ I feel frustrated by my job.
12. ____ I feel I 'm working too hard on my job.
13. ____ I don't really care what happens to some consumers.
14. ____ Working with people directly puts too much stress on me.
15. ____ I can easily create a relaxed atmosphere with my consumers.
16. ____ I feel exhilarated after working closely with my consumers.
17. ____ I have accomplished many worthwhile things in this job.
18. ____ I feel like I'm at the end of my rope.
19. ____ In my work, I deal with emotional problems very calmly.
20. ____ I feel consumers blame me for some of their problems.
21. ____ I feel used up at the end of the workday.
22. ____ Working with people all day is really a strain for me.

Motivational Interview Survey

Please take a moment to consider each question, and answer as honestly as possible, the following questions about your experience with this new approach to teaching. Thank you!

Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Lack of consumer motivation for change is a significant frustration in my work					
2. My consumers' lack of motivation for change is a significant frustration in my work					
3. I believe that a consumer 's own level of motivation for change is important					
4. If a consumer is not initially motivated, I do not think that I will be able to increase their motivation					
5. I am a skillful good listener in working with all consumers on my caseload					
6. I think that the most effective way to motivate patients to change is by drawing on their own internal motivation					
7. Some consumers need to be coerced or pressured to change					
8. Some consumers will never change regardless of how I interact with them					
9. *Most of the consumers on my caseload are on time to our sessions:					
10. *Only motivated consumers respond favorably to treatment.					
11. *Unmotivated consumers rarely improve with treatment.					
12. *VR counselors often miss important motivational characteristics in their clients.					

13. *Motivational problems are almost always caused by an underlying psychiatric disorder.					
14. *I am satisfied with my ability in treating or working with consumers with motivation problems:					

This Motivational Interview Survey was originally developed for the New Mexico Department of Corrections Education Bureau for use in their substance abuse division. Each item is rated on a 5-point Likert scale (1=strong disagree to 5=strongly agree). The Psychometric properties of this survey were well supported through high internal consistency reliabilities as seen in Willits et al.'s (2009) study.
*Additional survey questions written by Hunter (2013)

This section asks general questions about the characteristics of your caseload so we can better understand the experiences as a rehabilitation counselor.

General Instructions: Please fill-in or circle the best answer

1. *Approximately how many consumers on your caseload complete homework and/or job seeking/readiness activities assigned by you?

    - o 90-100%
    - o 75-89%
    - o 50-74%
    - o 30-49%
    - o < 30%
    - o Not Applicable (no homework assigned)

2. *How often do you assess clients' motivation or readiness to attain employment or to change their behaviors?

    - o Never
    - o Rarely
    - o Sometimes
    - o Usually
    - o Always

3. *How often do you discuss/advise clients to change their behaviors?

    - o Never
    - o Rarely
    - o Sometimes
    - o Usually
    - o Always

4. *In general, how often do you follow-up with your consumers to check on goal progress or to provide support? (Check only one.)

    - o Never: I let them contact me.
    - o Rarely: 1– 2 times per month
    - o Sometimes: 2 - 3 - Times per month

Demographic Questionnaire

This section asks general questions about you as a person, so we can better understand the experiences as a rehabilitation counselor. Within this section, if you feel uncomfortable answering any of the demographic questions, please feel free to skip the question and only answer those questions you would like to endorse.

General Instructions: Please select the best answer that describes you.

1. Which of these groups best describes you?
   - o Hispanic/Latino
   - o American Indian
   - o Asian/Pacific Islander
   - o Middle Eastern
   - o African American or Black
   - o White or Caucasian
   - o Other (PLEASE SPECIFY)

2. What year were you born?

3. What do you consider to be your Theoretical Orientation?
   - o Person-centered
   - o Behavioral
   - o Eclectic
   - o Humanistic/Existential
   - o Interpersonal
   - o Psycho-dynamic/Psychoanalytic
   - o Systems
   - o Other (Please Specify)

4. What is your gender?
   - o Male
   - o Female
   - o Transgender

5. What is the highest level of education you have completed?
   - o 4-year College Degree
   - o Masters Degree
   - o Doctoral Degree (PhD)

6. How many years have you worked with clients with disabilities?
   - o Less than a year
   - o 1-2 years
   - o 3-5 years

- 6-10 years
- More than 10 years

7. How many years have you been certified as a Certified Rehabilitation Counselor (CRC)?
    - Less than a year
    - 1-2 years
    - 3-5 years
    - 6-10 years
    - More than 10 years

8. Were you formally trained as a rehabilitation counselor in an accredited rehabilitation education program?
    - Yes
    - No
    - Unsure

9. How many total years of experience in rehabilitation counseling do you have?
    - Less than a year
    - 1-2 years
    - 3-5 years
    - 6-10 years
    - More than 10 years

10. Which other professional licensure do you currently hold? (Check all that apply)
    - Licensed Professional Counselor (LPC)
    - Certified Alcohol and Drug Abuse Counselor (CADAC)
    - Certified Career Counselor (CCC)
    - Certified Clinical Mental Health Counselor (CCMHC)
    - National Certified Career Counselor (NCCC)
    - State Counselor Licensure
    - Only CRC
    - Other certification(s) and / or licensure(s) (not described above)

11. How many years have you worked for the current VR agency? **(Check only one.)**
    - Less than 6 months
    - 6 months - 1 year
    - 1-3 years
    - 3-5 years
    - More than 5 years

12. In which state are you employed?

13. Is your agency located in a: (Check only one.)
    - o Rural Area (< 2,500 people)
    - o Urban Area (population of > 50,000, but < 100,000)
    - o Suburban Area (> 25,000 without a central city)
    - o Metropolitan area (> 100,000 people)

14. Which job title best describes your position?
    - o Rehabilitation counselor
    - o Case manager
    - o Job placement specialist
    - o Work adjustment specialist
    - o Supervisor Administrator/manager
    - o Other please specify
    - o

15. What is your average caseload?
    - o 0 - 50 consumers
    - o 51 - 100 consumers
    - o 101 - 150 consumers
    - o 151 - 200 consumers
    - o 201 - 250 consumers
    - o 251 - 300 consumers
    - o Greater than 300 consumers

16. Please rank the following ***primary*** disabilities that make up your total active caseload,(where '1' is the most and '8" is the least).
    - o Blind & Visual Impairment
    - o Cognitive Disability
    - o Developmental Disability
    - o Mental Illness
    - o Neurological Disability
    - o Orthopedic Disability
    - o Deaf or Hard of Hearing
    - o Other Disability (Please specify)

17. Approximately how many consumers on your caseload complete homework and/or job seeking/readiness activities assigned by you?
    - o 90-100%
    - o 75-89%
    - o 50-74%
    - o 30-49%
    - o 29-10%
    - o Less than 10%
    - o Not Applicable (no homework assigned)

18. How often do you discuss behavior change with your consumers?
    - Never
    - Rarely
    - Sometimes
    - Often
    - Most of the time

19. How often do your consumers make meaningful changes in their behaviors specific to the behavior targets discussed with you?
    - Never
    - Rarely
    - Sometimes
    - Often
    - Most of the time

20. In general, how often do you follow-up with your consumers to check on goal progress or to provide support (i.e., phone call, email, letter, etc.)? [Check only one]
    - Never: I let them contact me.
    - Rarely: 1– 2 times per month
    - Sometimes: 2 - 3 - Times per month
    - Often: 1 -2 times per week
    - Most of the time: 5 or more times per week

Exposure to Motivational Interview

Please take a moment to consider each question, and answer as honestly as possible, the following questions about your experience with Motivational Interviewing. Thank you!

Questions

Have you ever hear about Motivational Interviewing?

- o Yes
- o No

Have you had any training on MI?_____

- o Yes
- o No

If so, please indicate the type(s) of MI training that you have participated in and approximately how many hours for each

		1-3 hours	4-8 hours	9-16 hours	16-24 hours (2-3 days)	25-80 hours	Other: Please specify amount	MINT Trained? Y= Yes N= No DK= Don't Know
1	**Individual Study and Self-Training (**the study of MI print materials and/or viewing of training videotapes.							o Yes o No o DK
2	**Introduction to Motivational Interviewing** ("taste" of an MI training) became acquainted with basic concepts and methods of MI.							o Yes o No o DK
3	**Introductory Workshop.** Gained basic understanding of the spirit and method of MI, some practical experience in trying out different MI strategies as part of your counseling approach.							o Yes o No o DK
4	**Intermediate/Advanced Clinical Training in MI.** More advanced level of clinical training in MI for practitioners with prior proficiency and experience in the practice of MI. Focused on differentiating change talk from commitment language, and learning how to elicit and shape the two.							o Yes o No o DK
5	**Ongoing consultation and supervision** with MINT or expert MI trainer(s)s to monitor and code session tapes for clinical practice and/or individual consultation in person, telephonically, or through computer mediated communication such as video calls, digital audio or video recordings, and online classes.							o Yes o No o DK
6	**MI Supervisor Training.** These workshops are designed for people who have responsibility for the ongoing training and supervision of clinicians providing MI.							o Yes o No o DK

The 5 following questions are from the Motivational Interview Survey					
Please take a moment to consider each question, and answer as honestly as possible, the following questions about your experience with this new approach to teaching. Thank you!					
Questions	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
I understand the basic ideas and principles of motivational interviewing I understand the basic ideas and principles of Motivational Interviewing (#1 MI Survey)					
I feel proficient and able to use motivational interviewing in my practice (#2 MI Survey)					
There is limited administrative support for integrating MI into my work (#7 MI Survey)					
Motivational Interviewing is applicable to my practice (#8 MI Survey)					
I use Motivational Interviewing on a daily basis in my work (#10 MI Survey)					

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Almost finished... but just want to check in with you before you submit you survey on the following page:

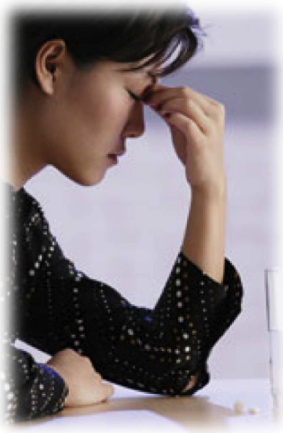
Are you experiencing 'Job Burnout'?

If so, please download the following brochure to learn more about the signs & symptoms associated with Job Burnout as well as resources to help.

Job Burnout Resources

Press the 'Continue' button to submit your survey and to access the external link to receive CEU verification.

Are you experiencing "Job Burnout?



'Burnout' is very common among rehabilitation counselors (Templeton & Satcher, 2007), and is often associated with job stress across the 'helping' professions. Job burnout is a special type of job stress — a state of physical, emotional or mental exhaustion combined with doubts about your competence and the value of your work.

Asking yourself the following questions may help you learn about the signs/symptoms of burnout and take action before job burnout affects your health and employment.

- Do you feel emotionally exhausted, feeling depleted with nothing left to give to others at a psychological level?
- Have you become cynical or critical at work?
- Do you drag yourself to work and have trouble getting started once you arrive?
- Have you become irritable or impatient with co-workers, customers or clients?
- Do you lack the energy to be consistently productive?
- Do you lack satisfaction from your achievements?
- Do you feel disillusioned about your job?
- Are you using food, drugs or alcohol to feel better or to simply not feel?
- Have your sleep habits or appetite changed?
- Are you troubled by unexplained headaches, backaches or other physical complaints?

If you answered yes to any of these questions, you may be experiencing job burnout and are encouraged to consult with your doctor or a mental health provider for professional identification and support, as some of these symptoms can also indicate certain health conditions, such as a thyroid disorder or depression (Mayo Foundation for Medical Education and Research, 2014).

If you do not currently have a mental health provider, please refer to the resources below to help locate a practitioner or consultant in your area.

- **American Psychological Association (APA)** 1-800-964-2000 750 First St., N.E. fax: 202–336–5723 Washington, DC 20002–4242

  -State psychological associations maintain a listing of licensed psychologists who may be able to help with work stress-related issues. Call the APA or your State psychological association for more information, or refer to the APA Internet site with this information (http://locator.apa.org.).

- **The National Alliance of Mental Health (NAMI):** If you need information, referrals and support call: (800) 950-NAMI (6264)
  -Trained volunteers at the NAMI Helpline provide information, referrals, and support to all who are impacted by depression and mental health concerns.

- **The National Suicide Prevention Lifeline**: **(800) 273-TALK (8255).** Lifeline is a free, confidential, 24-hour hotline for anyone experiencing emotional distress or suicidal thoughts. If you are having thoughts of death or suicide and need to speak to someone immediately, call: 1-800-273-8255

If you would like to learn more about job-related burnout and how to spot it and take action, please refer to the following resources and websites:

- **Job burnout**: How to spot it and take action - Mayo Clinic

  http://www.mayoclinic.org/healthy-living/adult-health/in-depth/burnout/art-20046642

- **National Institute for Occupational Safety and Health (NIOSH**) NIOSH provides information and publications about a wide range of occupational hazards, including job stress. NIOSH information about job stress can be found on the NIOSH job stress internet page (http://www.cdc.gov/niosh/jobstres.html), or call 1–800–35–NIOSH (1–800–356–4674)

More Information about Job Stress

- **The Encyclopedia of Occupational Health and Safety**, 4th Edition (ISBN 92–2–109203–8) contains a comprehensive summary of the latest scientific information about the causes and effects of job stress (see Vol. 1, Chapter 5, Mental Health; Vol. 2, Chapter 34, Psychosocial and Organizational Factors).

- **Stress At Work: How Do Social Workers Cope?**
  Arrington, P. (2008). *Stress at work: How do social workers cope?* NASW Membership Workforce Study. Washington, DC: National Association of Social Workers. http://workforce.socialworkers.org/whatsnew/stress.pdf

Finish Line

Phew! You made it!

Please press the red link below to submit your survey and to be redirected to the external website to enter your name and email address so we can send you the official ***'Verification of Completion'*** letter to receive your earned CEU credit from the CRCC.

Thank you so much for your participation!