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CLIENT OUTCOMES AND REHABILITATION COUNSELOR
MULTICULTURAL COUNSELING COMPETENCIES

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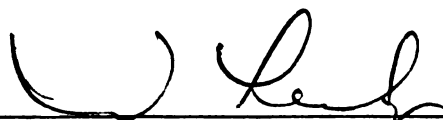
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RELATIONSHIP BETWEEN VOCATIONAL REHABILITATION
CLIENT OUTCOMES AND REHABILITATION COUNSELOR
MULTICULTURAL COUNSELING COMPETENCIES

By

Kathleen F. Matrone

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ABSTRACT

RELATION BETWEEN VOCATIONAL REHABILITATION CLIENT OUTCOMES AND REHABILITATION COUNSELOR MULTICULTURAL COUNSELING COMPETENCIES

By

Kathleen F. Matrone

Multicultural issues in rehabilitation counseling continue to be a focus of research due to the rapidly changing racial and ethnic profiles of persons with disabilities seeking services. This situation requires counselors to possess competence in working effectively with clients from diverse backgrounds. Counselors must possess the skills, knowledge, awareness, and relationship building abilities to work effectively outside of their own cultural group. The purpose of this study was to investigate multicultural counseling competencies of the MDCCD-RS counseling staff, and the relationship of the competencies to client outcomes. In addition, the function of counselor-client racial similarity and dissimilarity were studied in relation to client outcomes.

The findings indicate that some counselor characteristics were found to be significantly related to various multicultural competencies as measured by the Multicultural Counseling Inventory (MCI). These included counselor race and the Awareness and Relation dimensions; counselor's years of experience and the Awareness dimension; and counselor's report of having a CRC certification or eligible for the CRC certification, and the Awareness and Knowledge dimension of the MCI.

Through the use of Hierarchical Linear Modeling (HLM), the results of this study suggest that the characteristics the client brings into the counseling relationship are the primary variables in explaining differences in client outcomes. Counselor multicultural competencies (as measured by the MCI) were not found to be significant in explaining differences in client outcomes. Both counselor and client race were found to be important variables in explaining differences in client outcomes. In addition, the study found that most of the significant explanatory variables are located at the client level and not at the counselor level. In particular, client race, age at application, and social security benefit status are important variables in understanding the variance in client outcomes.

This investigation is one of the first in the field of rehabilitation counseling to utilize hierarchical linear models to test hypothesized relationships across levels. Although these statistical tools have been discussed in education, they have only recently been gaining attention within other disciplines. HLM as a statistical tool has helped in understanding the complex relationships between client variables and counselor variables in the context of multicultural counseling situations.

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Dedicated with all my love to my husband Harry who both challenged and supported my efforts by asking, "Why not?" And to my daughter Angelina and my son Brandon for their love, support and encouragement, especially when times were tough.

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TABLE OF CONTENTS

LIST OF TABLES.....	x
LIST OF FIGURES.....	xi
CHAPTER 1	
INTRODUCTION.....	1
Statement and Significance of the Problem	3
Purpose of the Study	6
Definition of Terms.....	7
Assumptions and Limitations	10
CHAPTER 2	
REVIEW OF THE LITERATURE.....	12
Theory of Multicultural Counseling and Therapy.....	12
Multicultural Counseling Competencies	15
Measures of Multicultural Counseling Competencies	18
Measures of Social Desirability	24
Vocational Rehabilitation Patterns of Service and Outcomes	26
Multicultural Competencies and Counselor Variables.....	33
CHAPTER 3	
METHODOLOGY	38
Participants	39
Instruments	41
Procedure	43
Data Analysis	45
CHAPTER 4	
RESULTS	49
Counselor Characteristics	50
Counselor Multicultural Competencies.....	53
Counselor Characteristics and Multicultural Competencies	56
Social Desirability.....	60
Counselor Multicultural Competencies and Client Outcomes	61
HLM Analysis	65
CHAPTER 5	
DISCUSSION.....	78
Counselor Multicultural Competencies.....	78
Counselor Characteristics and Multicultural Competencies	80
Counselor Multicultural Competencies and Client Outcomes	81
Limitations.....	84
Implications	87
Conclusions	92

APPENDICES	95
BIBLIOGRAPHY	108

LIST OF TABLES

Table	Page
1. Table of Components of Cultural Competence	17
2. Table of Demographic Characteristics of the Counselor Sample . .	52
3. Table of Rehabilitation Counselor MCI Dimensions and Items	53
4. Table of Means and Standard Deviations for Awareness and Relationship by Race	57
5. Table of Means and Standard Deviations for Awareness by Years of Experience	58
6. Table of Means and Standard Deviations for Awareness and Knowledge by CRC/CRC Eligible	59
7. Table of HLM Null Model	66
8. Table of HLM Model 1: Client Race and Counselor Race	69
9. Table of HLM Model 2: Client Age at Application	70
10. Table of HLM Model 3: Social Security Benefits	71
11. Table of Estimates for Three Models for Rehabilitation Outcomes.	73
12. Table of HLM Model 4: Disability and Rehabilitation Outcomes . . .	74
13. Table of Probabilities of Successful Closures by Disability	75

LIST OF FIGURES

Figure	Page
1. Figure of Multicultural Social Desirability Scale	61

CHAPTER 1

INTRODUCTION

During the past two decades, multicultural counseling issues have received significant attention in psychology, counseling, and rehabilitation literature. It is predicted that by the year 2010, Caucasians will account for less than 50% of the population (Sue, Arredondo, & McDavis, 1992) and persons from diverse racial and ethnic backgrounds will make up one of the largest groups within the labor force (Wheaton & Granello, 1998). Boujuwoye (2001) expanded the discussion of these issues from a national perspective to a global perspective, in stating “. . .since immigration, communication, and ease of travel will continue to contribute to multicultural milieus around the world, cultural knowledge will become significant in the provision of services, especially mental health services” (p. 33).

The importance of these issues has resulted in the development of a multicultural model, called the fourth theoretical force (Pedersen, 1991), which integrates counseling theory and practice. The model also provides the framework for discussion of multicultural issues in rehabilitation counseling. Due to the demographic changes in the racial and ethnic composition of the population of the United States, the field of rehabilitation counseling must be responsive to the socio-cultural implications in the provision of services to individuals with disabilities from diverse racial and ethnic backgrounds (Middleton, Rollins, Sanderson, Leung, Harley, et al., 2000; Alston, 1996). One

indicator of multicultural counseling competence is the counselor's possession of skills, knowledge, awareness, and relationship building abilities to work effectively outside of his or her own cultural group.

Interwoven in the discussions of multicultural issues in counseling is the concept of social justice. Sue (2001) argues that multicultural counseling competence must be about social justice – “providing equal access and opportunity, being inclusive, and removing individual and systemic barriers to fair services” (p. 801). The multicultural counseling literature discusses the high number of premature dropout rates which frequently occur when counselors from the dominant European American cultural group are matched with clients who come from one of the under-represented cultural groups (Sue et al, 1996; Sue and Sue, 1999). Research has explained these high dropout rates as stemming from differences in the counselors' and clients' language styles, worldviews, values, and life experiences (Atkinson, Brown, & Casas, 1996; Sue & Sue, 1999). “The underlying assumptions of social justice are consistent with the democratic ideals of cultural democracy and equity (not necessarily some of their passages) found in the Declaration of Independence, the U.S. Constitution, and the Bill of Rights” (Sue, 2001, p, 801). The principles of social justice as discussed by Sue guide the vision, values, and practice of multicultural competence (Sue, 2001; Pedersen, 2000).

Statement and Significance of the Problem

In the preamble to the Rehabilitation Act Amendments of 1992, Congress concluded that minorities often receive inequitable treatment in vocational rehabilitation, experience higher rates of rejection, have fewer successful case closures, receive less training, and have less money per client spent on them than is the case for majority white clients (Bellini, 2002). Several recent studies have found a disparity in access to services, provision of services, and outcomes in the public vocational rehabilitation program for individuals with disabilities from diverse racial and ethnic backgrounds (Feist-Price, 1995; Wheaton, Wilson, & Brown, 1996; Moore, 2002). The perception of inequity in the provision of services to individuals with disabilities from diverse racial and ethnic backgrounds continues to challenge the profession.

The issue of multicultural competence of rehabilitation counselors evolves from these discussions of social justice, equal access, and participation by individuals with disabilities from diverse backgrounds in rehabilitation systems and organizations. Thomas and Weinrach (2002) argue that the disparity in access to services and provision of services is not rooted in counselor bias, but rather “in counselor awareness of their clients’ social context” (p. 88). Counselor awareness is one important component of multicultural counseling competence. Following the 1992 Amendments to the Rehabilitation Act of 1973, issues of multicultural counseling competence have been addressed by several professional rehabilitation organizations (Jenkins, Ayers, & Hunt, 1996). The Commission for Rehabilitation Counselor Certification (CRCC) added a series of

questions on multicultural issues for inclusion in the national certification examination. In addition, there have been multiple competency statements made by the Council on Rehabilitation Education (CORE) and the Council for Accreditation of Counseling and related Education Programs (CACREP) endorsing the obligation to increase counselor's multicultural knowledge, skills and awareness (Byington, Fischer, Walker, & Freedman, 1997). For example, "Professional multicultural rehabilitation competencies and standards are necessary if persons with disabilities from diverse ethnic backgrounds are to be well served by rehabilitation counselors" (Middleton et al., 2000, p. 220). The importance of multicultural counseling competence in rehabilitation counseling is manifested through several perspectives including social justice, consumers, funding streams, and professional and credentialing bodies (Mason, 1999).

Although there has been considerable research in measuring multicultural counseling competence (D'Andrea, Daniels, & Heck, 1991; Sadowsky, Taffe, Gutkin, & Wise, 1994; Ponterotto, Rieger, Barrett, & Sparks, 1994; Hernandez & LaFromboise, 1985; Pope-Davis & Dings, 1995), the research investigating relationships between multicultural counseling competencies and client outcomes is in its infancy. Without supportive outcome data, the multicultural counseling competencies are of limited value (Ponterotto et al., 1994). Sadowsky (personal communication, September 5, 2002) has initiated studies looking at self-reports of multicultural competencies and client evaluations of counseling outcomes. Ponterotto et al., (1994), in their review of the current methods used to assess multicultural counseling competency, recommended outcome studies to both

demonstrate the validity of assessment tools and to improve our understanding of multicultural counseling competency.

In the rehabilitation literature, the research investigating the relationship between multicultural counseling competencies and the provision of services and outcomes is limited. Bellini (2002) investigated multicultural competencies in relation to demographic variables such as counselor gender, race, and participation in multicultural training. Regarding research needs, Bellini (2002) recommended investigations of the relationships between multicultural counseling competencies and rehabilitation outcomes to enhance the understanding of the construct and to provide additional validation for continued emphasis on multicultural training. Other researchers also have recommended investigations of the relationship between the scores of self-report multicultural competency instruments and actual behavioral measures of multicultural counseling performance (Ponterotto et al., 1994)

In 2003, Bellini explored the relationship between rehabilitation counselors' multicultural competency and vocational rehabilitation outcomes in the context of counselor-client racial similarity and difference for individuals with disabilities. Given the small number of minority counselors in most public rehabilitation agencies, Bellini (2003) recommended the need for studies that explore the differences in rehabilitation outcomes for various client groups. Additional studies are needed to advance our understanding of the multicultural competency construct and provide confirmation on the continued emphasis on multicultural training.

Purpose of the Study

The purpose of this study is to examine employment outcomes of vocational rehabilitation clients in relation to multicultural counseling competencies (MCC) of rehabilitation counselors practicing in a public rehabilitation setting. Data from the Rehabilitation Services Administration 911 reporting system and the Accessible Web-based Activity and Reporting Environment (AWARE) caseload management system of one general state VR agency were examined in relation to self-reported multicultural competencies and counselor demographic data. The counselors' level of multicultural competence was assessed using the Multicultural Counseling Inventory (Sodowsky et al., 1994), which comprises four subscales: skills, knowledge, awareness, and relationship. In addition, counselors were asked to complete a demographic form and the Multicultural Social Desirability Scale (Sodowsky, Kuo-Jackson, Richardson, & Corey, 1998). This measure of social desirability was included to control for the tendency to respond to self-report measures in socially acceptable ways. The specific research questions were as follows:

1. What are the patterns of multicultural counseling competencies among rehabilitation counselors practicing in a public rehabilitation setting?
2. After taking social desirability into account, what is the relationship between counselors' self-reported multicultural counseling competencies and selected counselor demographic characteristics (e.g., age, gender, race, and ethnicity)?

3. Do vocational rehabilitation outcomes differ as a function of counselor self-reported multicultural competency?
4. Do vocational rehabilitation outcomes differ as a function of counselor-client racial similarity and dissimilarity?

Definition of Terms

Vocational Rehabilitation Outcomes: Refers to the conclusion of services and case closure of eligible persons who received vocational rehabilitation services in accordance with an Individualized Plan for Employment (IPE). Successful vocational outcomes are those cases closed when the individual with a disability has maintained suitable employment for ninety days or more. Unsuccessful vocational closures are those cases closed when the individual received services in accordance with an IPE, but for one reason or another employment was not achieved.

Culture: Refers to the customs, values, and traditions that are learned from one's environment (Sue & Sue, 1999).

Diversity: Refers to individual and group differences including age, gender, sexual orientation, religion, physical ability or disability, or other self-defined characteristics (Arrendondo, Toporek, Brown, Jones, Locke, Sanchez, & Stadler, 1996).

Race and Ethnicity: "Race is a socially constructed category that specifies identification of group members based on physical characteristics of genetic origins. Ethnicity is defined as a sense of belongingness on the part of an

individual to a common origin in terms of history, ancestry, nationality, language, and religion” (Guindon, 2001, p. 272).

Multiculturalism: Refers to both a philosophical and practical approach “to the study of, understanding and valuing of multiple world-views related to major biological, cultural, ethnic, and other sociodemographic groupings” (Sue et al, 1998, p. 6). The philosophical assumptions underlying multicultural counseling training approaches and competence can be grouped into five types: universal, ubiquitous, traditional, race-based, and pan-national (Carter & Qureshi, 1995). In most of the multicultural counseling competence literature, these five types are condensed into two approaches, etic and emic. The etic approach combines the universal and ubiquitous approaches in the adoption of the philosophy that all people are basically the same as human beings. “On this basis, then, we are first and foremost human being, and only secondarily does our experience and identity derive from other reference groups (e.g., ethnicity, race, gender)” (Carter & Qureshi, 1995, p. 245). The etic approach defines multiculturalism very broadly in looking at differences such as those from sociodemographic variables. This broader definition of multiculturalism not only includes the various ethnic groups, but the characteristics of each group such as family, overall social status, and social political aspects (Essendoah, 1996).

The emic approach (the traditional and race-based types) focuses on the within-group differences in understanding the unique qualities of an individual from a race and culture perspective (Sodowsky et al, 1997). Locke (1990) argued that if the multicultural approach becomes too general, specific cultural groups

will suffer. Each minority group interrelates differently from the White dominant culture. Race issues should not be diluted with other issues, especially because all minority groups still see race as the crucial factor in their relationships with the dominant culture. Arrendondo (1996) also defined multiculturalism from the emic approach indicating the focus should be on ethnicity, race, and culture. For the purposes of this study, multiculturalism was defined from the emic approach to address race and ethnicity issues separate from other competing issues.

Multicultural Counseling: Refers to the preparation and practices that integrate multicultural awareness, knowledge, and skills into counseling interactions (Arrendondo et al., 1996).

Multicultural Counseling Competence: This concept is explored more in depth in the discussion of competency frameworks in the literature review section. In general, this concept refers to the counselor's attitudes/beliefs, knowledge, and skills in working with individuals from diverse backgrounds (Constantine & Ladany, 2000). Sue (2001) expanded this definition to also include advocacy, emphasizing skills the counselor needs to communicate, interact, negotiate, and intervene on behalf of clients from diverse backgrounds.

Multicultural Social Desirability: Refers to the degree to which someone personally and socially always interacts positively with minorities (Sodowsky et al., 1998).

World view: Refers to a personal theory composed of knowledge and beliefs about religion, humanity, nature, and one's existence (Jezewski & Sotnik, 2001; Trevino, 1996; Locke, 1998). Sue (1999) argued that world views are not only

composed of our attitudes and beliefs, but also affect how we think, make decisions, behave, and define events.

Assumptions and Limitations

The major limitation of this study is related to the use of self-report measures of multicultural counseling competencies. The primary disadvantage is that the respondent may consciously or unconsciously respond in a way that will result in a response bias rather than measure the construct (Heppner, Kivlighan, & Wampold, 1999). In addition, using self-report measures may not capture completely the broad constellation of multicultural counseling beliefs/attitudes knowledge, and skills (Sodowsky, personal communication, September 5, 2002). One example of a response bias associated with the self-reported multicultural competencies is the respondent wanting to appear socially acceptable to the researcher. The use of the Multicultural Social Desirability Scale (MCSD) in conjunction with the Multicultural Counseling Inventory assisted in the identification of socially desirable responses.

The generalizability of the findings is cautioned because the sample consists of rehabilitation counselors employed in a Midwestern public rehabilitation program. Future research should examine the study's variables in a more geographically diverse sample of counselors. In addition, the respondents who returned the completed survey packets may have a particular interest in the study's topic and may differ from counselors who did not respond.

The RSA 911 data possesses the three characteristics of quality data: comparability of statistics, coherence, and completeness (Arondel & Depoutot,

1998, as cited in Statistical Working Paper 31). This database has been identified as the single best data on demographics, services, and outcomes of individuals with disabilities served in the state-federal rehabilitation system (Wheaton, 2002; Wheaton, 1996). However, random errors do exist in the database due to data entry, coding, and editing. The electronic case management system (AWARE) used by MDCCD-RS reduces some error because secondary entry of data is not required. In addition, the size of the client database (approximately 9,000 cases) reduces the consequences of random errors (Wheaton, 2002).

CHAPTER 2

REVIEW OF THE LITERATURE

In the United States in the 1960's and 1970s the Civil Rights Movement was a catalyst for addressing issues of culture as an important consideration in the counseling profession (Vontress, 2001). Coupled with the rapidly changing demographics of the population, multicultural counseling issues have permeated the literature in a variety of disciplines for over three decades. Since the mid-1990's, multicultural counseling competence has been increasingly recognized as a factor impacting assessment and treatment effectiveness with individuals from diverse racial and ethnic backgrounds (Sodowsky, 2001). The literature review for this investigation incorporated multiple perspectives from the fields of rehabilitation counseling, counseling psychology, counselor education, and psychiatry, on multicultural counseling issues emphasizing multicultural counseling competence. The chapter begins with a review of the theory of multicultural counseling and therapy followed by a review of multicultural counseling competencies. The third section of this chapter reviews research on patterns of vocational rehabilitation services and outcomes for individuals from diverse racial and ethnic backgrounds.

Theory of Multicultural Counseling and Therapy

In rehabilitation counseling, research and practice is guided by theoretical approaches which help define client issues and effective methods of intervention (Riggall, Maki, & Wolf, 1986). Because of the complexity of issues in rehabilitation counseling, including political, physical, language, physiological,

and environment barriers, many rehabilitation counselors adhere to an eclectic approach to counseling. "No one theory is comprehensive enough to encompass all the problems subsumed under the rubric of rehabilitation counseling" (Thomas, Thoreson, Parker, & Butler, 1998, p. 257). The complexity of issues in multicultural counseling presents similar difficulties where current theories of counseling and psychotherapy inadequately describe, explain, predict, and deal with issues of cultural diversity (Sue et al., 1996; Pedersen, 1991). Research in multicultural counseling has been criticized due to the lack of a theoretical framework to guide and direct research resulting in fragmented studies (Ponterotto & Casas, 1991). This lack of a theoretical framework in multicultural counseling also has impacted practice. Sue (2001) suggested that the theoretical orientation of counselors shapes the definition of the problem and influences the counseling response. Counselors may adhere to a specific counseling theory with expectations of outcomes that are not shared by the client from a diverse cultural or ethnic background (LaFromboise, 1985). For example, counselors may focus on the client's self-actualization rather than promoting the collective well-being of the primary group with which the client identifies.

Some authors have argued for approaches that integrate concepts from current theories to address the needs of individuals from diverse backgrounds. For example, Arciniega and Newlon (as cited in Wehrly, 1995) argue for applying principles of Adlerian psychology to cross-cultural family counseling. Vontress (1988) presented an existential approach to cross-cultural counseling (1988). Ponterotto (1987) described the use of Lazarus's multimodal approach as a

framework for counseling Mexican Americans. Others have argued that an eclectic approach is more effective with individuals from diverse backgrounds (Constantine, 2001; Sue et al., 1996; Pedersen, 1991). In a study of school counselors, Constantine (2001) found that trainees with an eclectic/integrative orientation reported significantly higher levels of multicultural counseling competence than did trainees with a psychodynamic or cognitive-behavioral theoretical orientation.

In response to the lack of a theoretical framework in addressing multicultural issues in counseling, a theory of multicultural counseling and therapy (MCT) has evolved. This theory has been developed from the convergence of thinking of several leaders in multicultural counseling – Paul Pedersen, Darrell Wing Sue, and Allen Ivey (Sue, Ivey, & Pedersen, 1996). Pedersen, Sue, and Ivey are considered major contributors in the field of multicultural counseling and have been publishing since the 1970's (Wehrly, 1995). In the 1980's, Pedersen (as cited in Ponterotto & Casas, 1991) forecasted the development of this theory as a "Fourth Force" in psychology: "It seems likely, therefore, that the current trend toward multicultural awareness among counselors will have as great an impact on the helping professions in the next decade as Roger's "third force" of humanism had on the prevailing psychodynamic and behavioral systems (p. 4)." Multicultural counseling is being recognized as the fourth force by other researchers because of the importance cultural context plays in defining counseling issues and in influencing the appropriate therapeutic response (Sue, 2001; Essandoh, 1996).

The premise for the development of this metatheory, which is one of the descriptors of this theory used by Sue, is that the current theories of counseling and psychotherapy inadequately describe, explain, predict, and deal with current cultural diversity (Sue et al., 1996; Pedersen, 1991). Several of the propositions outlined by Sue et al., (1996) related to this theoretical base impact not only research in multicultural counseling, but also provide a basis for understanding multicultural counseling competence. For example, MCT postulates that both counselor and client identities are formed and embedded in multiple levels of experiences (individual, group, and universal) and context (individual, family, and cultural milieu). The implication for research is that cultured context influences how research questions and answers are framed. The ramifications for multicultural competence in practice is that for counseling to be effective, counselors should use modalities and define goals consistent with the life experiences and cultural values of the client (Sue et al., 1996). MCT also emphasizes the self-in-relation and people-in-context rather than examining just the individual or self. This shift in thinking is important in focusing research and practice to address wider social units and the sociopolitical forces affecting behavior (Sue et al., 1996).

Multicultural Counseling Competencies

In the early 1980's Sue et al. (1992) developed a framework resulting in the conceptualization of multicultural counseling competence. The underlying assumption of this framework is that if the counselor is culturally competent, he or she will be able to provide the most effective services through the

establishment of rapport, appropriate interventions, and culturally appropriate treatment (Pope-Davis, Toporek, Villalobos, Ligiéro, Brittan-Powell, Liu, et al., 2002). Originally, the competencies were conceptualized in terms of 11 specific competencies within three broad domains (Fuertes, 2001). In 1992, the original competency framework was expanded to include 31 specific competencies (Sue et al., 1992) and in 1998, the list expanded to 34 competencies (Sue et al., 1998), although the basic organization of the competencies follows the Sue et al., (1992) format. Arredondo (1996) supplemented the competencies with behavioral outcome statements.

The characteristics of a multiculturally competent counselor are organized by three domains: (a) counselor awareness of cultural values and biases; (b) counselor awareness of client's worldview; and (c) culturally appropriate intervention strategies (Arredondo & Arciniega, 2001). Within each domain are three competency areas: (a) beliefs and attitudes which encompass the counselor's attitudes toward one's own culture and to the difference of others in cultural, racial, and sociopolitical terms (Middleton et al., 2000; Sue et al., 1992); (b) knowledge which involves learning in understanding cultural diversity (Middleton, 2000; Sue et al., 1992); and (c) skills which are the proficiencies gained through active participation in multicultural training and experiences in working with diverse populations (Sodowsky & Impara, 1996; Sue et al., 1992). The framework is depicted in Table 1 with a 3 x 3 matrix (characteristics of culturally skilled helpers x awareness, knowledge, and skill) resulting in 31 different competencies (Sue et al., 1992). This same framework was used in the

development of the multicultural rehabilitation competencies (Middleton et al., 2000) and in the development of many multicultural training programs (Sue, 2001; Trevino, 1996). The National Association of Multicultural Counseling Concerns, a division of the National Rehabilitation Association, endorsed the professional multicultural rehabilitation counseling competency standards developed by Middleton (Bellini, 2002).

Table 1: Components of Cultural Competence

Belief/Attitude	Knowledge	Skill
1. Aware and sensitive to own heritage and valuing/respecting differences.	1. Has knowledge of own racial/culture heritage and how it affects perceptions.	1. Seeks out educational, consultative, and multicultural training experiences.
2. Aware of own background/experiences and biases and how they influence psychological processes.	2. Possesses knowledge about racial identify and development.	2. Seeks to understand self as racial/cultural being.
3. Recognizes limits of competencies and expertise.	3. Knowledgeable about own social impact and communication styles.	3. Familiarizes self with relevant research on racial/ethnic groups.
4. Comfortable with differences that exist between themselves and others.	4. Knowledgeable about groups one works or interacts with.	4. Involved with minority groups outside of work role: community events, celebrations, neighbors, and so forth.
5. In touch with negative emotional reactions toward racial/ethnic groups and can be nonjudgmental.	5. Understands how race/ethnicity affects personality formation, vocational choices, psychological disorders, and so forth.	5. Able to engage in a variety of verbal/nonverbal helping styles.
6. Aware of stereotypes and preconceived notions.	6. Knows about sociopolitical influences, immigration, poverty, powerlessness, and so forth.	6. Can exercise institutional intervention skills on behalf of clients.

Belief/Attitude	Knowledge	Skill
7. Respects religious and/or spiritual beliefs of others.	7. Understands culture-bound, class-bound, and linguistic features of psychological help.	7. Can seek consultation with traditional healers.
8. Respects indigenous helping practices and community networks.	8. Knows the effects of institutional barriers.	8. Can take responsibility to provide linguistic competence for clients.
9. Values bilingualism.	9. Knows bias of assessment.	9. Has expertise in cultural aspects of assessment.
	10. Knowledgeable about minority family structures, community, and so forth.	10. Works to eliminate bias, prejudice, and discrimination.
	11. Knows how discriminatory practices operate at a community level.	11. Educates clients in the nature of one's practice.

Note. Adapted from D.W. Sue, Arredondo, & McDavis (1992) as cited in Sue (2001) Sodowsky (Sodowsky, 1996; Sodowsky et al., 1997; Sodowsky et al.,

1994; Sodowsky et al., 1998) added a fourth dimension, multicultural counseling relationship to this model. "The multicultural competencies are designed to promote culturally effective relationships, particularly in interpersonal counseling" (Arrendondo et al., 1996, p. 55). This dimension was added to address the assumption that only acquiring knowledge and skills is sufficient to be a culturally skilled counselor and to address the importance of the interaction between the counselor and client (Sodowsky et al., 1994). The itemized four competency dimensions developed by Sodowsky (1994) are found in Appendix A.

Measures of Multicultural Counseling Competencies

The construct of multicultural counseling competence was first presented by Sue and his colleagues (Sue, Bernier, Durran, Feinberg, Pedersen, Smith et

al., 1982; Sue, Arredondo, & McDavis, 1992) and has been widely endorsed by experts in the field of multicultural counseling (Constantine & Ladany, 2000). These competencies have been integrated into the education and practice of professionals working in the fields of mental health and rehabilitation counseling (Sue et al., 1992; Arredondo et al., 1996; Middleton et al., 2000). Along with the operationalization of these competencies, tools have been developed to measure the construct of multicultural counseling competence. Research in multicultural counseling competence facilitates our understanding and advances the multicultural model which will ultimately enhance the provision of services to individuals with disabilities from diverse racial and ethnic backgrounds.

The following discussion examines the various self-report measures that have been developed to assess counselor's multicultural counseling competence in a variety of settings. Given that one of the limitations of self-report instruments is that people have a tendency to want to make a good impression by answering the questions "correctly" (e.g., socially acceptable responses rather than reporting actual feelings or behaviors), an additional tool to help screen for social desirability responses also is reviewed and discussed. As the empirical information on rehabilitation counselors' multicultural competence is limited, the review of the literature included publications in counseling psychology, family and marital counseling, psychiatry, and education.

There are currently four self-report, paper-and-pencil instruments that have been developed to measure multicultural counseling competence based on Sue's (1992) model. These include the Multicultural Awareness/Knowledge and

Skills (MAKSS), the Multicultural Counseling Knowledge and Awareness Scale (MCAS-B now called the MCKAS), and the Multicultural Counseling Inventory (MCI). The fourth instrument, the Cross-Cultural Counseling Inventory-Revised (CCCI-R) was designed for use in a more clinical educational setting for supervisors to evaluate counselor trainees' multicultural counseling competence. The MAKSS, MCAS-B, and the MCI are multifactor instruments yielding two to four scales while the CCCI-R is a single-factor scale of multicultural counseling competencies (Pope-Davis & Dings, 1995). Three of the instruments (CCCI-R, MCAS-B, and the MCI) are based explicitly on the competencies identified by Sue et al., (1982). The MAKSS assesses competencies in the three broad areas of awareness, knowledge, and skills, without specific reference to Sue's position paper (Pope-Davis & Nielson, 1996).

The strengths and weaknesses of each of these instruments are explored to identify the most appropriate instrument for this particular study. Issues of construct validity (how well the instrument measures what it claims to), content validity (how well the items give appropriate emphasis to the various components of the construct), and reliability (how well the instrument produces consistent results) are examined. The Cronbach's alpha is a common statistic used to gauge reliability reflecting the degree to which the items within the instrument measure the same construct (Grimm & Yarnold, 2000). Affective measures (thinking, acting, and feeling) such as the self-report instruments measuring multicultural counseling competence are found to have slightly lower reliability levels than

other measures (Gable & Wolf, 1993). Acceptable levels are usually found in the .70 + range for affective measures.

Multicultural Counseling Inventory (MCI)

As with the other self-report instruments, the Multicultural Counseling Inventory (MCI) is based on the multicultural counseling standards proposed by Sue, Arredondo, and McDavis (1992). The MIC (Sodowsky, Taffe, Gutke, & Wise, 1994) is a 40-item, four-point Likert-type scale self-assessment tool consisting of four subscales measuring components of multicultural counseling competence. The subscales include awareness (10 items), knowledge (11 items), skills (11 items), and multicultural counseling relationship (eight items). The full MCI scale has shown a mean Cronbach's alpha of .87 (Pope-Davis & Dings, 1994; Sodowsky et al., 1994; Sodowsky et al., 1998). The mean Cronbach's alpha for multicultural counseling skills is .80; for multicultural awareness .78; for multicultural counseling knowledge .77 (Ottavi et al., 1994; Pope-Davis & Dings, 1994; Pope-Davis & Ottavi, 1994; Pope-Davis et al., 1995; Sodowsky et al., 1994; Sodowsky et al. 1998); and counseling relationship .71 (Constantine & Ladany, 2000). The MCI is one of the most widely used and validated self-report multicultural competence scales. It has been found to have adequate construct validity, favorable criterion-related validity, and good content validity (Pope-Davis & Dings, 1995).

Cross-Cultural Counseling Inventory-Revised (CCI-R)

The Cross-Cultural Counseling Inventory-Revised (CCI-R: LaFromboise et al., 1991) is one of the original assessment tools developed to measure

multicultural competencies. This measure was first developed in 1985 for use in a clinical setting for supervisors to assess their trainees' cross-cultural counseling competence (Constantine & Ladany, 2000; Worthington, Mobley, Tan, & Franks, 2000). The CCCI-R is a 20-item, six-point Likert-type instrument representing three areas: cross-cultural counseling skill, sociopolitical awareness, and cultural sensitivity. It has been adopted for self-report in a previous study (Ladany, Inman, Constantine, & Hofheinz, 1997) as a measure of perceived multicultural counseling competence; however use for this purpose has been limited. Because the focus of this instrument is different from the other instruments (designed for evaluation of counselor trainees in a clinical setting by supervisors), this measure is not considered appropriate for this particular investigation and will not be explored further.

The Multicultural Awareness/Knowledge/Skills Survey (MAKSS)

The Multicultural Awareness/Knowledge/Skills Survey (MAKSS; D'Andrea et al., 1991) is a 60-item, four-point Likert-type self-administered scale that has been used primarily to evaluate the effectiveness of specific multicultural counseling training with graduate school students (Constantine & Ladany, 2000; Diaz-Lazaro & Beth, C.B., 2001; Pope-Davis et al., 1995). The instrument was developed from instructional objectives in graduate training programs. Three subscales are represented including awareness, knowledge, and skills. Initial reported Cronbach's alpha reliabilities were .75, .90, and .96 for each of the subscales (D'Andrea et al., 1991). However, other studies found the awareness subscale has questionable reliability (Pope-Davis & Dings, 1995). In their

examination Pope-Davis & Dings (1995) found that the validity evidence overall is minimal. The construct validity is weakened by a small sample and poor statistical approach (Pope-Davis & Dings, 1995). The content validity is weak in that the authors (D'Andrea et al., 1991) do not sufficiently describe the procedure on how the items in the questionnaire were derived from the specified instructional objectives (Pope-Davis & Dings, 1995). Kocarek, Talbot, Batka, & Anderson (2001) noted that because information on the development of the survey is limited, it is difficult to determine whether the same named subscales are intended to measure similar constructs of the multicultural model proposed by Sue. For the above reasons, this instrument is not considered the most appropriate tool for this study examining the multicultural counseling competencies of rehabilitation counselors.

The Multicultural Counseling Awareness Scale (MCAS-FORMB)

The Multicultural Counseling Awareness Scale (MCAS-FORMB; Ponterotto et al., 1996) is a 32-item, seven-point Likert-type measure consisting of two factors: Knowledge (20 items) and Awareness (12 items). This instrument, newly titled the Multicultural Counseling Knowledge and Awareness Scale (MCKAS), has recently been revised, the revisions focusing in on issues of construct validity (Ponterotto, Gretchen, Utsey, Rieger, & Austin, 2002). One of the major changes to the newly developed MCKAS was the removal of a social desirability index from the MCAS-B (Constantine & Ladany, 2000) due to the lack of adequate testing (Pope-Davis & Dings, 1995). The MCKAS consists of 20 knowledge items and 12 awareness items. This revised instrument has been

used in a few studies to measure multicultural counseling competencies (Constantine, 2000; Constantine et al., 2001), but the testing is limited. The preliminary information indicates that the MCKAS appears to have adequate construct validity (Constantine & Ladany, 2001). The reliability for the subscales is adequate as reported by Cronbach's alpha for the revised knowledge subscale is .92 and the awareness subscale is .79 (Ponterotto et al., 2002). Constantine & Ladany (2000) reported Cronbach's alphas for the full scale of .89, .90 for the knowledge subscale, and .75 for the awareness subscale. The revised MCKAS is reported to be a potentially useful instrument, but the results are preliminary (Ponterotto et al., 2002). Due to the recent revision (published July, 2002) and lack of substantial testing, this instrument is not considered the most appropriate instrument for this particular study.

Measures of Social Desirability

Social desirability is the degree to which respondents may want to make a good impression by giving socially desirable responses rather than describing what they actually think, believe, or do. Social desirability has been cited as a concern for all self-report measures of multicultural counseling competence (Constantine & Ladany, 2001; Pope-Davis & Dings, 1994; Sadowsky et al., 1998; Worthington et al, 2000). A significant positive relationship between the MCI full-scale score and a measure of social desirability suggests that multicultural social desirability may need to be controlled when examining correlates of self-reported multicultural counseling competencies (Sadowsky et al., 1998).

There are two primary instruments used to measure social desirability in conjunction with the use of self-report instruments measuring multicultural counseling competencies. These include the Multicultural Competence Social Desirability Scale and the Marlowe-Crowne Social Desirability Scale. These are discussed below.

The Multicultural Social Desirability Scale (MCDS)

Sodowsky (1998) developed a multicultural social desirability scale (MCDS) to measure "...a preference to make a good impression on others by self-reporting that one is very responsive in all personal and social interactions with minorities and that one always favors institutional policies for diversity" (Sodowsky et al., 1998, p. 4). The MCDS has been found to have Cronbach's alphas of .75 and .80 (Sodowsky et al., 1998). The format of the MCDS is forced-choice of true or false. A high score (25-26 points) indicates that the respondent is claiming favorable attitudes toward minorities all of the time on all personal, social, and institutional issues, and a low score (5-6) points indicates that the respondent does not care about appearing unsympathetic to minority concerns. According to the initial studies, a mean score range of 14 to 16 appears to balance the two perspectives, showing both positive and negative reactions to minority concerns (Sodowsky et al., 1998; Sodowsky et al., 2003).

The Marlowe-Crowne Social Desirability Scale (MCSDS)

The Marlowe-Crowne Social Desirability Scale (MCSDS) is one measure often used to address potential distortion due to social desirability in self-report measures of multicultural counseling competence (Worthington et al., 2000). This

instrument consists of 33 true-false items with a reported consistency coefficients ranging from .73 to .88 (Constantine et al., 2001). The MCSDS has been in existence since 1960 with evidence of adequate construct validity reported and reported item reliability with the Cronbach's alpha ranging from .73 to .88 (Constantine & Ladany, 2000). Sample items include, "I never hesitate to help someone in trouble," and "I like to gossip at times." Higher scores indicate a greater likelihood that the respondent endorses rare positive characteristics and denies common negative characteristics found in the general population (Worthington, 2000).

Measures of Multicultural Competence Summary

In summary, a comprehensive review of the multicultural counseling literature and of the instruments that measure multicultural counseling competency and social desirability responses has resulted in the identification of the strengths and weaknesses inherent in each instrument. This analysis has shown that the instruments selected as being most appropriate for this particular study include the Multicultural Counseling Inventory and the Multicultural Social Desirability Scale.

Vocational Rehabilitation Patterns of Service and Outcomes

The public vocational rehabilitation program is a state-federal partnership program designed to assist individuals with disabilities in preparing for and engaging in employment. Authorized by Congress, this program has been in existence since 1920, and is implemented through 84 separate state agencies, 25 of which provide services primarily to persons who are blind or visually

impaired. Each state agency is required to maintain client data which is reported annually to the Rehabilitation Services Administration (the federal oversight agency). This client data (often referred to as 911 data) is used extensively in rehabilitation research.

Early studies (Atkins & Wright, 1980; Bolton & Cooper, 1980) investigated issues of race and ethnicity in relation to successful closure. Atkins and Wright (1980) compared data for Black and White individuals with disabilities who participated in the public vocational rehabilitation program in fiscal year 1976. [Note: The terminology depicting race is that of the researchers]. This study found a larger percentage of Black applicants not accepted for service; of applicants accepted for service, a larger percentage of Black cases were closed without being rehabilitated; and Blacks whose cases were closed as successfully rehabilitated received lower weekly earnings. Atkins and Wright (1980) concluded that the needs of individuals with disabilities who were Black were not being adequately met by the public program. Bolton and Cooper (1980) conducted a similar analysis of the fiscal year 1977 federal 911 database. Although the differences were often small, the findings were similar. However, Bolton and Cooper (1980) felt that some of the conclusions made by Atkins and Wright needed to be placed in a broader perspective. "After carefully examining the data analyses upon which Atkins and Wright base their conclusions, we are of the opinion that their arguments are sometimes misleading and that their interpretations are generally overstated and occasionally erroneous" (Bolton & Cooper, 1980, p. 41). These researchers argued that the differences in outcome

measures can be explained by the disadvantages associated with racial membership such as level of education attainment prior to entering the VR system.

With changes in organizations and service delivery methods occurring in response to the 1992 and 1998 Amendments to the Rehabilitation Act of 1973, the literature review for this study will focus on more recent studies. The 1992 Amendments established the Rehabilitation Cultural Diversity Initiative (RCDI) and Section 21 which address the inclusion of underrepresented populations at all levels of the rehabilitation process (Middleton, 1996). The research using the Rehabilitation Services Administration (RSA) 911 database has consistently shown different patterns of services and outcomes of individuals with disabilities from diverse backgrounds (Feist-Price, 1995; Wheaton et al., 1996; Wilson, 2001; Wilson, 2002; Wilson, Harley, & Alston, 2001; Wilson, Turner, & Jackson, 2002; Moore, 2002; Moore et al., 2002; Moore, 2001a; Moore, 2001b). Most of the published results of these studies have made comparisons between African Americans and European Americans, although a few studies included other racial and ethnic groups. The research on vocational rehabilitation service provision and outcomes for clients from diverse racial or ethnic groups has shown (a) differences in the patterns of VR services; (b) differences in the cost of the services provided; and (c) differences in the outcomes following the provision of service.

Patterns of Vocational Rehabilitation Services

Feist-Price (1995) investigated the patterns of service for African American and European American clients in a southeastern public vocational rehabilitation agency using the RSA 911 client data for the fiscal years 1990 and 1991 combined. She found African-American clients were less likely to receive all types of post-secondary training than European American clients, were less likely to receive externally purchased services, and received more costly services than European American clients. In addition, the findings of the Feist-Price investigation differed from previous studies (Atkins & Wright, 1980; Bolton & Cooper, 1980) reporting European American clients received adjustment training and maintenance more often than African Americans. The author indicated that Chi-square analysis yielded significant differences at the .05 level in these identified service delivery variables; however, the data on each of the variables was not reported.

Wheaton et al., (1996) investigated the relationships between VR services and gender, race, and outcomes for a Midwestern public rehabilitation program for the fiscal year 1994 using the RSA 911 database. In comparison with the previous studies of Feist-Price (1995), findings in this study were similar along one variable: European Americans are more like to receive college-level training. The findings of Wheaton et al. (1996) are consistent with those of Atkins and Wright (1980) in that African Americans were more likely to receive adjustment training, transportation, and maintenance services while European American

clients were more likely to receive college, university or business training, and restoration services.

Moore (2001a) investigated the relationship between race and ethnicity and those rehabilitation services related to outcome for individuals with hearing loss using the national RSA 911 database for the fiscal year 1996. A higher proportion of those consumers who were provided with assessment, counseling and guidance, restoration, and job placement achieved successful closure. Racial and ethnic members of under-represented groups received a lower proportion of these services that are more closely associated with closure success. In addition, racial and ethnic members with hearing loss experience had significantly lower rates of successful outcomes when compared to European Americans.

In a similar study using the same database, Moore (2001b) found that African American consumers with mild/moderate mental retardation receive different patterns of services than European Americans. African Americans with mild/moderate mental retardation were provided with lower proportions of on-the-job training and job placement services. In addition, this study found that for persons with mental retardation, business/vocational training, on-the-job training, job placement, transportation, and maintenance were positively associated with successful closure.

Moore et al. (2002) examined the impact of services on the rehabilitation outcomes of persons with mild/moderate retardation using the RSA 911 database for a Midwestern public rehabilitation program for the fiscal year 1997.

In this study the authors reported that individuals with mild/moderate mental retardation who were provided with job placement services were more likely to achieve competitive jobs when compared to those who did not receive such services. They did not find race as being positively associated with achieving a successful outcome for persons with mild/mental retardation. In addition they did not find statistical significance differences for achieving higher levels of income based on race.

Wilson et al. (2002) found differences in the patterns of VR services received by successfully rehabilitated African Americans and European-American clients using national RSA 911 database for the fiscal year 1996. The results revealed the three services most commonly received by African American clients were maintenance, transportation and adjustment training. These findings are in agreement with Wheaton et al., (1996) and Atkins and Wright (1980). The three services most commonly received by European Americans included college or university training, physical and mental restoration, and diagnostic or assessment processes. The groups did not differ on business or vocational training, counseling, and on-the-job training. In addition, findings are consistent with previous studies indicating African American clients successfully rehabilitated receive more VR services than European Americans closed successfully (Wheaton, et al., 1997; Wilson, 1997).

Vocational Rehabilitation Outcomes

Feist-Price (1995) found European Americans with disabilities are successfully rehabilitated more frequently than African-American clients in higher

paid positions. The author reported the differences between the clients at the time of application, such as education, source of support, etc. However, these differences were not related to the findings of the client outcome data. The question arises what influence these differences between clients had on the types of services received, success of outcome, and wages received at closure. These issues were not addressed by the author.

Moore (2001a) reported that racial and ethnic members of underrepresented groups are significantly less likely to be closed successful when compared to European Americans and non-Latino consumers. The author argued that racial and ethnic members of underrepresented groups receive a significantly lower proportion of those services (assessment and restoration, job-placement) that are more closely associated with closure success. Moore (2001b; 2002) found that African American consumers with mild/moderate mental retardation achieve closure success at a significantly lower proportion as compared to European Americans with mild/moderate mental retardation.

Cost of Services

The research has shown differences in the cost of services provided between individuals from diverse race and ethnic backgrounds compared to European Americans. Feist-Price (1995) found African-American clients were received more costly services than European American clients. The cost of services was significantly higher for African American and Hispanic/Latino clients than for European American clients (Moore, 2001a).

Summary of Patterns of Service and Outcomes

The research on vocational rehabilitation service provision and outcomes for clients from diverse racial or ethnic groups has shown (a) differences in the patterns of VR services; (b) differences in the cost of the services provided; and (c) differences in the outcomes following the provision of service. In most of these studies comparisons between African American and European Americans are reported more often due to relatively small numbers of other racial and ethnic groups.

Multicultural Competencies and Counselor Variables

Research to date has suggested that there is a relationship between counselor demographic variables and multicultural competencies (Pope-Davis & Ottavi, 1994). Most of the research has focused on either the association between the counselor demographic variables and self-reported multicultural counseling competencies or client preference for counselor race and ethnicity (Atkinson & Lowe, 1995; Pope-Davis & Ottavi, 1994).

Counselor Demographic Variables and Multicultural Competencies

Counselor racial and ethnic self-designation has been found to have a significant relationship with self-reported multicultural competencies (Ponterotto et al., 1994; Pope-Davis & Ottavi, 1994; Pope-Davis et al, 1994; Pope-Davis, Reynolds, Dings, & Nielson, 1994; Sadowsky, 1998). Sadowsky et al. (1998) found that minority counselors have higher scores on the MCI full scale and subscales than White counselors. Pope-Davis & Ottavi (1994) found that race and ethnicity was the only demographic variable associated with differences in

self-reported multicultural counseling competencies. Asian American and Hispanic counselors reported higher scores on the MCI full scale than White counselors; African American, Asian American, and Hispanic counselors reported higher scores in the subscales of awareness and relationship than did White counselors.

In a study with rehabilitation counselors in a northeastern public program, Bellini (2002) found counselor race explained the largest share of variation in multicultural counseling competencies when measured by the Multicultural Counseling Inventory. Granello and Wheaton (1998) reported no significant differences between European American and African American rehabilitation counselors on the Multicultural Counseling Inventory (MCI) total score but did find that African American rehabilitation counselors had significantly higher scores on the MCI awareness and MCI relationship subscales.

Client Preference for Counselor Race and Ethnicity

Coleman et al. (1995) conducted a meta-analysis of studies from January 1971 through December 1992 assessing minorities' perceptions of, and preferences for, racial and ethnic similar counselors. This analysis found that racial and ethnic minorities tend to prefer ethnically similar counselors and tend to rate minority counselors more favorably than European American counselors. However, the preferences for counselors may be influenced by other variables other than race or ethnicity such as social desirability, attitudes and values and the research methods used.

Counselor-Client Race Similarity and Outcome Variables

In the counseling psychology literature, the number of studies linking counselor-client race similarity with outcome variables is limited. Terrell and others (Terrell & Terrell, 1984; Watkins & Terrell, 1988; Watkins et al., 1989) have linked cultural mistrust to premature termination by Black clients with White counselors. Thompson et al. (1994) found that clients low in cultural mistrust paired with a Black counselor resulted in more self-disclosures. The speculation of this finding is that low-mistrustful clients were more likely to see Black counselors as similar to themselves. Atkinson and Lowe (1995) noted that three major studies of patients at mental health facilities in 1991 in California provide substantial evidence that treatment outcomes are enhanced by matching therapist and client on the basis of language and ethnicity. However, none of these studies included within-group variables in their research design. Constantine (2001) suggested that counselor-client racial or ethnic similarity may not necessarily reflect multicultural counseling effectiveness.

In the rehabilitation counseling literature, Bellini (2003) investigated the relationship between rehabilitation counselors' multicultural competency and vocational rehabilitation outcomes in the context of counselor-client racial similarity and difference for individuals with disabilities in a large northeastern public rehabilitation program. In this recent study, he used the MCI to measure multicultural counseling competency and matched client data supplied by the public agency for the period January 1, 1998 through September 30, 2000. The outcome variables included a rehabilitation rate (ratio of successful closures to

the total number of closures following the initiation of the IPE); vocational training rate (ratio of the number of individuals who received some type of vocational training); and total cost of services. This investigation found significant main effects of counselor race and client race on the three outcomes. European American counselors had significantly higher rehabilitation rates (.76) than did minority counselors (.69). European American clients had significantly higher rehabilitation rates (.77) than Hispanic/Latino (.72) and African American clients (.69). In looking at the interaction effect of counselor and client race, European American clients who were served by European American counselors had the highest success rate of any sub-group (.78). African American clients served by minority counselors had the lowest rehabilitation rate (.65). European American clients who were served by minority counselors also had high success rates (.74) and Hispanic/Latino had approximately equivalent rehabilitation rates regardless of the racial status of the counselor.

In looking at the vocational training rate, Bellini (2003) reported that minority counselors provided vocational training services at a significantly higher rate (.34) than did European American counselors (.27). Hispanic/Latino clients were more likely to receive these services than European American and African American clients. European American counselors provided more training services to Hispanic/Latino and European American clients than African American clients.

Multicultural Competencies and Education/Training Experiences

High levels of multicultural counseling competencies have been found to be related to multicultural training such as multicultural course work, workshops, and clinical supervision (Constantine, 2001; Constantine et al., 2001; Pope-Davis & Ottavi, 1994; D'Andrea et al., 1991; Wheaton & Granello, 1998, Sadowsky et al., 1998; Bellini, 2002). Cross-cultural contact also has been shown to be a significant factor in the development of multicultural counseling competencies (Diaz-Lázaro & Cohen, 2001). Bellini (2002) found counselors who reported having taken a graduate class in multicultural counseling and counselors who participated in multicultural workshops reported higher multicultural counseling competencies.

Literature Review Summary

In summary, most of the research in counseling psychology and rehabilitation counseling has focused on understanding multicultural competence from the perspective of the counselor or on client preference for counselor race and ethnicity. In vocational rehabilitation counseling, a standardized process for measuring patterns of services and outcomes is available, which is not true in all counseling specialties. However, little research has been completed using VR data to explore outcomes of clients from diverse racial and ethnic backgrounds in relation to counselor variables including multicultural competence.

CHAPTER 3

METHODOLOGY

The purpose of this study was to examine vocational rehabilitation client outcomes in relation to multicultural counseling competencies (MCC) of rehabilitation counselors practicing in a public rehabilitation setting. Data from the Rehabilitation Services Administration 911 reporting system and the Accessible Web-based Activity and Reporting Environment (AWARE) caseload management system was examined in relation to self-reported multicultural competencies and counselor demographic data. The counselors' level of multicultural competence was assessed using the Multicultural Counseling Inventory (Sodowsky et al., 1994), which comprises four subscales: skills, knowledge, awareness, and relationship (counseling). In addition, counselors were asked to complete a demographic form and the Multicultural Social Desirability Scale (Sodowsky et al., 1998). This measure of social desirability was included to control for the tendency to respond to self-report measures in socially acceptable ways. The specific research questions are as follows:

1. What are the patterns of multicultural counseling competencies among rehabilitation counselors practicing in a public rehabilitation setting?
2. After taking social desirability into account, what is the relationship between counselors's self-reported multicultural counseling competencies and selected demographic counselor characteristics (e.g., age, gender, race, and ethnicity)?

3. Do vocational rehabilitation outcomes differ as a function of counselor self-reported multicultural competency?
4. Do vocational rehabilitation outcomes differ as a function of counselor-client racial similarity and dissimilarity?

Participants

Counselor Sample

The sample used to look at patterns of multicultural competence across counselors included 147 rehabilitation counselors employed by MDCCD-RS who elected to respond to the survey, from a list of 252 counselors provided by MDCCD-RS. The respondents self-identified as counselors on the demographic questionnaire, resulting in a 58% response rate for this group. This sample was used in the analyses of the first two research questions.

In order to evaluate the relationship between the client-level data, the counselor-level data, and outcomes, a match between counselors and a closed caseload of clients in the in the FY 2002 911 database was required. During this matching process, it was identified that some counselors who self-identified as a counselor and completed the questionnaires did not have a matching caseload of clients in the database, while others did not have sufficient closures (less than 12) within the time frame of the study to complete the analysis. These counselors were therefore dropped from the sample.

Eight of 120 rehabilitation counselors with a corresponding caseload omitted responses to one or more questions on the MCI. A review of the item-missing responses indicated no pattern to the omitted responses. In a second

step of the review of the item-missing responses, rates were calculated separately for each of the four dimensions on the MCI for each of these counselors. Following recommended methods (National Technical Information Service, 2001), item non-response rates were calculated for each dimension (the ratio of the number of eligible responses to the number of questions responded to in the block of questions). As a result, two additional counselors were dropped from the analyses due to item-missing rates higher than 10% in a given dimension. In order to maintain as much usable data as possible and maintain an adequate sample size, the decision was made to impute the values for the missing items for the additional six counselors. A mean imputation method was used which is one of the procedures often used to impute for item-missing data (National Technical Information Service, 2001). A comparison of the counselor characteristics between this sample of counselors and the larger database of counselors currently employed by MDCCD-RS are provided in Appendix C.

Client Sample

The client sample was extracted from the 2002 RSA 911 database for Michigan that consisted of 18,074 cases closed between October 1, 2001 and September 30, 2002. The client sample consisted of client cases (5,669) that were closed after the initiation of services under the Individualized Plan for Employment (IPE), and were served by counselors identified in the above process. A comparison of the client characteristics between this sample of clients and the larger database of clients closed after the initiation of the IPE in FY 2002 are provided in Appendix D. Overall, the client characteristics in the sample are

highly representative of the larger population of cases closed. The sample of 118 counselors and 5,669 clients was then used in the analyses of the counselor multicultural competencies and client outcomes.

Instruments

The MCI was selected from the available self-report measures as the best instrument for this investigation for several reasons. The MCI is considered one of the stronger competency instruments from a psychometric perspective (Ponterotto et al., 2002). The reliability, as measured by Cronbach's alpha, indicates that items within each scale perform consistently (Pope-Davis & Dings, 1995). Evidence of content validity was derived from expert evaluations (Pope-Davis & Dings, 1995; Ponterotto & Alexander, 1996; Sadowsky et al, 1994). Exploratory and confirmatory factor analyses and tests of congruence provided evidence of adequate construct validity (Pope-Davis & Dings, 1995; Sadowsky, 1996; Sadowsky et al., 1994).

The addition of the fourth subscale is another reason for the selection of this instrument. This subscale goes beyond the three broad dimensions (awareness, skills, and knowledge) proposed by Sue to address the dimension of counselor-client interaction and relationship (Sadowsky, 1996). According to Sadowsky et al., (1994) this dimension is best defined as the ability to develop a personal interaction between a counselor and a client from a different culture. "The MCI's presentation of more than three factors indicates greater diversity of structure than the other three scales" (Sadowsky, 1996, p. 294). In rehabilitation, the addition of this dimension to the multicultural model is important as the

counseling relationship is a central function of the rehabilitation process (Maki & Riggat, 1997; Wright, 1980).

The MCI has been used in research involving rehabilitation counselors in similar work settings (Bellini, 2002; Granello, Wheaton, & Miranda, 1998; Wheaton & Granello, 1998). "The MCI was intended to measure the competencies of any counselor working with a minority or culturally diverse client" (Sodowsky et al., 1994, p. 140). The MCI is of moderate length (40 items) four-point scale facilitating higher response rates. In addition, possible errors due to respondent fatigue associated with long questionnaires are reduced with a moderate length questionnaire (Schwanz, Darby, & Conn, 2001).

The final reason for the selection of the MCI is that it focuses more on the behaviors and experiences rather than the thoughts or attitudes of the respondent. Statements begin with expressions such as "I am able to," "I use," "I am skilled at," "I am effective with." To the extent that counselors are able to make more accurate assessment and self-reports of their behaviors than their attitudes, the MCI appears to be tapping into an aspect of multicultural counseling competency that may be more readily amenable to self-report (Pope-Davis & Dings, 1995; Bellini, 2002).

In general, this data provides evidence of moderate to high internal consistency reliability using Cronbach's alpha of the items within each dimension (Skills = .78; Awareness = .79; Relationship = .72; Knowledge = .79). In addition, to assess the validity of the instrument, a psychometric analysis of survey questions and participant responses was conducted and it was found that overall

the MCI instrument satisfactorily measured the multicultural competency psychological construct. Specifically, the results of a fit analysis indicated that there were no abnormal discrepancies among the participant's responses that threatened the accuracy of our findings. Furthermore, this analysis confirmed the validity of the instrument and adequately separated respondents into distinct levels of multicultural counseling competency. This finding indicates that the subscales created from the instrument are reliable (Mapuranga, 2003).

The MCSD was selected for this particular investigation because of the content specific nature of the social desirability measure in addressing multicultural counseling competence. Sadowsky et al. (1998) has reported a significant positive relationship between respondents' MCI full-scale scores and multicultural social desirability using this scale while Constantine & Ladany (2000) reported higher Marlowe-Crowne social desirability scores positively correlated with only one subscale – the MCI relationship subscale. This study found the internal reliability estimate (Cronbach's alpha) for the MCDS total score was .72.

Procedure

Design

This study used two research designs in exploring the vocational rehabilitation client outcomes in relation to multicultural counseling competencies of rehabilitation counselors practicing in a public rehabilitation setting. An exploratory research design was used to gather information from rehabilitation counselors. The counselor information was combined with the client data through

the use of an AWARE coding system. The ex post facto design explored client data from the RSA 911 database and the AWARE database for the fiscal year 2002 (October 1, 2001 through September 30, 2002).

Data Collection

Data was collected at the counselor level through the dissemination of a survey packet of materials (Appendix B) to 252 counselors from a list provided by MDCCD-RS. [Note: Copyright prohibits inclusion of the actual survey documents] The MCI, MCDS, and demographic questionnaire were formatted and printed enabling scannable scoring. No compensation for participating in the investigation was offered. The participants did not incur any costs as a result of their participation.

Prior to the first mailing, an e-mail message was sent by the Director of MDCCD-RS to all counseling staff informing them of the study and encouraging them to participate. Participation in the study was voluntary and the participant's privacy was protected through the coding of each survey. The survey packet of materials mailed to the counselors included a transmittal letter, instructions on completing the survey, a demographic questionnaire, the Multicultural Competency Inventory, the Multicultural Social Desirability Scale, and a self-addressed stamped return envelope. The demographic questionnaire included items pertaining to the counselor's age, gender, race, years of experience, degree level, certification, and multicultural training. Six questions were also included in the demographic questionnaire, based on a request by the Services to Minority Populations Committee of MDCCD-RS, to obtain information on the

culture and practices within the field office setting pertaining to multicultural issues. The analysis of these responses was not included in this document.

The second method of data collection involved extracting data from the Rehabilitation Services Administration 911 data and the AWARE data for the federal fiscal year 2002 (October 1, 2001 through September 30, 2002) which was provided by the MDCCD-RS early in 2003. This database contained client information including demographics, services, and outcomes for 18,074 cases closed during this time frame. Client case information was matched with counselors in the counselor sample through a coding system. Only those client cases that were closed after the initiation of the (IPE) during fiscal year 2002 were included in this investigation to explore outcomes.

Data Analysis

The data analysis included several approaches to address each of the research questions. Descriptive statistics were computed on the counselor sample demographic characteristics from the questionnaire. Frequencies and percentages were computed for the following categorical variables: (a) gender, (b) age, (c) years of experience and (d) race/ethnicity.

On the basis of findings from numerous previous investigations using the MCI with evidence of content validity, criterion-related validity, and adequate construct validity, this study used the four factors assessing multicultural counseling skills, awareness, relationship, and knowledge. To address the first research question group means, standard deviations, and histograms were computed for each item, each factor and the total score. The individual and group

scores on the MCSD were computed, as well as means and standard deviations. An internal consistency estimate of reliability was computed for each factor of the MCI and for the group scores on the MCSD.

In order to address the second research question in determining if scores on the four dimensions of multicultural competence (skills, awareness, relationship, and knowledge) differed according to the characteristics of counselors, a one-way multivariate analysis of variance (MANOVA) was conducted. The dependent variables for these analyses were the mean scores on each of the four dimensions measuring multicultural counseling competence. One independent variable was used in each MANOVA. The independent variables for these analyses were counselor (a) gender, (b) age, (c) years of experience, (d) race (collapsed into white/non-white), (e) training, (f) education level, (g) CRC and CRC eligible, and (h) LPC. Upon finding a significant F (Wilks' $\Lambda = .05$), post hoc univariate analyses were conducted. Bonferroni comparisons were conducted for each dependent variable for the three variables with three or more levels. These variables included age, years of experience, and education level. Independent –samples *t* test comparisons were conducted for the five independent variables with two levels. These variables included race, gender, training, certification and credentialing.

Hierarchical Linear Modeling

Researchers in the field of education have often used Hierarchical Linear Modeling (HLM) approaches to study students as members of classroom units and teachers as members of institutions. The use of hierarchical linear or multi-

level models has increased and been applied to a wide variety of problems (Schmidt, 2000). However, researchers in rehabilitation have not yet focused on the potential of these hierarchical approaches in studying multi-level relationships such as clients and counselors. Similar to the student, teacher, and school levels often associated with the use of HLM, client, counselor, and office levels exist in the public rehabilitation system. HLM allows for the simultaneous investigation of relationships within the client level data, within the counselor level data, and the relationships across these levels in explaining differences in client outcomes. In addition, variation across counselors due to the numbers of clients or difficulty level of clients is balanced in the analysis of relationships. This approach was used because of the nested nature of the data and the need for simultaneous evaluation of client- and counselor-level variables.

In order to address the third and fourth research questions, HLM techniques were used to analyze the counselor and client data using a two-level approach. Because the outcome variable is binary (successful or unsuccessful closure) and the assumption of normality and linearity could not be established, Hierarchical Generalized Linear Modeling or HGLM was used (Raudenbush et al. (2001). As HGLM is a special nonlinear analysis within HLM and less recognized in the literature, the term HLM is used in referencing these statistical techniques in this document.

The HLM software requires the preparation of two data files. Data describing the individual client are the level 1 units of analysis and data describing the counselors are the level 2 units of analysis. SPSS was used to

generate these data files which were then imported into the HLM Software. A sufficient statistics matrices file (SSM) was constructed from this imported data.

CHAPTER 4

RESULTS

The survey packet was mailed to 252 MDCCD-RS counseling staff members during the first week of December, 2002. A follow-up mailing was sent out the first week of January 2003 to counseling staff members who had not yet responded. As counselors with disabilities were included in the population, accommodations were provided as deemed necessary (e.g., large print or electronic format) for completion of the surveys. From the 252 questionnaires in the first mailing, a total of 124 usable surveys were returned (49%). The second mailing yielded an additional 23 surveys. The total number of usable surveys returned was 147, resulting in a 58% return rate. Reasons for incomplete or non-usable questionnaires included the lack of a completed demographic questionnaire or the respondent returned the questionnaire but chose not to participate in the study.

Although there is no scientifically determined criterion for what constitutes an appropriate response rate, in general a 50 percent response rate is considered "adequate" (Babbie, 1992. p. 267). Similar research in a large northeastern state VR agency using the MCI resulted in a response rate of 49% (Bellini, 2002). Given that the total response rate was over 50% and the limited number of usable returns received from the second mailing, it was decided that a third mailing would not yield enough additional responses to be cost effective.

Counselor Characteristics

The sample used to look at patterns of multicultural competence across counselors included 147 rehabilitation counselors employed by MDCCD-RS who elected to respond to the survey. Table 2 provides the breakdown of the sample by demographic and professional characteristics. A comparison of the counselor characteristics between this sample of counselors and the larger database of counselors currently employed by MDCCD-RS is provided in Appendix C. Of the 147 counselors who responded to the survey, the majority were women (59.2 %). The most frequent age ranges reported by the women were the 40-49 age groups (34.5%) and the 50+ age group (35.6%), while the most frequently reported age group for the male participants was the 50+ years of age category (43.8%). The largest group of participants (both male and female) also reported having 14+ years of counseling experience (39.7%).

As indicated in Table 2, the majority of the respondents were Caucasian (74.4%), followed by African American (19%). The percentage of Caucasians in the sample was slightly higher (7%) and the percentages of African Americans slightly lower (10%) than the reported racial/ethnic groupings of the MDCCD-RS counselor population as reported in Appendix C. The percentages in the other racial and ethnic categories in the sample are similar to those found in the current counselor population. The impact of the differences in the racial/ethnic makeup of the counselors in the sample versus the population on the results of the investigation (particularly the scores on the MCI) can not be fully known. For

analysis purposes, the racial/ethnic groupings were collapsed into two categories (white/non-white) due to the low numbers in some of the categories.

Because participants had the option of reporting more than one response for degree level, certification, and training, the decision was made to group the responses for analysis. Degree level was grouped into four categories: master's in rehabilitation counseling, master's degree in a related field, master's in an unrelated field, or bachelor's degree. The majority of the counselors (53.7%) reported a master's degree in a related area as their highest earned degree while an additional 40% reported they held a master's degree in rehabilitation counseling.

The Certified Rehabilitation Counselor (CRC) and the CRC eligible categories were collapsed into one variable. The other certification variable used in the analysis was the Licensed Professional Counselor category (LPC). Both of these variables were coded into a yes-no response. Only 42.2% of the counselors reported they were either CRC's or eligible for CRC certification. The data for all counselors who are CRC was not available. The data on the CRC/CRC eligible category may be underreported as counselors may not easily identify with the CRC eligible label. In addition, 34% of the counselors reported they held the LPC credential.

The training variable was also grouped into a binary response. Respondents who indicated participation in some form of multicultural training (e.g., a graduate class, multicultural workshop, research activity, etc.) were collapsed into one group and those indicating no training were collected in

another group. The majority (88.4%) of counselors reported having participated in some type of multicultural training.

Table 2
Demographic Characteristics of the Counselor Sample

Variable	N	Valid %
Gender		
Male	60	40.8
Female	86	59.2
Age		
20-29	6	4.1
30-39	29	19.7
40-49	47	32.0
>50	64	43.5
Race		
American Indian	1	0.7
African American	28	19.0
Caucasian	110	74.8
Hispanic	3	2.0
Multiracial	3	2.0
Years Experience		
<1	9	6.1
1-5	32	21.8
5-7	13	8.8
8-13	34	23.1
>14	58	39.5
Ed Level		
MRC	59	40.1
Master Related	79	53.7
Bachelors	7	4.8
CRC/CRC Eligible		
Yes	62	42.2
No	85	57.8
LPC		
Yes	50	34.0
No	97	66.0
Training		
Yes	130	88.4
No	13	8.8

Note: The Ns do not compute to 147 due to missing data.

Counselor Multicultural Competencies

To complete the MCI, participants were asked to rate how accurately each item described them when working in a multicultural counseling situation using a four point Likert-type scale (1 = very inaccurate, 2 = somewhat inaccurate, 3 = somewhat accurate, and 4 = very accurate) to quantify the degree to which items describe their work. The MCI has four dimensions measuring components of self-reported multicultural counseling competence based on Sue's model. In Table 3, the means and standard deviations are provided for the four dimensions and individual items based on the responses for all the respondents. An internal consistency reliability (Cronbach's alpha) coefficient is also listed for each of the four main dimensions.

Table 3: Rehabilitation Counselor MCI Dimensions and Items

Dimension	Summarized Items	Alpha	Mean	Standard Deviation
Skills		.79	3.43	0.59
	50% of clients seen more than once		3.71	0.52
	Cultural mistakes quickly recognized & recovered		3.39	0.58
	Use of several methods of assessment		3.34	0.71
	Counselor philosophical preferences understood		3.56	0.55
	Able to distinguish those who need short-term & long-term therapy		3.43	0.55
	Effective crisis interventions		3.22	0.70
	Various counseling techniques & skills used		3.58	0.52
	Concise & to the point in verbal skills		3.53	0.53
	Comfortable exploring sexual issues		3.05	0.78
	Effective in getting a client to be specific		3.47	0.56
	Compatible nonverbal & verbal responses		3.48	0.52
Awareness		.78	2.83	0.87
	Solving problems in unfamiliar settings		3.45	0.59
	Having an understanding of specific racial & ethnic groups		3.04	0.73
	Understanding the importance of the legalities of immigration		2.78	.96
	Extensive professional or collegial interactions with minority individuals		3.01	0.90

Dimension	Summarized Items	Alpha	Mean	Standard Deviation
Awareness		.78	2.83	0.87
	Multicultural case load has doubled in the past year		1.99	0.93
	Interactions with people of different cultures are enjoyable		3.43	0.75
	Involved in working against institutional barriers for minority services		2.41	1.03
	Well-versed with nonstandard English		2.71	0.93
	Extensive life experience with minority individuals		3.05	1.00
	Frequently seek consultation & attend multicultural workshops or training sessions		2.41	0.87
Relationship		.72	3.34	0.79
	Clients mistrust of racially different counselor		3.10	0.86
	Counselor overcompensation, over-solicitation, & guilt		3.69	0.63
	Case conceptualizations not stereotypical or biased		3.22	0.96
	Differences between counselor worldviews & client worldviews		3.37	0.83
	Cognitive differences make communication difficult		3.29	0.72
	Minority clients compared with majority group members		2.94	0.86
	Self-examination of personal limitations shakes counselor confidence		3.48	0.75
	Client differences causing counselor discomfort		3.65	0.70
Knowledge		.79	3.09	0.72
	Understanding the effects of age, gender roles, & socioeconomic status		3.40	0.70
	Innovative concepts & treatment methods		3.07	0.65
	A "world-minded" or pluralistic outlook		3.15	0.72
	Self-examination of counselor cultural biases		3.45	0.68
	Research on minority clients' preferences applied		2.83	0.77
	Aware of changing practices, views & interests of people		2.88	0.65
	The range of differences within a minority group considered		3.40	0.63
	Referrals & consultations on the basis of clients' minority identity development		2.79	0.84
	Counselor defensiveness is self-monitored & corrected		3.23	0.76
	The sociopolitical history of the clients' respective minority groups is applied		2.75	0.80
	Understanding client's level of acculturation		3.07	0.71

Note. N = 147

Copyright prohibits inclusion of the actual items, therefore, author approved summary items are reported.

As indicated in Table 3, the two highest rated dimensions for participants in this study are Skills (Mean = 3.43, SD = .59) and Relationships (Mean = 3.34, SD = .79). The Skills dimension addresses strategies and techniques used in working with clients from diverse cultures while the Relationship dimension reflects the interpersonal process of multicultural counseling and focuses on the participant's cultural and racial attitudes in client interactions. The mean scores on the Knowledge dimension (Mean = 3.09, SD = .72) are less high than either the Skills or Relationship dimensions. The Knowledge dimension encompasses theoretical knowledge of multicultural counseling issues including racial and cultural concepts such as racial and ethnic identity, worldviews, and acculturation.

The Awareness dimension (Mean = 2.83, SD = .87) is the least strong. This dimension encompasses cultural self-awareness and other-awareness, and is achieved through introspection, self-monitoring, and reflective self-evaluation (Sodowsky, 1996). Others have described this dimension as developing a deep-cultural self-empathy where the individual can look at their own culture by stepping outside of it (Pedersen, 1987). The item indicating that the multicultural case load has doubled in the past year has the lowest mean (Mean = 1.99; SD = .93) than any item within any of the dimensions. This lower mean score on this item is difficult to interpret. As the counselor working in a public rehabilitation setting does not always have total control over the make-up of the caseload, the response to this question may reflect more of an organizational perspective than that of the individual counselor.

The higher mean scores in the Skills and Relationship dimension and the lower mean scores in the Awareness dimension may indicate individuals are more competent on cognitive and behavioral levels, but less developed in cultural self-exploration. "Self-exploration constitutes a fundamental component of multicultural counseling competence." (Sodowsky et al., 1997, p. 15). Appendix A provides a framework of the construct of multicultural counseling competence that may assist in the understanding each of these dimensions and competency areas.

Counselor Characteristics and Multicultural Competencies

In order to determine if scores on the four dimensions of multicultural competence (skills, awareness, relationship, and knowledge) differed according to the characteristics of counselors, a one-way multivariate analysis of variance (MANOVA) was conducted. Counselor characteristics included in the analysis were gender, age, years of experience, race (collapsed into white/non-white), training, education level, CRC and CRC eligible, and LPC. Upon finding a significant F (Wilks' $\Lambda = .05$), post hoc comparisons were conducted. Several counselor characteristics were found to be significant for one or more dimension as discussed below, however, no statistical differences were found for gender, age, educational level, training and LPC variables in relation to any of the multicultural dimensions.

Counselor race was found to impact scores on the Awareness and Relation dimensions of the MCI (Wilks' $\Lambda = .010$, $F(4,138) = 4.62$, $p < .01$)

indicating there are differences between groups (white and non-white counselors) in these dimensions. The multivariate η^2 based on Wilks' Λ was moderately strong, .36. Post hoc comparisons (t test, $p \leq .05$) indicated that non-white counselors scored significantly higher than white counselors on the Awareness and Relation dimensions. The means and standard deviations for these two groups and the two dimensions are reported in Table 4. These differences might be explained in that non-white counselors, because of their own cultural experiences, possess more self-awareness of attitudes and worldviews into which they have been socialized, in addition to recognizing the client's worldview and attitudes. The results also indicated the scores for non-white counselors and white counselors did not differ significantly in relation to the Knowledge or Skill dimension. This might be attributed to the impact of training given that these dimensions are more cognitive in nature.

Table 4: Means and Standard Deviations for Awareness and Relationship by Race

	Awareness			Relationship		
	N	Mean	SD	N	Mean	SD
White	110	2.77	0.52	110	3.29	0.48
Non-White	35	2.97	0.45	35	3.34	0.46

The counselor's years of experience was found to be significant only in relation to the Awareness dimension of the MCI, Wilks' $\Lambda = .88$, $F(4,136) = 4.62$, $p < .01$. Post hoc comparisons (Bonferroni, $p \leq .05$) indicated the counselors with 1-5 years of experience and those with 5-7 years of experience had significantly higher scores in relation to the Awareness dimension than the counselors with

one year or less experience or those with more than eight years of experience. The means and standard deviations for the five levels of years of experience and the two dimensions are reported in Table 5. These findings may indicate that as new counselors begin to settle into the job, they may be more focused on developing multicultural competence through self-exploration.

Table 5: Means and Standard Deviations for Awareness by
Years of Experience

Years	N	Mean	Std. Deviation
<1	8	2.48	0.34
1-5	31	3.01	0.47
5-7	13	3.00	0.44
8-13	33	2.75	0.56
>14	55	2.78	0.50
Total	140	2.83	0.51

Note. The Ns do not compute to 147 due to missing data.

A significant multivariate F (Wilks' $\Lambda = .88$, $F(4,140) = 3.02$, $p < .05$) was found in relation to the CRC or CRC eligible variable. Post hoc comparisons (t test, $p \leq .05$) revealed that the counselors who reported they were a CRC or were eligible for the CRC certification had significantly higher scores on the Awareness and Knowledge dimensions of the MCI than the counselors who did not self-identify as being either a CRC or CRC eligible. The means and standard deviations for these two groups and the two dimensions are reported in Table 6. No differences were found between the groups in relation to either the Skills and Relations dimensions. One might attribute the higher scores in the Awareness and Knowledge dimensions of the MCI to the increased attention to multicultural issues not only by MDCCD-RS, but also by professional organizations such as The Commission for Rehabilitation Certification (CRCC) or the Council on

Rehabilitation Education (CORE). However, this does not account for the finding of no differences in relation to the other two dimensions. The differences in higher scores on the Awareness and Knowledge dimensions may reflect the type of training rather than the amount of training counselors may receive on multicultural issues. Individuals who are CRC or CRC eligible often seek out opportunities for training to maintain the certification. Multicultural training may attract counselors due to the issues in day to day practice. Continuing education and training activities often focuses on awareness and theoretical perspectives and less on strategies in providing services to individuals with disabilities from diverse racial and ethnic backgrounds.

Table 6: Means and Standard Deviations for Awareness and Knowledge
By CRC/CRC Eligible

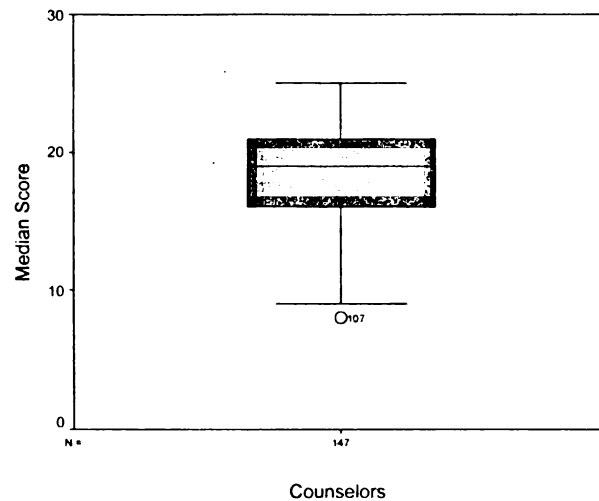
	Awareness			Knowledge		
	N	Mean	SD	N	Mean	SD
No	80	2.74	0.54	80	3.03	0.42
Yes	61	2.94	0.44	58	3.18	0.39

In summary, the findings indicate a few of the counselor characteristics were found to be significantly related to various multicultural competency dimensions as measured by the MCI. These included counselor race and the Awareness and Relation dimensions; counselor's years of experience and the Awareness dimension; and counselor's report of having a CRC certification or eligible for the CRC certification, and the Awareness and Knowledge dimension of the MCI.

Social Desirability

The format of the Multicultural Social Desirability Scale (MSDS) is a forced-choice of true or false. A high score (21-26 points) indicates that the respondent is claiming favorable attitudes toward minorities all of the time on all personal, social, and institutional issues, and a low score (5-6 points) points indicates that the respondent does not care about appearing unsympathetic to minority concerns. A mean score of 16 appears to balance the two perspectives, showing both positive and negative reactions to minority concerns and indicating realistic attitudes and responses (Sodowsky, et al., 1998). The MCDS results for this investigation indicates a mean score of 18.54 ($SD = 3.53$) for the counselors who participated in this study. The lowest score was 8 and the highest score was 25.0. Figure 1 provides a visual summarization of the scores by displaying a boxplot with the medians and outliers. What this visual representation tells us is that the median is in, or fairly close to, the middle of the box and the variability of scores are relatively small, with an outlier (score of 8). As a group the counselors scored a little higher than the score suggested by Sodowsky. This slightly higher score might be attributed to the milieu surrounding counselors on a daily basis in working with people with disabilities.

Figure 1: Multicultural Social Desirability Scale



Counselor Multicultural Competencies and Client Outcomes

Although numerous studies have investigated client outcomes of persons with disabilities from diverse racial and ethnic backgrounds (Atkins & Wright, 1980; Feist-Price, 1995; Wheaton et al, 1996; Moore, 2001; Bellini, 2003), very few studies have investigated the relationship between counselor characteristics, including multicultural competencies, client characteristics, and client outcomes. One such study (Bellini, 2003) explored the relationship between counselors' multicultural competency and client outcomes in the context of counselor-client racial similarity and dissimilarity. However, these studies (including Bellini) have used statistical methods for analysis that have not adequately accounted for the specific client characteristics and counselor characteristics present in the individual counseling relationship.

Given that outcomes are gathered at the client level, and other variables exist at the counselor level, the question arises as to how to disentangle the effects of individual client and counselor characteristics on outcomes and how to

deal with the cross-level nature of the data. The statistical methods used in previous studies did not allow researchers to separate individual client variation from counselor level variation in explaining outcomes. As Frank (1998) suggests, through the recent developments in estimation, quantitative methods can help in the understanding of social structures and the variation of outcomes. In this study, the statistical method of Hierarchical Linear Modeling (HLM) was used to examine the characteristics the client brings to the relationship, and characteristics the counselor brings to the relationship, and the interaction between these characteristics in explaining client outcomes. Analyses were performed using the HLM5 statistical software package (Raudenbush et al., 2001).

In addition to the multicultural counseling competencies as measured by the MCI, counselor variables found to have an association with successful outcomes from previously published research were included in the HLM analysis. The counselor explanatory variables used included information gathered from the demographic questionnaire. These variables included gender, age, race, years of experience, education level, multicultural training, and certification or licensure. The client explanatory variables used in the HLM analysis included those variables found to have an association with successful outcomes from previous studies conducted by Project Excellence involving the 911 client databases and previously published research. [Project Excellence is a research and program evaluation component of the Office of Rehabilitation and Disability Studies at Michigan State University.] These variables included gender, age at application,

education level at application, race, primary disability, and social security recipient. Prior to conducting these analyses, the variables had to be constructed for proper file formats for use with the HLM software.

Preparation of Counselor Variables for HLM Analysis

Categorical variables were transformed into dummy variables. The racial/ethnic groupings were collapsed into two categories (white/non-white) due to the low numbers in some of the categories. Counselor age was transformed into four dummy variables. Counselor years of experience was first collapsed from five categories into three, and then transformed into three dummy variables. Within the counselor education variable, master's degree in an unrelated field was dropped due to lack of response by members of this sub sample. The three remaining categories in education level were transformed into three dummy variables. All of the other variables were in a dichotomous format.

Descriptive statistics were computed for the sub sample of 118 counselors with frequencies and percentages computed for all counselor variables. The means and standard deviations were calculated for the individual items within each of the four dimensions (Skill, Awareness, Relationship, and Knowledge) of the Multicultural Counseling Inventory (MCI). The mean scores of each of four dimensions were used in the HLM analysis.

Preparation of Client Variables for HLM Analysis

Categorical variables were transformed into dummy variables. The variables of gender and social security recipient were in a binary format. The racial/ethnic groupings were collapsed into two categories (white/non-white) due

to the low numbers in some of the categories. Age at application remained a continuous variable. The nine categories of education attainment level of application variable were first collapsed into four categories. These four categories were then transformed into four dummy variables.

The disability categories were collapsed from ten categories into seven categories. This addressed the issue of small cell sizes, allowing us to estimate the model. These categories included (a) sensory, (b) physical impairments (orthopedic & neurological), (c) all other physical impairments, (d) LD ADHD, (e) MR/Autism, (f) mental illness, & (g) substance abuse. Because of the large number of categories, disability was treated as a separate model including client and counselor race. Frequencies and percentages were computed for these variables of the sub sample. A comparison of the characteristics between this sample of clients and the larger database of clients closed after the initiation of the IPE in FY 2002 for Michigan are provided in Appendix D.

In conducting the analyses, the outcome or dependent variable was type of closure which is dichotomous (successful or unsuccessful). A *Bernoulli* distribution was selected as there is only one outcome per person in using the binary outcome model. The HLM5 statistical software package (Raudenbush et al., 2001) also offered the option of the Laplace6 approach that has been shown to be more precise in approximating the likelihood of the sample data in non-linear models (Raudenbush & Bryk, 2002; Snijders & Bosker, 1999).

Centering

As Hoffman (1998) discusses, an important consideration in the use of HLM is the method of centering which is defined as the subtraction of the same value from each score of any explanatory variable. Centering is important where the variables have no meaningful zero such as in attitude or intelligence tests. "In such instances centering explanatory variables renders the intercept meaningful as the value of the response variable at the mean of all explanatory variables" (Kreft, 1998, p. 107). The HLM software offers three centering options including (a) no centering, (b) grand mean centering, and (c) group mean centering. Grand mean centering was used in this analysis when appropriate (such as with continuous variables). Grand mean centering has been shown to produce an equivalent model as raw metric approaches, but may provide a computational advantage by reducing the covariance between the intercept and slope parameters (Kreft, 1998).

HLM Analysis

A sequence of models using the HLM5 statistical package (Raudenbush et al., 2001) was conducted. The first step in the HLM analysis was to run an empty or null model which contained only the dependent variable of outcome and no client or counselor explanatory variables. As Kreft (1998) noted, the null model provides baseline information for subsequent analyses and provides an initial estimate for the intra-class correlation (proportion of the variance that is between groups) in the outcome variable.

The log-odds in the HLM model is the log of the ratio of the probability of a successful closure to the probability of an unsuccessful closure. Table 7 displays the expected log-odds of a successful closure ($\gamma_{00} = 0.3373$). The deviance is 17943.8760 with 2 estimated parameters. This measure can be used to test hypotheses about the random effects of the model as a measure of improvement of model fit in subsequent models (Kreft, 1998; Raudenbush & Bryk, 2002).

Table 7: Estimates for HLM Null Model

Fixed Effect	Coefficient	Standard Error	T-ratio	Approx. d.f.	p-value
For					
INTRCPT1, BO					
INTRCPT2, γ_{00}	0.3373	0.0613	5.501	117	0.000
Random Effects	Variance Component				
τ_0^2	0.3006***				

Separate analyses were then conducted with variables at each level, both client and counselor. Only those variables showing significance are reported in this analysis. Counselor multicultural competencies (as measured by the Multicultural Counseling Inventory) were not found to be significant in explaining differences in client outcomes. Counselor variables of age, gender, years of experience, multicultural training, education level, or CRC/CRC eligible certification were not significant in explaining client outcomes. At the client level, gender was not found to be a significant variable in explaining differences in client outcomes.

Only one category of the education level at the client level was found to be significant in explaining successful closure. This category included any client with post secondary education or training (including post-secondary degrees) at the time of application. Client or counselor race was not significant in explaining successful closure in combination with client educational level. It would be expected that Individual clients with more education entering the rehabilitation process would have increased possibilities for successful outcomes at the end of the process. Because the other categories within this variable were not found significant and client or counselor race was not found significant, the variable of education level of the client was not added to the overall model.

The LPC credential was found to be slightly significant ($p = .046$) in explaining client outcomes only in combination with client and counselor race. Non-white clients working with a non-white counselor who has the LPC credential is more likely to be a successful closure than a white client working with a counselor of any race who has the LPC credential. Because of the limited addition of this variable in explaining client outcomes, it was not added to the overall model.

Client Race and Counselor Race

Tables 8 through 10 provide the results of the estimation of fixed effects (Laplace) for each of the models found significant in explaining client outcomes. Fixed (as opposed to random) means that it is not assumed that the effect of the explanatory variable on the outcome variable is different among counselors (Kreft, 1998). Considering the purpose of the study and theoretical base, both

client and counselor race were added to the model with the results displayed in Table 8. The Gamma intercept ($\gamma_{00} = 0.3989$) is the expected log-odds of a successful closure for white clients working with white counselors. The effect of non-white counselors working with white clients in explaining outcomes is not significant ($p = 0.483$), although this parameter was kept in the model so estimates of the impact of this parameter upon the random slope would not be biased (Raudenbush & Bryk, 2002). Counselor race was slightly significant ($p = 0.035$) as a factor in explaining outcomes with non-white clients and left in the model. The log-odds of a successful closure for non-white clients working with white counselors = $\gamma_{10} = -0.3810$.

The log-odds of a successful closure for non-white clients working with non-white counselors ($\gamma_{00} + \gamma_{12} = 0.4725$) corresponds to a probability of 0.6160. Snijders & Bosker (1999) indicate as variables are added to a model, the coefficients cannot be interpreted in isolation from each other. Together these variables represent the explanation of variance in the type of closure. The process of interpreting the interaction of this data involved adding the combinations of coefficients together to compute the log-odds and probability of a successful closure. This same process was used in computing the log-odds and probability for the remaining models. The probability is computed through the formula: $(\exp(\gamma'_{00} + \gamma_{11w})) / (1 + \exp((\gamma'_{00} + \gamma_{12}))$

Table 8: HLM Model 1: Client Race and Counselor Race

Fixed Effect	Coefficient	Standard Error	T-ratio	Approx. d.f.	p-value
For INTRCPT1, B0					
INTRCPT2, γ_{00}	0.3823	0.0626	6.106	116	0.000
COUNRA1, γ_{01}	-0.1362	0.1945	-0.700	116	0.483
For RACE1 slope, B1					
INTRCPT2, γ_{10}	-0.3738	0.1397	-2.676	116	0.008
COUNRA1, γ_{11}	0.4725	0.2238	2.111	116	0.035

Client Age at Application

The next variable added to the model was client age at application. Because this is a continuous variable it was determined the variable should be grand mean centered for meaningful interpretation. Table 9 displays the results of the addition of this variable to the model. Counselor race was not found significant as a factor on the variance of closure and therefore dropped from the model.

The log-odds of a successful closure for white clients of average age working with counselors of any race is $\gamma_{00} = 0.3879$. As the client age increases above the overall average age by one unit (one day), the log odds of a successful closure increases by ($\gamma_{10} = 0.0183$).

Table 9: HLM Model 2: Client Age at Application

Fixed Effect	Coefficient	Standard Error	T-ratio	Approx. d.f.	p-value
For INTRCPT1, B0					
INTRCPT2, γ_{00}	0.3879	0.0628	6.180	117	0.000
For AGEAPP slope, B1					
INTRCPT2, γ_{10}	0.0183	0.0035	5.289	117	0.000
For RACE1 slope, B2					
INTRCPT2, γ_{20}	-0.2230	0.1015	-2.196	117	0.028

Social Security Benefits

Previous outcome studies conducted by MSU Project Excellence involving the Michigan FY 2002 911 client databases have found an association between clients who are social security recipients and successful outcomes. This association was further explored in this study and added to the model. The dichotomous variable was extracted from the FY 2002 911 database and includes those clients identified as recipients of Social Security Insurance (SSI) and/or Social Security Disability Benefits (SSDI) at the time of application.

Table 10 displays the HLM results when social security benefits are added to the equation. Overall, if the client is receiving social security benefits they are less likely to be a successful closure. Further analysis indicates that non-white clients receiving SSA benefits working with a non-white counselor are more likely to be a successful closure than white clients receiving social security benefits working with a counselor of any race.

Table 10: HLM Model 3: Social Security Benefits

Fixed Effect	Coefficient	Standard Error	T-ratio	Approx. d.f.	p-value
For INTRCPT1, B0					
INTRCPT2, γ_{00}	0.5346	0.0683	7.828	117	0.000
For AGEAPP slope, B1					
INTRCPT2, γ_{10}	0.0210	0.0038	5.427	116	0.000
For SSBENEFIT slope, B2					
INTRCPT2, γ_{20}	-0.4382	0.0863	-5.075	116	0.000
COUNRA1, γ_{21}	-0.4269	0.2086	-2.047	116	0.040
For RACE1 slope, B3					
INTRCPT2, γ_{30}	-0.3291	0.1408	-2.337	116	0.019
COUNRA1, γ_{31}	0.43341	0.1934	2.240	116	0.025

Comparisons of Models for Rehabilitation Outcomes

Table 11 presents a comparison of the estimates for each of the three models described in Tables 8-10 with. Model 1 includes the fixed effect of client race, Model 2 the fixed effect of client race and age at application, and Model 3 the fixed effect of client race, age at application, and social security benefit status. The intercept variance and deviance is included in each of the models.

The mean log-odds of a successful closure for white clients working with a counselor of any race is $\gamma_{00} = 0.382$, ($p = <0.001$). An overall negative effect ($\gamma_{30} = -0.374$), $p = <0.01$) is indicated for non-white clients working with white counselors. The mean log-odds of a successful closure for non-white clients working with a non-white counselor ($\gamma_{31} = 0.473$, $p = <0.05$) are higher than for white clients working with a counselor of any race.

The effect of age at application of the client slightly varies between Model 2 and Model 3. The mean log-odds of a successful closure for white clients of

average age = 0.388 (γ_{00} , $p < 0.000$). The mean log-odds of a successful closure for non-white clients of average age = 0.018 (γ_{10} , $p < 0.000$). In adding the variable of social security status to the equation, the mean log-odds of a successful closure for non-white clients of average age slightly increase (0.021, $p < 0.000$).

The resulting estimates for adding social security benefit status are given in Table 11 as Model 3. It appears that social security benefit status has a strong negative effect ($\gamma_{20} = (-0.439)$, $p = 0.000$) on successful closure. Social security recipients may experience significant disabilities presenting complex barriers to employment, including fears of losing secure benefits and medical insurance. These factors might be contributing to the reduced log-odds of a successful closure. The mean log-odds for a successful closure are slightly higher for non-white clients working with non-white counselors ($\gamma_{21} = (-0.427)$, $p < 0.05$).

The random effects section in Table 11 displays the variation across clients and the variation of log-odds of successful closure. As indicated in Table 11, the variance component for client race in Model 1 ($\tau_{32}^2 = 0.302$) decreases in Model 3 ($\tau_{32}^2 = 0.274$). The variance component for age at application in Model 2 ($\tau_{12}^2 = 0.000$, $p < 0.000$) remains the same in Model 3 ($\tau_{12}^2 = 0.000$, $p < 0.000$). A reduction in the intercept variance in the log-odds of successful closures occurred between the Null Model ($\tau_{02}^2 = 0.301$, $p = < 0.000$) and Model 3 ($\tau_{02}^2 = 0.205$, $p = < 0.000$). The client level variables explain more of the differences in client outcomes in Model 3.

Table 11: Estimates for Three Models for Rehabilitation Outcomes

	Model 1		Model 2		Model 3	
Fixed Effect	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.
Intercept, γ_{00}	0.382***	0.063	0.388***	0.063	0.535***	0.068
COUNRA, γ_{01}	-0.136	0.195	0.074	0.130	0.198	0.165
Ageapp ⁺ , γ_{10}			0.018***	0.004	0.021***	0.004
SSBENE, γ_{20}					-0.4386***	0.086
COUNRA, γ_{21}					-0.427*	0.209
CL RACE, γ_{30}	-0.374**	0.140	-0.223*	0.134	-0.329*	0.141
COUNRA, γ_{31}	0.473*	0.224			0.433*	0.193
Random Effects	Variance Component		Variance Component		Variance Component	
τ_0^2	0.251***		0.221***		0.205***	
τ_1^2			0.0005***		0.000**	
τ_2^2					0.071	
τ_3^2	0.302**		0.278*		0.274*	
Deviance	17923.128, $df = 7$		17837.623, $df = 9$		17764.364, $df = 17$	

⁺ Grand Mean Centered

*** p-value ≤ 0.001

** p-value ≤ 0.01

* p-value ≤ 0.05

Disability

Because of the large number of categories, disability was treated as a separate model including the variables of client and counselor race as displayed in Table 13. The disability categories were collapsed from ten categories into seven. These categories included (a) sensory, (b) physical impairments

(orthopedic & neurological), (c) all other physical impairments, (d) LD ADHD, (e) MR/Autism, (f) mental illness, & (g) substance abuse. The HLM software was not able to produce the Laplace results or the deviance score. All disability categories were found to be significant in explaining client outcomes. Counselor race was not found to be a significant factor and was dropped from the model. The log-odds and probability for successful closure was computed for each variable.

The overall the log-odds for successful closure for non-white clients regardless of disability are less than the log-odds for successful closures for white clients. The one exception is the sensory category. The log-odds for a successful closure for non-white clients with a sensory impairment (1.353, $p < .05$) are higher than any other group of white or non-white clients in any other disability category. However, only 80 clients (6.1%) out of the 5,669 clients in the

Table 12: HLM Model 4: Disability and Rehabilitation Outcomes

Fixed Effect	Coefficient	Standard Error	T-ratio	Approx. d.f.	p-value
For INTRCPT1, B0					
INTRCPT2, γ^{00}	0.5860	0.1603	9.892	.117	0.000
For RACE1 slope, B1					
INTRCPT2, γ^{10}	-0.2303	0.0967	-2.383	117	0.017
For DIS2 slope, B2					
INTRCPT2, γ^{20}	-1.3977	0.1916	-7.295	117	0.000
For DIS3 slope, B3					
INTRCPT2, γ^{30}	-1.1451	0.1978	-5.788	117	0.000
For DIS4 slope, B4					
INTRCPT2, γ^{40}	-1.1598	0.1875	-6.187	117	0.000
For DIS5 slope, B5					
INTRCPT2, γ^{50}	-0.9733	0.1825	-5.333	117	0.000
For DIS6 slope, B6					
INTRCPT2, γ^{60}	-1.7271	0.1704	-10.135	117	0.000
For DIS7 slope, B7					
INTRCPT2, γ	-1.2255	0.2226	-5.506	117	0.000

database are included in the sensory category. This category includes blind/visually impaired, deaf/hearing impaired, and deaf-blind clients.

The probabilities of successful closure were computed and displayed in Table 13 for each of the disability categories by client race (white/non-white). In comparing the disability categories (other than sensory), white clients identified with MR/autism as a primary disability are more likely to be successful closures ($p = 0.649$). Non-white clients with mental illness as a primary disability are less likely to be a successful closure ($p = 0.410$). The probability for successful closure for non-white clients regardless of disability (other than sensory) is less than the probability for successful closure for white clients.

Table 13: Probabilities of Successful Closures by Disability

Disability	Probability
Sensory –Blind/Deaf/Deaf-Blind	
White	0.642
Non-White	0.882
Physical – Orthopedic/Neurological	
White	0.547
Non-White	0.490
Physical – Other	
White	0.609
Non-White	0.550
LD/ADHD	
White	0.605
Non-White	0.548
MR/Autism	
White	0.649
Non-White	0.594
Mental Illness	
White	0.465
Non-White	0.410
Substance Abuse	
White	0.589
Non-White	0.532

In summary, HLM as a statistical tool has helped in understanding the complex relationships between client variables and counselor variables in the context of multicultural counseling situations. The results indicate counselor multicultural competencies (as measured by the Multicultural Counseling Inventory) were not found to be significant in explaining differences in client outcomes. However, the reliance solely on a self-report multicultural instrument for information about a counselor's competence should be cautioned as it may fail to yield accurate information about their true ability (Constantine et al, 2002).

Both counselor and client race are important variables in explaining differences in client outcomes. However, counselor race was only a contributor in explaining differences when combined with some explanatory variables at the client level. These included client age at application, race, one category within education level, and whether the client was a recipient of social security benefits. In combination with client gender, disability, and the majority of educational level, counselor race was not found to be a contributor in the explanation of outcomes. Increased numbers of counselors would have allowed for more exploration of counselor characteristics than was possible with the limited number of degrees of freedom in the sample.

The HLM analysis found most of the significant explanatory variables are located at the client level and not at the counselor level. This is an important finding from this study as much of the previous research has looked to counselor variables in explaining differences in outcomes of clients from diverse racial and ethnic backgrounds. Explanatory variables at the client level found to be

significant in explaining differences in client outcomes include client race, client age, whether the client is a recipient of benefits, and disability.

CHAPTER 5

DISCUSSION

The purpose of this study was to investigate multicultural counseling competencies of the MDCD-RS counseling staff, and the relationship of the competencies to client outcomes. In addition, the function of counselor-client racial similarity and dissimilarity were studied in relation to outcomes. Counselor multicultural competencies (as measured by the Multicultural Counseling Inventory) were not found to be significant in explaining differences in client outcomes. The findings indicate that some counselor characteristics were found to be significantly related to various multicultural competencies as measured by the MCI. Both counselor and client race were found to be important variables in explaining differences in client outcomes. In addition, the study found that most of the significant explanatory variables are located at the client level and not at the counselor level.

Counselor Multicultural Competencies

The mean scores in each of the MCI dimensions provide specific information that may be helpful in understanding the construct of multicultural counseling competence as well as serve as indicators for further investigation. One of the dimensions with the highest mean scores for participants in this study is the Skills dimension. This is an important dimension in the rehabilitation process as the emphasis is on the “how” in working with clients from diverse

cultures. In addition to measuring the counselor's competence in the Skills dimension, the higher mean scores may also be reflective of the respondents' years of experience, and participation in multicultural training experiences. For example, the majority of counselors reported more than 14 years of experience, and almost 90% indicated have received some type of multicultural training.

Another MCI dimension with high participant means scores is the Relationship dimension. This dimension reflects the cultural and racial attitudes in client interactions and the interpersonal process of multicultural counseling. Slight differences in mean scores were found between white and non-white counselors. Because of their own cultural experiences, non-white counselors may be more sensitive to their own cultural, racial, or ethnic feelings and thoughts than white counselors, and as a result have higher mean scores in this area.

The Knowledge dimension had the broadest range of mean scores for counselors. This dimension encompasses the theoretical knowledge of multicultural counseling issues including racial and cultural concepts such as racial and ethnic identity, worldviews, and acculturation. The range in scores may reflect less comfort by the respondents with specific knowledge areas such as minority identity development and research on minority client's preferences. The counselor's report of having a CRC certification or eligible for CRC certification was found to be significant on the Knowledge dimension. This may reflect the emphasis by the Commission for Rehabilitation Counselor Certification for

inclusion of questions in this Knowledge dimension on the national certification examination.

Overall the Awareness dimension for the counseling staff is the least strong of the four dimensions. The Awareness dimension represents a challenge to each individual counselor and to the organization as it involves an introspection of one's own assumptions, values, and biases. Because the majority (80.6%) of the respondents were white, it is critical for counselors to understand their own racial and cultural "programming" on the development of self (Roysircar, 2003). An example is an awareness of white privilege status or as McIntosh (2001) calls the "invisible package of unearned assets that [White people] can count on cashing in each day" (as cited in Kwan & Taub, 2003, p 222). Additional information on multicultural competencies in each of the dimensions is provided in Appendix A.

Counselor Characteristics and Multicultural Competencies

Counselor race, years of experience, and CRC or CRC eligible status were all found to be significant on the Awareness dimension. The mean scores were higher for non-white counselors indicating they may possess more self-awareness of attitudes and worldviews into which they have been socialized. The mean scores were slightly higher for two categories of years of experience, which combined comprised those counselors with one to seven years of experience. These higher mean scores may reflect the emphasis in graduate school or recent in-service training workshops on multicultural issues. In addition, the higher mean

scores found with those counselors who have CRC certification or are CRC eligible, support the changing emphasis in multicultural issues by professional organizations and regulatory bodies in rehabilitation counseling.

Counselor Multicultural Competencies and Client Outcomes

The use of the HLM analysis technique was critical in studying multicultural counseling competencies and client outcomes. By having the ability to look at client-level and counselor level-effects and the effects across levels, this investigation was able to focus the lens more accurately on those factors that are associated with outcomes. Results indicated that counselor race in combination with other explanatory variables was found to be a significant factor in explaining outcomes. Bellini (2003) found clients from different racial groups experience different outcomes as a function of the counselors' race and the counselors' multicultural competency. In contrast, this investigation did not find the counselors' multicultural competency, as measured by the MCI, to be significant in explaining client outcomes, but did find counselor race in combination with other explanatory variables to be a significant factor. For example, non-white clients of average age working with non-white counselors are more likely to be a successful closure than white clients of average age working with counselors of any race. Non-white clients receiving social security benefits working with a non-white counselor are more likely to be a successful closure than white clients receiving social security benefits working with a counselor of any race.

Multicultural competence, as measured by the MCI, was not a significant factor in explaining client outcomes. Therefore, other possibilities need to be considered. Previous studies have reported consistent and strong preferences of clients from diverse racial and ethnic backgrounds for racially and similar counselors (Constantine, 2001). In addition, research has suggested (Watkins et al., 1989) that non-white clients who are mistrustful regard white counselors as less credible. The findings from these studies may provide additional insights into understanding the interactions of counselor race with other explanatory variables and client outcomes. This issue is complex and additional research is needed to clarify the effects of counselor-client racial similarity and dissimilarity and multicultural counseling competence on client outcomes.

The HLM analysis found most of the significant explanatory variables are located at the client level (age, race, recipient of benefits, disability and one level within education). As indicated by Bellini (2003), previous research has suggested that four classes of variables determine client outcomes. These include client characteristics, counselor characteristics, characteristics of service provision, and macro-economic indicators. Through the use of HLM, this investigation has suggested that the client characteristics are the primary variables in explaining differences in client outcomes. Client race (as defined as white/non-white for this analysis) was found to be important in explaining client outcomes. Non-white clients working with a counselor of any race have a lower probability for successful closure. This finding is supported by numerous studies on differences in outcomes for rehabilitation consumers from diverse racial and

ethnic backgrounds (Bellini, 2003). Researchers have often looked at counselor variables in explaining these differences in outcomes. This study did not find variables at the counselor level, other than counselor race in combination with other factors, to be significant in explaining client outcomes. However, increased numbers of counselors would have allowed for more exploration of counselor characteristics than was possible with the limited number of degrees of freedom in the sample.

In looking at the combination of client race and age, the findings indicate that non-white clients are less likely to be a successful closure. Counselor race was not found significant as a factor on the variance of closure. The age of the client at application added little to the model other than confirming the difference in variance of outcome by race of the client.

Another significant client variable in explaining client outcomes is whether the client is a recipient of social security benefits. A variety of factors are associated with this variable including the severity of the client's disability, the fear of losing benefits, or the community support services available to the client. The finding of the HLM analysis indicated that non-white clients receiving benefits when working with a non-white counselor are more likely to be a successful closure than white clients receiving benefits in working with a counselor of any race is puzzling. The issue of client-counselor ethnic or racial similarity may be a more important factor than issues of multicultural competence. Or another possibility is that other measures of multicultural competency in addition to the self-report instrument need to be explored.

Additional research is needed to fully understand the implications of these findings.

Client race was found to be significant in combination with disability. The probability for successful closure for non-white clients regardless of disability (other than sensory) is less than the probability for successful closure for white clients. In comparing the disability categories (other than sensory), all clients in the study identified with MR/autism as a primary disability are more likely to be successful closures. White clients identified with MR/autism as a primary disability are more likely to be successful closures than non-white clients identified with MR/autism as a primary disability. Clients in this study identified with mental illness as a primary disability are less likely to be a successful closure. White clients with mental illness as a primary disability are less likely to be a successful closure than non-white clients with mental illness as a primary disability. These results indicate the complexity of the interactions of between these variables in explaining client outcomes.

Limitations

The results of this investigation must be considered in light of several potential limitations. Although the response rate was sufficient for research purposes, the non-response is a concern. The response rate for counselors was approximately 58%, with over 80% of the respondents reporting race as white. The overall staff demographics as reported in Appendix C indicate less than 70% of the counselors are white. The respondents who returned the completed

questionnaire packets may have had a particular interest in the study's topic and may differ from the individuals who did not return the completed packets.

Because respondents were cued to the intent of the study, they may have responded differently based on their perception of what was being assessed. The impact of the response rate and patterns on the results of the investigation (particularly the scores on the MCI) is not fully known.

A second limitation in this study is the sole reliance on a self-report instrument to measure multicultural competence. Recent research (Constantine et al, 2002) has indicated that the use of self-report multicultural counseling instruments may actually be measuring multicultural counseling self-efficacy (i.e., the belief that one possesses multicultural competency and is therefore able to provide multicultural competent counseling services to clients). In addition, many of the items in the MCI are based on the assumption of working with clients in an individual counseling context and do not take into consideration competence in the context of larger systems such as families or groups (Constantine et al, 2002). As the MCI was the sole measure used in this investigation measuring multicultural counseling competence, the results should be considered in light of these limitations.

The MCI (as shown in Appendix B) was developed to measure multicultural counseling competencies for counseling psychologists in the mental health profession and not rehabilitation counselors. Although most of the questions in the instrument are applicable to a broad audience within the counseling profession, rehabilitation counselors practicing in a public setting may

not easily identify with the wording of some of the questions. For example, one of the questions on the MCI asks, "I am successful at seeing 50% of the clients more than once, not including intake." In a public rehabilitation program the rehabilitation process must be considered as an additional factor in the client/counselor relationship which may not be the case in a more individualized therapeutic counseling setting. The psychometric analysis of survey questions and participant responses conducted (Mapuranga, 2003) found that overall the MCI instrument satisfactorily measured the multicultural competency psychological construct. However, an instrument designed specifically for rehabilitation counselors might produce a more accurate picture of multicultural competence in the rehabilitation counseling field.

Another limitation involves the Multicultural Social Desirability Scale. The results of this study indicate an overall higher average score for counselors than found in research with professionals from other fields. The MCDS results for this investigation indicated a mean score of 18.54 ($SD = 3.53$) for the counselors who participated in this study. According to previous research a mean score of 16 appears to balance the two perspectives, showing both positive and negative reactions to minority concerns and indicating realistic attitudes and responses (Sodowsky, et al., 1998). The scores ranged from a low of 8 to a high of 25. The higher mean score of respondents in this study might be explained by the unique milieu surrounding counselors in their work with individuals with disabilities.

The range of scores on the MCDS at either the low end or the high end may reflect a measurement of social desirability or a reaction to the scale itself.

As a true/false answer format was used, the respondents may have felt conflicted in their responses. For example, one of the statements participants are asked to respond to, "I have never intensely disliked anyone of another race."

Respondents may have refused to answer or answer honestly to the sensitive questions on the scale as they may have been embarrassed, felt threatened, or even anger over the wording of some of the questions. Because of recent development of the instrument, normative data for the scale was not available at the time the instrument was selected. Previous research involving social desirability scales and multicultural counseling competence (Worthington et al., 2000) suggests that the construct of social desirability might be conceptualized as two-dimensional. The two components include self deception (the respondent actually believes his or her positive self-reports) and social desirability (the respondent consciously distorts the truth). Future research is needed in respect to the use of social desirable scales and multicultural counseling competence.

Implications

Implications of the Use of Self-Report Multicultural Counseling Scales

The findings of this investigation have implications for the use of a self-report instrument as the sole measure of multicultural counseling competence. Previous research (Constantine & Ladany, 2000) has suggested that self-report instruments may be measuring "multicultural counseling self-efficacy" as opposed to abilities in working with persons from diverse racial and ethnic backgrounds. In addition, relying on self-report instruments designed for counseling psychologists may fail to provide accurate information about a

rehabilitation counselor's true ability. The scales may provide clues in the understanding the complex construct of multicultural counseling competence, but should not be used as the only tool in assessing counselor or staff competence in working with clients from diverse racial and ethnic backgrounds. Behavioral observations and portfolio assessments are approaches found to be effective in identifying multicultural counseling competency (Roysircar et al., 2003; Coleman, 1996).

Although the Multicultural Social Desirability Scale provided some information about the potential impact of social desirable attitudes on the completion of the MCI, the usefulness of the scale was limited. The contribution of the MCSD scores in relation to the MCI was not found significant. The authors of the MCSD (Sodowsky et al., 1998) recommended checking high-end and low-end MCSD scores with the MCI scores. This process provided some insight into the social desirable attitudes of the respondents, but did not produce sufficient empirical information to determine the influence of social desirable attitudes on the MCI. Additional research is needed to address the relationships between self-reported multicultural counseling competence and social desirability. In addition, research is needed to refine existing measures or develop new measures to adequately address the construct of social desirability and multicultural counseling competence.

Implications for Education and Training

The results of this investigation have implications for counselor education and training. The higher mean scores of counselors found in the Skills and

Relationship dimension and the lower mean scores on the Awareness dimension may indicate individuals are more competent on cognitive and behavioral levels, but less developed in cultural self-exploration. The differences in the mean scores between white and non-white counselors on the Awareness dimension may add support to this hypothesis. Because of their own cultural experiences, non-white counselors may possess more self-awareness of attitudes and worldviews into which they have been socialized.

The approaches often used in education and training programs teach rehabilitation counselors to work within other cultures, but do not teach them how to integrate contrasting worldviews, beliefs, and perceptions in their practice (Middleton, 2000). Various approaches have been used in multicultural training programs to address the Awareness dimension including experiential learning, cultural immersion, and simulations. However, the full impact of any of these approaches is not known and more research is needed regarding the best way to train rehabilitation counselors in multicultural counseling competencies.

Implications for Practice

The results of this study have found most of the explanatory variables are located at the client level and not at the counselor level in explaining variance of client outcomes. Counselor multicultural competencies (as measured by the Multicultural Counseling Inventory) were not found to be significant in explaining differences in client outcomes. Bellini (2002) suggested additional research was needed to “confirm or disconfirm hypothesized linkages between counselors’ self-reports of multicultural counseling competencies and counseling outcome

criteria, including minority client satisfaction, client evaluations of counselor effectiveness or the working alliance, and minority client outcomes (p. 74)." The results of this investigation indicate self-report measures of multicultural competence may be limited in understanding differences in client outcomes. Further research is needed to explore the multicultural counseling competence of rehabilitation counselors from other perspectives, such as qualitative interviews to gain the client's perspectives of multicultural counseling. In addition, the influence of organizational multicultural competence on the development of the counselors' multicultural development needs to be explored.

The results indicating most of the explanatory variables are located at the client level and not at the counselor level in explaining variance of client outcomes is not surprising. Although rehabilitation counseling is holistic in its approach, it is an individualized process adapting to the uniqueness of each client (Wright, 1980). Because the individual client possesses a wide variety of characteristics when entering into a counseling relation, the skills and knowledge requirements of the rehabilitation counselor are extensive to assist the client in achieving successful outcomes. Additional research is needed on the best practices utilized by counselors to effectuate positive outcomes.

Implications for Future Research

Because of the limitations of the existing self-report instruments measuring multicultural counseling competence for use in rehabilitation counseling, additional research is needed to identify methods to evaluate multicultural counseling competence. Behaviorally based methods of evaluating

multicultural counseling competence may be necessary to more accurately determine a rehabilitation counselor's ability to effectively work with individuals from diverse racial and ethnic backgrounds. Such methods might include video-taping or audio-taping of counseling sessions for assessment by trained observers. Qualitative studies to gain the client's perspective on multicultural counseling are another approach to capture different aspects of the multicultural counseling competence construct. Further research is needed to explore the multicultural counseling competence of rehabilitation counselors from other perspectives, such as qualitative interviews to gain the client's perspectives of multicultural counseling. In addition, the development of measurement tools specific to rehabilitation counseling might also provide more accurate assessments of multicultural counseling competence of rehabilitation counselors working in a public program.

Recent research has examined the extent to which the three most common multicultural scales were measuring the conceptualization of multicultural counseling competence (Constantine et al., 2002). A 2-factor structure of multicultural counseling competence was identified rather than the 3-factor model used in the MAKSS and the MCKAS or the 4-factor model used in the MCI. In computing an exploratory factor analysis for this study, preliminary results suggested a 5-factor model. These results indicate a need for additional research on self-report multicultural counseling competency scales.

Because of the small percentage of non-white counselors in the study, additional research is needed to evaluate client and counselor racial similarity

and dissimilarity, especially in relation to client outcomes. The collapsing of several racial categories both at the client and counselor level for analysis purposes may not accurately reflect how the clients' individual characteristics interact with the counselor's characteristics. There is a need for additional research to explore counselor-client racial similarity and dissimilarity issues in relation to client outcomes using databases from other state VR organizations.

Conclusions

This investigation has addressed the complexity of issues in multicultural counseling competence from information gathered at the client and counselor levels. Although counselor multicultural competencies as measured by the MCI were not found significant in explaining differences in client outcomes, their importance should not be diminished. The finding that client race, counselor race, and the interaction with other explanatory variables are significant factors in explaining client outcomes suggests the importance of multicultural counseling competence.

Multicultural counseling competence is an evolving, complex construct and is not easily quantifiable through a self-report instrument. A vital component missing from this investigation is an understanding of how the client experiences cultural competence. Qualitative research through individual interviews or focus groups may be methods to further explore the perception of multicultural competence of rehabilitation counselors from the perspective of the client.

Through the use of HLM, the findings of this study suggest that the characteristics the client brings into the counseling relationship are the primary variables in explaining differences in client outcomes. In particular, client race, age at application, and social security benefit status are important variables in understanding the variance in client outcomes. Additional research is needed to add to these findings to enhance our understanding of multicultural competency and client outcomes.

Sue (1982) developed the first framework for multicultural counseling competency, defining the concept in reference to the counselor's attitudes/beliefs, knowledge, and skills in working with individuals from diverse backgrounds. In 2001 he redefined multicultural counseling competency to include advocacy. "Multicultural counseling competence is defined 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 more responsive to all groups" (p. 802). The changing construct of multicultural competence reflects not only the complexity of issues including interactions with the socio-political environment, but the difficulty in trying to understand it.

The findings of this study have important implications for research, practice, and measurement of multicultural counseling competence in rehabilitation counseling. Despite the limitations, this investigation has added to

the understanding of multicultural counseling competence in relation to individuals with disabilities from diverse racial and ethnic backgrounds.

APPENDICES

Appendix A
Multicultural Counseling Competencies

Appendix A

Multicultural Counseling Competencies

Skills	Awareness	Relationship	Knowledge
Possess general counseling skills & proficiencies	Embraces life experiences & professional interactions of a multicultural nature	Comfortable with minority client's differences	Possesses a pluralistic worldview
Utilizes multiple methods of assessment	Enjoys multicultural interactions	Confident in facing personal limitations	Examines own cultural biases
Able to differentiate between needs for structured vs. structured therapies	Advocates against barriers to mental health services	Sensitive to client mistrust	Self-monitors and self-corrects
Understands own philosophical preferences/worldview	Has an awareness & understanding of diverse racial, cultural, & ethnic minority groups	Understands countertransference &/or defensive reactions with minority clients	Uses innovative approaches & methods
Able to retain minority clients	Is aware of legalities regarding visa, passport, green card, & naturalization	Sensitive to difficulties based on cognitive style	Familiar with current trends & practices
	Has knowledge of & tolerance for nonstandard English	Strives to avoid stereotyped & biased case conceptualization	Understands impact of acculturation
	Draws on multicultural consultation & training resources	Understands minority client-majority group comparisons	Utilizes research on minority client preferences
	Problem solves in unfamiliar settings	Knows how differences in worldviews affect counseling	Sensitive to within-group differences
	Has increasing multicultural caseload		Minority identify development considered in referrals or consultation
			Includes demographic variables in cultural understanding

Knowledge

Integrates
sociopolitical history
into client
conceptualizations

Note: Adapted from Sodowsky, Taffe, Gutkin, & Wise, 1994.

Appendix B
Multicultural Counseling Competency Survey Packet

MULTICULTURAL COUNSELING INVENTORIES

INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

1. Read each statement CAREFULLY.
2. Please complete the entire questionnaire. If you do not find an answer that fits exactly, use the one that comes closest.
3. Use a PENCIL to completely fill inside the circles – do **not** use a pen.
4. Blacken the circle for each response and erase cleanly any answer you wish to change.
5. Make no other markings or comments on the survey pages since they interfere with the automatic reading.
6. Do **NOT** write your name anywhere on this booklet

WHEN YOU HAVE COMPLETED THE QUESTIONNAIRE, PLEASE RETURN IT IMMEDIATELY TO PROJECT EXCELLENCE IN THE ENCLOSED SELF-ADDRESSED STAMPED ENVELOPE BY THE DATE SPECIFIED IN THE COVER LETTER.

Assurance of Confidentiality

All information about individual participants will be held in the strictest confidence. It will be used only by people who are directly involved in this survey, and will NOT be discussed or released to others for any purpose. Your responses will be used ONLY when combined with those of many other respondents. You indicate your voluntary agreement to participate by completing and returning this questionnaire.

DEMOGRAPHIC QUESTIONNAIRE

Please complete the following demographic items. Select only one response per item.

1. Gender
 - ☐ Female
 - ☐ Male
2. Age
 - ☐ 20-29
 - ☐ 30-39
 - ☐ 40-49
 - ☐ 50+
3. Education Level:
 - ☐ Master's degree in Rehabilitation Counseling
 - ☐ Master's degree in related area (e.g., counseling, psychology, rehabilitation services)
 - ☐ Master's degree in unrelated area
 - ☐ Bachelor's degree in Rehabilitation Counseling
 - ☐ Bachelor's degree in related area (e.g., psychology, sociology)
 - ☐ Bachelor's degree in unrelated area
 - ☐ Two years college
 - ☐ No post high school training
4. Certification
 - ☐ Certified Rehabilitation Counselor (CRC)
 - ☐ CRC-Clinical Supervisor (CRC-CS)
 - ☐ Canadian Certified Rehabilitation Counselor (CCRC)
 - ☐ Licensed Professional Counselor
 - ☐ Certified Rehabilitation Counselor (CRC) eligible
 - ☐ Other _____
5. Job Title (that most closely matches)
 - ☐ Administration
 - ☐ Supervisor
 - ☐ Rehabilitation Counselor
 - ☐ Rehabilitation Assistant
 - ☐ Blended Staff
 - ☐ Teacher
 - ☐ Other: _____
6. Years of Service
 - ☐ Less than one year
 - ☐ 1-5 Years
 - ☐ 5-7 Years

- 8-13 Years
 - 14+ Years
7. Race/Ethnicity
- American Indian or Alaskan Native
 - African American
 - Caucasian (Non-Hispanic)
 - Asian
 - Hispanic or Latino
 - Multiracial
8. Multicultural Training
- Participated in a multicultural graduate class
 - Participated in multicultural workshops
 - Participated in multicultural research projects
 - Have not received formal training in this area

Please rate the following questions according the following scale:

- 1 = Strongly Disagree**
2 = Disagree
3 = Agree
4 = Strongly Agree

- | | | | | |
|--|---|---|---|---|
| 9. The office I work in values multiculturalism through recruitment, retention, and promotion of staff from diverse backgrounds. | 1 | 2 | 3 | 4 |
| 10. Multicultural issues are typically discussed in case conferences with supervisor. | 1 | 2 | 3 | 4 |
| 11. Multicultural references and training materials are readily available. | 1 | 2 | 3 | 4 |
| 12. This office supports participation of staff in multicultural training activities. | 1 | 2 | 3 | 4 |
| 13. This office encourages discussion among staff of multicultural issues. | 1 | 2 | 3 | 4 |
| 14. Community outreach to multicultural groups in local office is encouraged. | 1 | 2 | 3 | 4 |

Appendix C
Demographic Characteristics of the Counselor Population

Appendix C

Demographic Characteristics of the Counselor Population

Variable		N	Valid %
Gender	Male	94	38.4
	Female	151	61.6
Age	20-29	6	4.1
	30-39	29	19.7
	40-49	47	32.0
	>50	64	43.5
Race	American Indian	2	0.8
	African American	70	28.6
	Caucasian	165	67.3
	Hispanic	5	2.0
	Asian/Pacific Islander	2	0.8
Years Experience	<1	22	9.0
	1-5	57	23.0
	5-7	30	12.0
	8-13	38	16.0
	>14	98	40.0

Note: The Ns do not compute to 252 due to missing data. Education level, certification, credentialing, and training data not available.

Appendix D

Client Characteristics of Cases Closed After Initiation of Plan 10/1/01 thru 9/30/02

Appendix D

Client Characteristics of Cases Closed After Initiation of Plan 10/1/01 thru 9/30/02

Gender

	FY 2002 911 Data		MC Study Sample	
	Frequency	Percentage	Frequency	Percentage
Male	6675	58.1	3241	57.2
Female	4808	41.9	2427	42.8
Total	11483	100.0	5669	100.0

Age at Application

	FY 2002 911 Data		MC Study Sample	
	Frequency	Percentage	Frequency	Percentage
<21	3155	27.5	1668	29.4
22-29	1430	12.5	736	13.0
30-39	2344	20.4	1131	20.0
40-49	2809	24.5	1304	23.0
50-59	1374	12.0	653	11.5
60-64	233	2.0	101	1.8
>64	138	1.2	76	1.3
Total	11483	100.0	5669	100.0

Race

	FY 2002 911 Data		MC Study Sample	
	Frequency	Percentage	Frequency	Percentage
White	8512	74.1	4351	76.8
Non-White	2971	25.9	1318	23.2
Total	11483	100.0	5669	100.0

SSI/SSDI Benefits

	FY 2002 911 Data		MC Study Sample	
	Frequency	Percentage	Frequency	Percentage
No	7831	68.2	3835	67.6
Yes	3652	31.8	1834	32.4
Total	11483	100.0	5669	100.0

Disability

	FY 2002 911 Data		MC Study Sample	
	Frequency	Percentage	Frequency	Percentage
Blind/Visual Impairment	112	1.0	54	.9
Deafness/Hearing Impairment	1130	9.8	554	9.8
Physical Impairment-Orthopedic/Neurological	1660	14.5	810	14.3
Other Physical Impairments	1285	11.2	579	10.2
LD/ADHD	1893	16.5	954	16.8
MR/Autism	1433	12.5	808	14.3
Mental Illness	2475	21.6	1257	22.2
Substance Abuse	1211	10.5	500	8.8
TBI	179	1.6	88	1.6
Communicative/All Other Mental Impairments	105	.9	65	1.2
Total	11483	100.0	5669	100.0

Education Level at Application

	FY 2002 911 Data		MC Study Sample	
	Frequency	Percentage	Frequency	Percentage
<8 Years	239	2.0	135	2.4
9-12 No Diploma	2071	18.0	1024	18.1
SE Certificate	1019	8.9	618	10.9
HS Grad/GED	5962	51.9	2855	50.4
Some Post-Sec	1510	13.2	740	13.1
BA+	682	6.0	297	5.2
Total	11483	100.0	5669	100.0

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