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CONSULTATION COMPETENCIES IN REHABILITATION COUNSELOR EDUCATION: A MIXED METHODS INVESTIGATION

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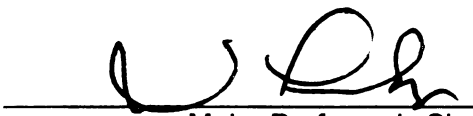

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CONSULTATION COMPETENCIES IN REHABILITATION COUNSELOR EDUCATION: A MIXED METHODS INVESTIGATION

By

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ABSTRACT

CONSULTATION COMPETENCIES IN REHABILITATION COUNSELOR EDUCATION: A MIXED METHODS INVESTIGATION

By

Stephen Anthony Zanskas

The purpose of this mixed methods study was to identify which consultation competencies rehabilitation counselor educators perceived as important for rehabilitation counseling practice, their perceived level of proficiency in teaching these competencies, and to explore strategies for incorporating these knowledge and skills areas into the rehabilitation counseling curriculum. In addition, this study addressed whether the educators' perceptions of importance and proficiency differed according to demographic characteristics. Initially, 352 individuals with the rank of assistant, associate, or professor rank identified as members of the National Council on Rehabilitation Education (NCRE) or faculty of NCRE member institutions were identified as potential participants. Of the original 352 individual e-mail invitations sent to NCRE faculty members throughout the United States, 301 were successfully delivered. Another 15 reported that they were no longer employed as rehabilitation counseling educators, declined to participate or would be out of the office for an extended time period. One individual was unable to access the electronic survey and another was determined deceased. Of the total population of 284 potential participants, 83 participated yielding an overall survey response rate of 29.22%. Empirical data was gathered utilizing the Consultation Competency Inventory (CCI) a

web based survey developed for this investigation. Qualitative data was obtained in the text responses of 42 survey participants to open ended survey questions and through interviews with seven rehabilitation counselor educators. Five a priori domains of importance and instructional proficiency were identified: (a) Assessment; (b) Business and Case Management; (c) Consultation Process and Application Skills; (d) Interpersonal Relationship Skills, and (e) Problem Solving. Overall, the survey participants ranked the five a priori domains of consultation competencies as important or very important to rehabilitation counseling practice. The rehabilitation counselor educators also ranked themselves as proficient across each of the five competency domains. No significant demographic differences were identified for the a priori importance or proficiency domains. A moderately strong positive correlation was demonstrated reflecting a relationship between educator's perception of the importance of the consultation competencies and self-reported instructional and pedagogical proficiency. The implications for rehabilitation counselor practice, education and future research are discussed.

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Chapter I

Introduction

Consultation in the human services evolved from clinical models in the fields of medicine, mental health, behavioral, and organizational psychology (Hansen, Himes, & Meier, 1990; Lynch, Habeck, & Sebastian, 1997). Consultation, as a service, has consistently been empirically identified as one of the primary knowledge areas required by practicing rehabilitation counselors (Chan, Leahy, Saunders, Tarvydas, Ferrin, & Lee, 2003; Leahy, Chan, & Saunders, 2003: Leahy, Shapson, & Wright, 1987; Linkowski, Thoreson, Diamond, Leahy, & Szymanski, 1993; Szymanski, Leahy, & Linkowski, 1993). The types of consultation services rehabilitation counselors typically provide include: assessment, problem solving, information synthesis, and plan development. These consultation services also represent the core skills provided by rehabilitation counselors (Lynch et al., 1997).

Consultation lacks a universally accepted definition in the fields of counseling and psychology (Estrada-Hernandez & Saunders, 2005; Schein, 1999; Zins, 1993). The definition of consultation provided by the CRCC reflects a process model of consultation. The Commission for Rehabilitation Counselors (CRCC) has defined consultation in the Scope of Practice for rehabilitation counselors as "the application of scientific principles and procedures in counseling and human development to provide assistance in understanding and solving problems that the consultee may have in relation to a third party, be it individual, group, or organization" (CRCC, 2000, p.2).

Rehabilitation counselors need adequate preparation for the consultation activities they will be expected to perform in their future practice. A review of the literature reflects

that practicing certified rehabilitation counselors perceive consultation as a required job function and knowledge area (Estrada-Hernandez & Saunders, 2005; Leahy, et al., 1987; Linkowski, et al., 1993; Szymanski, Leahy, & Linkowski, 1993; Chan, et al., 2003; Leahy, et al., 2003). Brown (1993) expressed that the process of training consultants differed little from the process of training counselors. However, rehabilitation counselor educators have reported that they did not feel adequately prepared to provide instruction in consultation-related activities (Ebener, Berven, & Wright, 1993).

Rehabilitation counselors have been affected by changes in counseling practice settings and service delivery systems over the past decade (Leahy, Chan, & Saunders, 2003). Societal trends, legislative mandates or changes, emerging knowledge and skill requirements, managed health care, the licensure movement, accreditation changes, outsourcing, and economic trends have contributed to a turbulent employment environment (Cummings, 1995; Hershenson & McKenna, 1998: Leahy, et al., 2003; Shaw, Leahy, Chan, & Catalano, 2006). Employment options for rehabilitation counselors are expanding in this dynamic environment (Benschoff & Souheaver, 1991; Desmond, 1985; Garvin, 1985; Koch & Rumrill, 1997; Lynch & Herbert 1984). Rehabilitation counselors are increasingly employed in the private sector as forensic or vocational experts, within disability management programs, and in medical or other settings requiring consultation skills (Blackwell, Field, Johnson, Kelsay, & Neulicht, 2005; Estrada-Hernandez & Saunders, 2005; Leahy, Chan & Saunders, 2003; Scully, 1996; Shahnassarian, 2002; Thomas, 1999).

As the employment of rehabilitation counselors in service delivery settings requiring consultation skills continues to increase, traditional state-federal public

rehabilitation settings are experiencing manpower shortages. As early as 1995, Jakubiak observed that rehabilitation counselor education programs could not keep up with the demand for qualified counselors. Chan (2003) projected numerous job openings within the state-federal rehabilitation programs that were attributed to retirement, turnover and the increased hiring of rehabilitation counselors by insurance companies, case management companies, and mental health providers. Chan (2003) also concluded that the state agency's personnel needs could not be met through the current rehabilitation counselor education programs. Despite favorable occupational projections, a recent Delphi study of leaders in the field of rehabilitation cited declining RSA training funds and difficulty recruiting masters and doctoral students into rehabilitation counselor education programs among the most highly ranked education and training issues for the field (Shaw, et al., 2006). The authors noted that although many state vocational rehabilitation counseling positions are available their salaries are lower and their pay increases have not kept pace with those in the private sector.

Consultation has been described as an effective method of service delivery in school psychology and other settings that involve many clients, where both time and service management are essential (Lepage, Kratochwill, & Elliott, 2004). Implementation of a consultation approach has been a pragmatic response in mental health, public health, and school psychology settings that realized the number of clients that could benefit from services exceeded the number of individuals who could be treated individually (Albee, 1968; Caplan & Caplan 1993, Curtis & Zin, 1981). The convergence of societal trends has contributed to a practice environment conducive to rehabilitation counselor educators incorporating consultation skill development into their program curricula.

Statement and Significance of the Problem

Historically, consultation has been identified as an important rehabilitation counseling job function and knowledge requirement (Leahy, Shapson, & Wright, 1987; Linkowski, Thoreson, Diamond, Leahy, & Szymanski; Szymanski, Leahy, & Linkowski, 1993). Further, recent research regarding job and knowledge requirements and training needs of certified rehabilitation counselors (CRC's) in the 21 st century indicates consultation is among the most frequently performed rehabilitation counseling tasks (Chan, et al., 2003; Leahy, Chan, & Saunders, 2003). Rehabilitation counseling employment settings have experienced considerable diversification during the past 20 years. Changes in service provision have accompanied this diversification of practice settings resulting in the emergence of new practitioner knowledge and skill requirements (Leahy, et al., 2003). These changes in the rehabilitation counselor's role have added to the knowledge and skill requirements for practice (Jacques, 1959; Wright, 1980; & Leahy 2002).

The development of new employment opportunities is often based upon an individual counselor's personal abilities and skills rather than the recognition of rehabilitation counseling as a profession. Habeck (1997) described the process of rehabilitation counselors obtaining employment in new settings as a type of "pathfinding," where professionals discover new settings to apply their skills. Jenkins and Strauser (1999) argued that the marketability of rehabilitation counselors would eventually decline if the profession remained focused upon serving a single population. In response to the rehabilitation profession's dynamic practice environment, Jenkins and Strauser (1999) expressed the need for rehabilitation counselors to horizontally expand

their interaction with businesses and organizations, broadening the application of, and incorporating new areas of knowledge into their training and consultation services. The literature review section of this study will demonstrate the trend toward diverse employment options for rehabilitation counselors requiring the development of consultation skills for effective practice.

Specific research regarding the education and training opportunities for graduate rehabilitation counseling students interested in developing consultation skills is essentially nonexistent. However, the call for the revision of rehabilitation counselor program curriculums to address the needs of private sector and disability management services is extensive. As early as 1979, researchers indicated the shift in employment from public sector to less traditional employment settings (Feinberg & McFarlane, 1979; McMahon, 1979; Sales, 1979). During the mid 1980's a number of authors suggested that rehabilitation counseling education programs were not adequately preparing graduates for private sector employment (Crystal, 1987; Habeck, & Munrowd, 1987; Klein, Rellick, & Kelz, 1987; Lynch & Martin, 1982; Matkin & Riggar, 1986; McMahon & Matkin, 1983). Rather than developing new courses, Matkin (1987) recommended integrating information regarding business management and insurance rehabilitation into existing courses and developing field placements in these settings to provide applied practice experience. Modification of the rehabilitation counselor education curriculum continued to be described as necessary to prepare rehabilitation counselors for employment in private sector rehabilitation throughout the 1990's (Kilbury, Benshoff, & Riggar, 1990; Rasch, 1992; Rosenthal & Olshesky, 1999). Conceptually, the employment of rehabilitation counselors in disability management settings requires that they expand their

scope of practice and training beyond the traditional individual or clinical services to include education about the environmental, organizational and systemic factors of rehabilitation in business and industry (Gottlieb, Vandergoot, & Lutsky, 1991; Habeck, Kress, Scully, & Kirchner, 1994; Shrey, 1994; and Tate, Habeck, & Galvin, 1986).

Training needs identified for competent practice by CRC's during the 21st century were investigated by Chan, Leahy, Saunders, Tarvydas, Ferrin, and Lee (2003). Results of Chan et al.'s (2003) study of CRC's in the public, non-profit and private sectors revealed that the knowledge factor which included career counseling, assessment, and consultation contained more critical training needs than any other identified factor. Results of their analysis revealed 23 knowledge areas in three primary practice settings (public, nonprofit, and proprietary). The authors noted knowledge about some of the emerging training needs such as health care and disability systems were not likely covered in graduate rehabilitation counselor curriculums when the respondents received their training and that it was unlikely that they were emphasized in the majority of current rehabilitation counselor education programs.

Consistent with rehabilitation counselors employed in the public sectors, Chan, et al., (2003), noted career counseling, assessment, and consultation as areas which met the criteria for critical training needs for counselors employed in the private sector. Rehabilitation counselors in proprietary settings expressed the perception that they had limited preparation in the areas of accommodations, employer practices, job acquisition and retention, follow-up/post employment services, work conditioning, and the use of the internet resources for rehabilitation counseling. Unique to the private sector was the identification of critical training needs within the health care and disability systems

knowledge domains. Specific items included expert testimony, workers compensation laws and practices, and employer-based disability prevention and management services. Multicultural counseling, ethical decision-making, financial resources as well as case and caseload management were identified as critical training needs.

Private sector rehabilitation professionals are not the only segment of our profession implementing a consultative approach to service provision. Advocates of consumerism and social justice approaches have also advocated consulting roles for the rehabilitation counseling professional (Davidson, Waldo, & Adams, 2006; Horne & Mathews, 2006; Toporek, Gerstein, Fouad, Roysircar, & Israel, 2006; Vash, 1992). Social justice proponents have also expressed the need for training programs to focus on building and sustaining community partnerships as well as teaching students consultation and organizational change skills (Toporek, Gerstein, Fouad, Roysircar, & Israel, 2006).

Rather than focus upon knowledge and skill requirements required for specific practice settings, it would appear advantageous for preservice education programs to prepare rehabilitation counseling graduate students with fundamental skills, such as consultation competencies, that transcend service settings. Rehabilitation counselor educators have reported in the past that they did not feel adequately prepared to provide instruction in consultation-related activities (Ebener & Berven, 1993). Despite the historical importance of consultation in rehabilitation counseling, there has been minimal research about the topic in our profession and negligible formal education or training available to prepare rehabilitation counselors to provide consultation services (Brown, 1993; Estrada-Hernandez & Saunders, 2005).

Societal trends, the emergence of diverse practice settings, increasing demand for

service along with an insufficient number of practicing rehabilitation counselors to meet the demand for service suggests the value of incorporating consultation competencies into the curriculum of rehabilitation counselor education programs. In our dynamic practice environment, it is essential for the rehabilitation counseling profession to investigate as well as understand the current state of the art in the education and training of rehabilitation counselors to fulfill consultation roles, identify strategies to incorporate consultation competencies into rehabilitation counselor curriculums and the obstacles to their implementation.

Purpose of the Study

Although the consulting competencies, related job functions, knowledge areas and training needs of practicing certified rehabilitation counselors have been empirically documented, the existing body of research has not addressed the development of consultation competencies at the master's degree level. Knowledge of the process of consultation and the development of consulting skills remains a critical training need for practicing rehabilitation counselors. Pre-service education addressing consultation as a professional competency would prepare rehabilitation counselors for their future practice. Despite the evident need for consultation training at the master's degree level for rehabilitation counselors, no studies have addressed their development. Only one study can be identified in the rehabilitation counseling literature addressing faculty perceptions of the importance of and faculty's perceived level of preparation for educating rehabilitation counseling graduate students about the process of consultation (Ebener & Berven, 1993). The existing research has primarily consisted of opinion pieces regarding the value and importance of consultation for practicing counselors, or addresses

consultation from the perspectives of other disciplines.

A mixed methods design will be used for this study. The intent of this design is three-fold. The modified RSI-R will be used to identify which consultation competencies rehabilitation counselor educators' perceive to be important to rehabilitation counseling practice as well as their perceived level of proficiency for teaching the respective competencies. Finally, interviews with subject experts will be used to explore the barriers to and the best methods for integrating the consultation competencies into the rehabilitation counseling curriculum.

Whether current graduate rehabilitation counselor training programs have failed to integrate consultation skill development into the curriculum in an identifiable manner to their students, or simply are not providing adequate educational opportunities for the development of consultation skills has not been previously addressed. In order to begin to address this gap in the literature, a descriptive ex post facto research design will be used to identify which consultation competencies rehabilitation counselor educators' perceive to be important to rehabilitation counseling practice, their perceived level of proficiency for teaching the respective competencies, and the relationship between the importance attributed to consultation skills and the educators teaching proficiency rating. Concurrently, qualitative interview data will be gathered from subject experts to identify the barriers to and methods of integrating consultation competencies into the rehabilitation counselor curriculum. The research questions to be addressed in this proposed study include:

1. According to rehabilitation counselor educators, how important are consultation competencies for effective rehabilitation counselor practice?

2. Does the level of importance differ across components of the competencies?

3. Are there differences in the level of importance in the components of the competencies relative to specific demographic characteristics (ie. Age, gender, years of experience as a rehabilitation counselor educator, years as a paid consultant, and the established credit hour requirement for completion of a master's degree at the faculty's respective rehabilitation counselor education program)?

4. How do rehabilitation counselor educators perceive their own instructional and pedagogical proficiency to teach consultation competencies for rehabilitation counseling practice?

5. Are there differences in the level of proficiency in the components of the competencies relative to specific demographic characteristics (ie. Age, gender, years of experience as a rehabilitation counselor educator, years as a paid consultant, and the established credit hour requirement for completion of a master's degree at the faculty's respective rehabilitation counselor education program)?

6. How do the perceptions of rehabilitation counselor educators' own instructional and pedagogical proficiency to teach consultation competencies differ across components of the competencies?

7. What is the relationship between educators' perceptions of the importance and their proficiency in teaching consulting competencies?

Qualitative Questions

1. How do rehabilitation counselor educators describe consultation skills in relation to rehabilitation counselor practice?

2. How can consultation competencies be incorporated into the rehabilitation counselor

education curriculum?

3. What barriers or obstacles do rehabilitation counselor educators perceive to the incorporation of consultation competencies into their curriculum?

Definition of Terms

Consultation: The Commission for Rehabilitation Counselor Certification (CRCC) has defined consultation in the Scope of Practice for rehabilitation counselors as "the application of scientific principles and procedures in counseling and human development to provide assistance in understanding and solving problems that the consultee may have in relation to a third party, be it individual, group, or organization" (CRCC, 2000, p.2).

Rehabilitation Counselor: A practitioner with a master's degree who assists persons with physical, mental, developmental, cognitive, and emotional disabilities to achieve their personal, career, and independent living goals in the most integrated setting possible through the application of the counseling process. Techniques and modalities used by rehabilitation counselors may include, but are not limited to: (a) assessment and appraisal; (b) diagnosis and treatment planning; (c) career or vocational counseling; (d) individual or group counseling; (e) case management, referral, and service coordination; (f) program evaluation and research; (g) interventions to remove attitudinal, employment, or environmental barriers; (h) consultation services among multiple parties, regulatory bodies, or about access to technology; and (i) job analysis, job development, or job placement services (Scope of Practice for Rehabilitation Counseling, 2005).

Consultee: An individual, group or organization who invokes the consultant's assistance in a problem that is believed to be within the consultant's area of competence (Caplan and Caplan, 1993).

Client: The focus of the consultee's professional operation.

Competencies: The specific knowledge and skills required of rehabilitation counselors to provide effective services to the consultee in relation to a third party, be it an individual, group, or organization.

Mixed Methods: A research method that focuses on collection, analyzing, and integration of both quantitative and qualitative data in a single study (Creswell, 2003).

Concurrent Strategy: A mixed methods research strategy identified by its use of one data collection phase, during which both qualitative and quantitative data are collected simultaneously (Creswell, 2003; Hansen, Creswell, Plano-Clark, Petska, & Creswell, 2005).

Concurrent Nested Strategy: A nested approach has a predominant method that guides the project and an embedded research method. For the purposes of this investigation, the qualitative research method is embedded within the quantitative method. The analysis of the two methods are mixed during the analysis phase of the investigation. This research model enables the researcher to benefit from the advantages of both quantitative and qualitative data and gain broader perspectives as a result of using different types of data obtained from different levels within a single study (Creswell, 2003; Hansen, Creswell, Plano-Clark, Petska, & Creswell, 2005).

Assumptions and Limitations

A primary assumption underlying this study is related to the validity of relying upon self-report measures to assess rehabilitation counselor educators perception of the importance of consultation competencies to rehabilitation practice, the adequacy of their own education or training, experience, and program curriculums for preparing

rehabilitation counselors to provide consulting skills in their clinical practice upon graduation. Self-report surveys represent a single sample taken at the time the participant considers their opinions and perceptions (Leedy and Ormond, 2005). Self-report measures can be impacted by the context, recent events, or the desire of the participant to appear favorable to the researcher. Regardless of the potential limitations, self-report survey research has been used frequently to define competencies that are either not directly observed, or are observed through multiple behaviors (Boyatzis, 1982; Scully, 1996). Rehabilitation counselor educators, as university faculty, are however believed to possess the requisite skill, ability, judgment, and research experience to accurately assess professional competencies related to consultation.

It is assumed that the modified Rehabilitation Skills Inventory-Revised (RSI-R) accurately reflects the consultation competencies related to rehabilitation counseling practice; however, outcome studies were not used to verify the instrument's accuracy for this purpose. The Rehabilitation Skills Inventory-Revised is an instrument designed to be a standardized questionnaire of the competencies required of rehabilitation counselors and considers consultation from a rehabilitation counseling perspective. The consultation items used in this investigation were modified items drawn from the RSI-R. The items drawn from the RSI-R and the consultation practice portion of the questionnaire have not been validated as being involved in effective consultation, were inferred from the literature, and have not been directly connected to consultation outcomes.

Another potential limitation of this investigation is related to the non-probability sampling method employed for the quantitative web based survey of rehabilitation counselor educators portion of this mixed methods research design. However, Birnbaum

(2005) has expressed that the use of the World Wide Web allows the researcher to efficiently recruit specialized samples of people with rare characteristics, allows for standardization of procedures, and makes studies easy to replicate. As the results of the present investigation are intended for generalization to rehabilitation counselor educators, a purposive sample appears appropriate.

Electronic surveys can be a highly effective method of data collection with university faculty members. As participants, university faculty are comfortable with computers, familiar with using the internet, and have an interest in research (Leedy and Ormond, 2005). Methodological problems of Web based studies include higher rates of drop out and repeated participation. Despite these limitations, Birnbaum (2005) analyzed a number of studies that compared data obtained in Web versus lab and found that these two methods usually reach the same conclusions.

Although a concurrent nested mixed methods research design has many strengths, there are limitations inherent with the use of this approach. Data collected will require transformation to allow integration during the analysis phase of the investigation. Creswell (2003) indicated that little has been written to guide the researcher through the data transformation process or how the researcher should resolve discrepancies that may occur between the two types of data. The embedded nature of the qualitative data in this study also implies an unequal priority between the quantitative and qualitative methods resulting in unequal evidence that can impact integration and interpretation of the final results (Creswell, 2003; Hansen, Creswell, Plano-Clark, Petska, & Creswell, 2005; Bryman, 2006; Bryman, 2007).

Chapter II

Literature Review

Consultation, as a service, has been empirically identified as one of the primary knowledge areas required by practicing rehabilitation counselors (Chan, Leahy, Saunders, Tarvydas, Ferrin, & Lee, 2003; Leahy, Chan, & Saunders, 2003: Leahy, Shapson, & Wright, 1987; Linkowski, Thoreson, Diamond, Leahy, & Szymanski, 1993; Szymanski, Leahy, & Linkowski, 1993). Despite the importance of consultation, rehabilitation counselors have expressed they do not feel adequately prepared for providing consultation services (Chan et al., 2003). Similarly, rehabilitation counselor educators have reported they were only moderately prepared to provide instruction in consultation-related activities (Ebener, Berven, & Wright, 1993).

Minimal theoretical or empirically based information has been available about consultation in the rehabilitation counseling literature. As a result, little is known about the preparation of rehabilitation counselors for consultation practice, the level of importance rehabilitation counselor educators attribute to consultation skill development or their ability to teach the requisite competencies. While there is limited information available about consultation in the rehabilitation counseling literature, an extensive body of literature exists in the allied helping professions. The areas of counseling, consulting psychology, industrial/organizational psychology, school psychology and disability management were reviewed in order to provide a context for this study.

Demographic Changes in Rehabilitation Counseling

Since 1973 the employment market for new rehabilitation professionals graduating from rehabilitation counselor education programs shifted from the public

sector to less traditional employment settings (Feinberg & McFarlane, 1979). According to a recent manpower study, the data on the chronological age of the current workforce indicates that about 15% of state vocational rehabilitation counselors will retire within the next five years (Chan, 2003). The expected retirement rate of field supervisors was expected to be even higher. Chan's (2003) analyses also suggest that another 25% of the counselors will be leave state vocational rehabilitation agency employment for reasons other than retirement. Many counselors reportedly leave state vocational rehabilitation agency employment to obtain a higher salary. Other reasons cited for voluntarily leaving state vocational rehabilitation agency employment included the counselors' desire to have more autonomy in making decisions and the desire to spend more time with their clients. Chan's (2003) preliminary projections indicated that state rehabilitation agencies could expect to replace about 3,800 counselors and about 850 supervisors within the next five years. However, university masters programs for rehabilitation counselors are also facing succession and replacement problems. Chan (2003) projected that universities could be expected to produce about 5,000 new graduates by 2007. However, given current recruitment rates, only about 1,500 graduates would be employed by state VR agencies. The anticipated pool of new hires is significantly below the expected replacement needs of state VR agencies.

Demographic information provided by the Commission on Rehabilitation Counselor Certification (CRCC) provides additional support for the contention that the supply of new rehabilitation counselors is inadequate to meet the demand for qualified rehabilitation professionals. As of November 22, 2006, there were 15,615 Certified Rehabilitation Counselors (CRC's). Less than 6% of the CRC's were age 30 or younger

while over 51% were age 50 years of age or older. Only approximately 27% of the total CRC's were employed in the state-federal vocational rehabilitation system (personal communication from Cindy A. Chapman, November 28, 2006). Review of the facts and figures regarding the demographic composition of the rehabilitation counseling profession suggests our profession is in the midst of a developing national labor shortage. The incorporation of consultation strategies in rehabilitation counseling may become necessary in order to maximize the use of existing skilled professionals. Similar to fundamental counseling or communication skills, consultation as a process spans across counselor practice settings and would appear to have broad appeal.

The Concept of Consultation

Consultation in human services is an outgrowth of the clinical models of medicine and mental health, behavioral psychology, and organizational studies (Lynch, et al., 1997). Understanding and articulating one's definition of consultation is essential for successful consultation to occur. Research findings indicate that the definition of consultation depends upon a consultant's work setting, educational backgrounds, goals and conceptual models (Kurpius & Fuqua. 1993). Consultation has been defined as an indirect means of solving problems between a consultant and the help seeker or the consultee (Zins, 1993). Consultation is generally regarded as a triadic, work related, issue focused, voluntary, and non-judgmental activity (Kurpius & Fuqua,1993). Consultation in rehabilitation is frequently interdisciplinary and counselors often serve as part of an interdisciplinary team (Lynch et al., 1997).

The current study uses the definition of consultation contained in the CRCC Scope of Practice Statement. The Commission for Rehabilitation Counselor (CRCC)

defined consultation in the Scope of Practice for rehabilitation counselors as "the application of scientific principles and procedures in counseling and human development to provide assistance in understanding and solving problems that the consultee may have in relation to a third party, be it individual, group, or organization" (CRCC, 2000, p.2).

There are many models of consultation (Blake & Mouton, 1976). Within these models, consultation can be described as either formal or informal. Formal consultation requires the development of a contract. Informal consultation is most often represented as taking place among peers or between a consultant and a senior colleague (Kurpius & Fuqua, 1993). Another distinguishing characteristic between consultants is their employer. Although the process of consulting is essentially the same regardless of the employer, a consultant that works specifically for an employer is considered an internal consultant. External consultants are individuals hired by a consultee and usually have either a contract or fee for service payment arrangement. Whether one is employed as an internal consultant or retained as an external consultant conveys distinct role advantages. External consultants are readily perceived as experts. However, external consultants often lack the relevant background information internal consultants possess regarding problems by virtue of their employment by an organization (Kurpius & Fuqua, 1993; Lynch et al., 1997).

Fundamentally, consultation paradigms can be divided into two conceptualizations, expert and process models of consultation. A consultant has responsibility for the design, implementation and the success of the intervention during expert consultation. Examples of the expert model of consultation include the fee for expertise and traditional doctor-patient relationships (Rockwood, 1993). In contrast,

process consultation, involves the consultant working with the consultee to design and implement change and the responsibility for success is share (Kurpius & Fuqua, 1993; Schein, 1999). Process consultation allows for a shift between the expert and process models as required by the problem encountered (Schein, 1999).

Hodges and Cooper (1983) described three basic models of consultation. Educational consultation was described as associated with a problem that is related to a lack of skill or knowledge. Interventions in educational consultation are focused upon modeling skills or imparting information. Individual consultation involves problems primarily attributed to attitudes, motivation, intra-psychic conflicts or the personal style of the consultee. Interventions in individual consulting focus upon eliminating defensive processes, resolving theme interferences, or facilitating personal growth. System process models where the problem is primarily due to characteristics of an organization or community to which that client or consultee belong. Intervention is focused around changing channels of communication, power, and support.

Although a description of the many models of consultation is beyond the scope of the present study, the actual process of consultation has been described as including six generic stages (Kurpius, Fuqua, & Rozecki, 1993):

1. Pre-entry. Self-assessment by the consultant to evaluate personal competencies related to the needed services.
2. Entry. Problem exploration and contract development.
3. Information gathering, problem identification and goal setting.
4. Solution searching and intervention selection.
5. Evaluation of the success of the intervention and possible redefinition of the problem.

6. Termination. Which may include debriefing and reflection about the process.

A review of the literature has demonstrated that a consultant's definitions of consultation vary depending upon their work setting, educational backgrounds, goals and conceptual models. Attempting to identify common consulting competencies will reflect similar levels of complexity and contextual differences (Estrada-Hernandez & Saunders, 2005; Kurpius & Fuqua. 1993; Shein, 1999).

Consultation Competencies in Related Fields

The need to identify consultation competencies was identified as early as 1920 when the APA's Division 13 of Consulting Psychology received the assignment to specify the competencies and knowledge bases associated with consulting psychology and to assure that division members had met the prerequisites for recognition as consulting psychologists (O'Roark, 1999). Although the process of consultation can be defined, the approach taken to define what constitutes a competency appears to vary by discipline. As will be apparent in this review of the literature, practitioner perspectives of consultation competencies suggest consultation competencies are developed over time through practice rather than specific training.

Heckler (1998) subjectively described his perceptions of the characteristics of an effective consulting management psychologist as he encouraged others to mentor new professionals entering the field. Heckler cited being pragmatic, able to think on one's feet, salesmanship, versatility, and personal attractiveness as essential qualities of the management psychologist.

Consulting has also been described as an art rather than a science (Merrell & Weigel, 1998). Based upon their applied consulting experiences, Merrell and Weigel

(1998) indicated successful consultants were generalists, solution focused, pragmatic, and insightful. Regardless of one's specialty consultants may engage in preventative, developmental or remedial services. In applied practice, the consultant's character, experience, values, intuition, and relationship building skills appear more important than the application of scientific facts and theories. According to Merrell and Weigel, the art of consultation is not readily trained. It emerges as consultants develop their craft, requires an apprenticeship, mentoring, and a commitment to lifelong learning and development.

Consultation has become a major function of school psychologists (Knoff, Hines, & Kromrey, 1995). Extending earlier work the authors developed the Consultation Effectiveness Scale (CES). The final version of the CES was developed through the study of 225 school psychologists. A factor analysis yielded four final scales reflecting the characteristics of effective consultants: Interpersonal Skills, Problem-Solving Skills, Consultation Process and Application, and Ethical and Professional Practice Skills (Knoff et al., 1995). The CES was described as providing insight into the characteristics of school psychologists who were also effective consultants. Additional review of the competencies identified in the CES to inform the present investigation of rehabilitation counselor competencies is warranted

Interpersonal Skills, with 24 items, emphasized showing respect for the consultee, being trustworthy, approachable, encouraging, pleasant and having a positive attitude. Problem-solving skills, with 14 items described behaviors and skills consultants use to identify and analyze problems. Items receiving the highest rating in the problem-solving factor included: skillful, good facilitator, active listener, effective at establishing a

rapport, good at problem-solving, and astute observer/perceptive. Consultation Process and Application, with 11 items, was the third cluster identified. Items on this scale essentially reflect the consultant's ability to get involved, evaluate and focus ideas, be active, follow through and identify clear goals. Ethical and Professional Practice Skills, with 7 items, was the final factor identified. Representative characteristics for this factor included practicing in an ethical manner, being trustworthy, maintaining confidentiality, remaining emotionally stable, and possessing a clear sense of professional identity (Knoff et al., 1995).

Froehle (1978) outlined an entire curriculum based upon field placement, didactic, and laboratory skill development for the systematic training for consultants through competency-based education. Formal training in consultation received increased attention in the counseling psychology literature when consultation became an important part of the psychologist's role (Alpert & Meyers, 1983; Fox, 1994; Froehle, Fuqua, Gibson, Kurpius, & Robinson, 1989; Hellcamp & Morgan, 1989; Lowman, 1998; Lowman, 2002; Matarazza, 1987; Zins, Kratochwill, & Elliott, 1993). Proficiency in consultation requires not only specialty knowledge and skills but also competency in the consultation process, a skill that transcends all specialty areas or employment settings in psychology. Specialty area skills or expertise alone do not imply proficiency as a consultant ((Hellcamp, Zins, Ferguson, & Hodge, 1998; Robinson-Kurpius, Fuqua, Gibson, Kurpius, & Froehle, 1995).

Lynch et al., (1997) represents one of the few authors to have specifically addressed consultation as a professional practice in rehabilitation. In their review of the literature the authors described consultation skills as involving the core rehabilitation

counseling skills of evaluation or assessment, problem solving, information synthesis, and plan development. Within the context of the role and function studies in rehabilitation counseling, Lynch et al., (1997) identified comprehensive assessment, case management and vocational planning, research methodology, program evaluation, and outcome analysis as valuable reimbursable consultative services. Business and industry, disability management, legal, or school settings were described as potential consultation opportunities for rehabilitation counselors. Lynch et al., (1997) expressed the need for improved training opportunities for both new and experienced rehabilitation counselors emphasizing the adoption of an ecological or systems perspective and an understanding of organizational systems and their development.

A national survey of graduate programs in psychology regarding their training practices in consultation reflected that courses, practicum experiences or workshops on consulting were not typically offered (Hellcamp, Zins, Ferguson, & Hodge, 1998). A content analysis of doctoral-level training programs in consulting psychology reflects that the profession was cross-disciplinary (Garman, Zlatoper, & Whiston, 1998). Despite the extensive research regarding the training of consultants in consulting and counseling psychology, until recently there were no programs designed specifically for the preparation of consulting psychologists (Fuqua & Newman, 2002). Graduate education, through an emphasis on the development of counseling and case management skills, appears to have failed to incorporate the development of consultation competencies into the curriculum.

Although psychologists have engaged in consulting since the early 1900s, it was only recently that their profession began to clearly express a conceptual framework for

consulting activities (Cooper, 2002a). In 2002, the APA's Education and Training Committee, Society of Consulting Psychology, introduced principles for education and training at the doctoral and post-doctoral level in consulting psychology. The principles were organized around core competencies and three broad domains of expertise: individual, group, and organizational. The primary individual level core competencies included: career and vocational assessment, assessment for employee selection or development, job analysis, coaching, and intervention for job and career related problems. The consulting competencies for the group-level domain included: assessment of group behavior, assessment and team development, creating group level teams in organizations, inter-group assessment and intervention, and identity group management within an organizational context. Organizational or systemic level core competencies were represented primarily by: organizational diagnosis or assessment; attitude, climate, and satisfaction surveys; evaluation of corporate management philosophy, culture, and systemic stressors, workflow and project planning activities, identification of aggregate performance measures, organizational-level interventions, and change management of organizational systems. Evaluating the document from an educator's perspective, Fuqua and Newman (2002) noted the emphasis on competencies rather than curriculum, an emphasis on research and evaluation, non-exclusivity among the divisions of psychology and the scientist-practitioner model as strengths of the proposed educational principles.

Following a review of the recommended principles for education and training of psychological consultants, Cummings (2002) expressed concern about faculty being inadequately prepared to teach each of the 11 consulting competencies. Cummings (2002) suggested that individual programs might have faculty with ample experience and

expertise in training, coaching, and individual counseling interventions while having minimal skills in educational, group, or organizational interventions.

The Society for Industrial and Organizational Psychology had identified 25 competencies based upon knowledge, skills, and abilities (Campbell, 2002). Campbell indicated that as an approach, the industrial and organizational psychologist approach differed from the recommendations for the education and training competencies of consulting psychologists. Rather than listing representative activities consulting psychologists could be expected to perform at the individual, group, and organization levels, Campbell recommended that the principles of education and training for consulting psychologists be supplemented by competencies that focus on the underlying knowledge, skills, and abilities required to perform this work competently. According to Campbell, the knowledge, skills, and abilities could include, but were not limited to, such things as research methods, statistical analyses, analysis of work, criterion theory and development, psychometric theory and personnel selection, legal issues, work motivation, and organizational theory.

Practical Experience

Caplan, Caplan, & Erchul (1994) emphasized the importance of education and training to acquire consultation's unique body of knowledge, concepts, and skills. Using a systems approach, Froehle (1978) outlined a consultation training approach that incorporated didactic, laboratory, and field placement components. Within each of these components he identified consultation competencies; 19 knowledge competencies, 13 behavioral skills, and nine judgment competencies. In addition to developing a model curriculum with core competencies, Froehle (1978) established criteria for acceptable

performance. Although the training process was outlined, there was not any empirical evidence of the curriculum's effectiveness (Brown, 1985).

Applied training opportunities for new consultants are limited. Atella and Figgatt (1998) expressed that clinicians are engaged in consulting without adequate knowledge and training in consulting. In addition to the lack of formal educational programs in consulting psychology, there are even fewer opportunities for apprenticeships, internships, or practicums (Atella & Figgatt, 1998; Carey, 1995).

Discussing collaborative consultation for mental health professionals within a school system Cochrane and Saylers (2006) recommended an introductory collaborative consultation course be incorporated into the second semester of a students' graduate program or the last year of a students' undergraduate program along with planned experiences during practicum and internship to develop a foundation for the development inter-professional relationships. The author's cautioned faculty about the need for students to develop a professional identity prior to their introduction to the concept of inter-professional collaborative consultation.

Adequate supervision for individuals entering consulting practice is considered paramount in importance. Many of the educators who provide consultant training have had little if any formal training in consultation practices themselves (Pryzwansky, 1985; Stoltenberg, 1993). The primary objective of training in consultation currently is the development of scientist-practitioners who are able to function as service providers, trainers, program designers, program evaluators, administrators, consultants, and researchers in business and organizational settings to meet the unique challenge of a more diverse workforce (Gerstein & Shullman, 1992). What further magnifies this deficit in the

education and training of organizational consultants is that the majority of the faculty who train future consultants do not actually engage in consultative activity, nor do they identify themselves as experts in this area (Gerstein & Shullman, 1992). Consequently, trainees' role models are not actually consultants but academicians, who typically require a much different skill set for professional success (Steward, 1996).

The demand for diversity-related consultation has increased with increasing racial or ethnic representation within the workforce. Discussing the impact of increased demand for multicultural consulting competencies, Steward (1996) also identified factors that could explain why professionals engage in general organizational consultation with limited competency. Steward observed that most academic programs offer limited consultant training. The lack of available education and training regarding consultation may contribute to the graduate's perception that they have mastered what was required to function as consultants regardless of the issue addressed. Professional consulting activities in general are considered lucrative and can be intrinsically rewarding for those committed to large-scale social change.

Private Sector Rehabilitation and Disability Management

The education and training needs of rehabilitation counselors in the private sector has been a topic of research since the sector emerged in the 1970's (Feinberg & McFarlane, 1979; McMahon, 1979; Sales, 1979). Empirical research regarding private sector rehabilitation began with Lynch and Matkin's (1982) survey of private sector knowledge and skill areas. A 41-item instrument was developed and administered to a sample of 147 members of the National Association of Rehabilitation Providers in the Private Sector (NARPPS). Results of Lynch and Matkin's 1982 survey reflected training

needs related to transferable skills analysis, workers compensation legislation, job analysis and job modification, insurance industry practices, labor market analysis, disability benefit programs, business practices, vocational testimony, and financial planning strategies. Lynch and Matkin (1982) noted similarities between private sector knowledge and skills areas and pre-service counselor preparation however they also suggested changes to the traditional rehabilitation counselor curriculum.

Matkin (1983) conducted a national study of rehabilitation specialists within the insurance industry, private rehabilitation companies, self-insured employers and private practitioners. The sample consisted of 850 members of NARPPS and their employees. A 132-item survey was developed based upon the literature and competency studies of tasks performed by private rehabilitation specialists. Five major work roles were identified through factor analysis: planning and coordinating client services, business and office management, job development and placement, diagnostic assessment, and other professional activities. As a result of this study, Matkin provided recommendations for rehabilitation education, credentialing, and cooperation between public and private rehabilitation.

Matkin and Riggar (1984) conducted two national surveys to address both the growth of private sector rehabilitation and whether graduate level training had responded to the needs of private sector rehabilitation counselors. Members of NARPPS and NCRE were surveyed concurrently. Participant responses reflected increased employment opportunities in the private sector and that graduate programs had responded to the changing work settings through the involvement of private rehabilitation professionals and course development.

In an attempt to further delineate the private sector rehabilitation provider's role and functions, Matkin (1987) reviewed the results of a two-year study conducted by the Board for Rehabilitation Certification. Four knowledge areas were identified for private sector practitioners: (a) rules, regulations, policies, and procedures of disability management systems; (b) service applications within disability compensation systems; (c) forensic rehabilitation; and (d) cost containment and resource allocation. Based upon his review of the results from this study, Matkin (1987) recommended the incorporation of practicum and internship sites in private sector settings.

Habeck and Munrowd (1987) distinguished between employer based and private rehabilitation. The author's made the distinction that in private rehabilitation, an external consultant is retained to provide the service required. Employer based rehabilitation was described as a process implemented by organizations to promote the retention and productivity of employees of injured or ill employees, preventing job loss. Competencies for practice in an employer based setting were noted to fall within clinical and direct skills, administrative skills, and organizational skills. Despite the attempt to draw a distinction between the two approaches, Habeck and Munrowd (1987) acknowledged that the majority of disability management programs were actually provided by contractual vendors of rehabilitation services.

According to Habeck and Munrowd (1987), rehabilitation counselors practicing in employer based environments needed to develop skills conducting needs assessment, policy analysis, data analysis, communication, program development management, budgeting, marketing, supervision, time management and job analysis. Necessary knowledge requirements included the fundamentals of organizational behavior and

development, federal/state legislation, insurance and benefit systems, corporate and union agreements, community resources, labor market trends, prevention and wellness approaches, and collective bargaining principles were identified as necessary related knowledge areas for a rehabilitation counselor entering employer based practice. Habeck and Munrowd (1987) expressed the challenge for rehabilitation counselor educators would be to determine how these identified competency areas could be addressed within existing curricula. The authors expressed their opinion that these types of courses may be more effectively taught by business or labor relations faculty.

In another conceptual article, Crystal (1987) described the evolution of the Business and Industry Rehabilitation course at the University of Kentucky. Crystal (1987) indicated that rehabilitation counselor educators had three courses of action to consider regarding modifications of curriculum content: (a) decide that the current curriculum meets the need; (b) determine existing course structures can meet the need with modification of structure and content; or (c) decide a new course is required to address the curricular needs. The faculty at the University of Kentucky decided to add an elective course regarding business and industry rehabilitation to the curriculum including the following topics: philosophy of business and industry; review of systems in private rehabilitation; an overview of the types of disabilities occurring within these systems; assessment, planning, and process issues; residual and transferable skills analysis; use of computerized job matching systems; consultation with employers and job placement; working with all of the parties involved in the system; expert testimony; and ethical and legal issues. The course was open to individuals interested in private or public rehabilitation, as the content was perceived as universal to the field.

Conceptually the employment of rehabilitation counselors providing disability management services requires the rehabilitation counselor to broaden their scope of practice beyond the traditional individual or clinical services to include environmental, organizational and systemic factors (Gottlieb, Vandergoot, & Lutsky, 1991; Habeck, Kress, Scully, & Kirchner, 1994; Shrey, 1994; and Tate, Habeck, & Galvin, 1986). Modification of the rehabilitation counselor education curriculum was also described as necessary to prepare rehabilitation counselors for employment in private sector rehabilitation (Kilbury, Benshoff, & Riggar, 1990; Rasch, 1992; Rosenthal & Olshesky, 1999). Kilbury, et al., (1990) recommended that the rehabilitation counseling curriculum be expanded to include information about neuropsychological assessment, stress management, disability management, supported employment, business administration, personnel management, and program evaluation.

Employers of insurance rehabilitation specialists were surveyed and interviewed in order to obtain their perspective about the desired skill development and educational outcomes for graduates of graduate rehabilitation counselor education programs (Gilbride, Connolly, & Stensrud, 1990). A 28-item survey was sent to the major firms engaged in insurance rehabilitation in the State of Iowa. The employers identified job placement and job development techniques, job analysis and modification, transferable skills analysis and case management as the most important knowledge areas graduates could possess. Time management, decision-making, and writing ability were identified as the most important case handling skills. Organizational skills and the ability to work independently were considered the most important interpersonal skills for a person employed in the private sector.

Rasch (1992) identified core courses existing within rehabilitation counselor education (RCE) programs and provided a description of the instructional content areas that would make them relevant for practice in the private sector. Courses and instructional areas identified included: foundations, counseling, evaluation, medical, psychosocial, and vocational aspects of disability. In describing the content areas, Rasch (1992) felt it was critical that public and private rehabilitation be compared with respect to their history and development, characteristics of their clientele, funding sources, and service delivery process.

Rosenthal and Olshesky (1999) reviewed studies regarding disability management and vocational rehabilitation and interviewed three practitioners to address the opportunities for rehabilitation counseling in disability management. The author's observed that although the terminology and concepts associated with disability management were present in the rehabilitation literature for more than 15 years, rehabilitation counseling professionals were not recognized as the first choice by employers to provide disability management services. They urged CORE accredited program curricula to respond proactively to the emerging needs and roles of the rehabilitation counseling profession. Rosenthal and Olshesky (1999) suggested that this might require addition of courses, infusing disability management content into current courses, and offering internship sites in disability management.

According to Habeck (1996), disability management could be distinguished from private-sector rehabilitation practice. Disability management was characterized by direct access to the workplace and by intervention at the onset of work-related injury or illness, was generally employer-based, and proactive. The clinical orientation of traditional

private-sector rehabilitation emphasized the provision of services to individual workers after work-related injury or illness, after it appeared that a disability prevented a return to work.

Habeck and Kirchner (1999) conceptualized two levels of disability management. Level I (DM) was defined as administrative, managerial, and had an organizational focus. Level II (dm) was described as human-service oriented, involving the direct provision of services to individual clients. Related to this two stage conceptualization of disability management, the Certification of Disability Management Specialists Commission (CDMSC) conducted its first role and function study to create an empirical basis for a certification exam and to describe the practice of disability managers in 1999 (Currier, Chan, Berven, Habeck, & Taylor 2001). A Delphi study approach was used to identify the important job functions and knowledge domains in disability management. Examination of the functions and knowledge domains common to Level I and Level II indicates a clear differentiation between traditional private-sector rehabilitation interventions and the context of the disability management model. Identified knowledge domains included disability case management, psychosocial intervention, vocational aspects of disability, managed care and disability management concepts, and business knowledge related to disability management.

Another role and function study was conducted on behalf of the CDMSC in 2004 employing a survey of 1500 participants and subject experts. The study was used to determine whether the domains of practice had changed and establish an empirical basis for a disability management specialist certification exam. The panel of experts identified three domains during this investigation: disability case management, disability prevention

and workplace intervention, and program development, management, and evaluation. The findings of Rosenthal, Hursh, Lui, Isom, and Sasson (2007) suggested that the individual and organizational practices previously identified in disability management had "blended". Employers appear to expect disability managers to understand absence management, presenteeism, integrated benefits, productivity enhancement and health and wellness. Rosenthal et al. (2007) also noted an increased expectation of outcome and evidenced based practice in order to demonstrate accountability.

Private sector rehabilitation and disability management settings represent expanding employment settings for rehabilitation counselors. Review of the literature reflects that these sectors are as dynamic as the general profession of rehabilitation counseling. Private sector rehabilitation emerged from workers compensation and insurance based rehabilitation. Disability management evolved from employer need and insurance based rehabilitation as direct service providers to disability managers responsible for the administration of comprehensive organizational disability management programs. Recently, disability management seems to have entered a new cycle of blended disability management services with greater emphasis on accountability, individual and organizational responsibilities and general benefit expertise. The need for curriculum change is a recurrent theme throughout the review of the literature concerning the development of the private sector and disability management in rehabilitation.

Competencies in Rehabilitation Counseling

The practice of rehabilitation counseling has been empirically defined through extensive research using job analysis, role and function studies, identification of professional competencies, and critical incident methods (Berven, 1979; Emener &

Rubin, 1980; Harrison & Lee, 1979; Jacques, 1959; Leahy et al., 1987; Leahy et al., 1993; Leahy et al., 2003; Muthard & Salamone, 1969; Rubin, Matkin, Ashley, Beardsley, May, & Onstott, 1984; Wright & Fraser, 1975). Consultation has historically been identified as an important rehabilitation counseling job function and knowledge requirement (Leahy, Shapson, & Wright, 1987; Linkowski, Thoreson, Diamond, Leahy, & Szymanski; Szymanski, Leahy, & Linkowski, 1993). Recent research regarding the job functions, knowledge requirements, and training needs of certified rehabilitation counselors (CRC's) in the 21"century indicates consultation continues to be among the most frequently performed rehabilitation counseling tasks (Chan, et al., 2003; Leahy, et al., 2003).

Jacques (1959) used a critical incidents approach with a national sample of 404 rehabilitation counselors and supervisors to study rehabilitation counselor competencies. Six sub-domains of rehabilitation counseling were identified through this process: (a) creating a therapeutic climate; (b) structured arranging and defining limits, (c) information gathering, (d) evaluating, (e) providing information, and (f) interacting. Review of these counseling sub-domains reveals similarities to the consultation competencies identified in this study.

Rehabilitation counselors in the public and non-profit rehabilitation settings were surveyed using the Rehabilitation Counselor Task Inventory in order to develop an understanding of their work role (Muthard & Salamone, 1969). Eight major job roles were identified through this research: (a) affective counseling, (b) eligibility and case finding, (c) group procedures, (d) placement, (e) vocational counseling, (f) test administration, and (g) test interpretation. The study also demonstrated that

approximately one-third of a rehabilitation counselor's time was devoted to counseling and 25% of their time involved case reporting or other clerical functions.

Fraser and Clowers (1978) surveyed 78 rehabilitation counselors in order to assess the nature and difficulty of their job functions. Rehabilitation counselor educators and rehabilitation counselors developed a 15-item survey through the review and categorization of rehabilitation counselor job tasks. Counselors were asked to rate both the amount of time required to perform a function and the level of difficulty they assigned to each task. Counseling, planning, and case recording and reporting were identified as requiring the majority of a counselor's time.

Role and function studies have been used extensively to delineate training needs for rehabilitation counselors, establishing certification criteria, and curriculum development. The Rehabilitation Training Needs Questionnaire was used to identify the training needs of state rehabilitation counselors (Berven, 1979). A sample of 680 regional rehabilitation counselors, supervisors and 70 national trainers were surveyed in order to identify their pre-service training needs (Berven, 1979). Identified training needs included: (a) psychological information, (b) case management, (c) medical information, (d) resource utilization (e) job placement (f) counseling, and (g) special rehabilitation problems.

Differences in the relative importance of work tasks began to appear in Emener and Rubin's 1980 study of rehabilitation counselors, administrators, and educators. A subsequent survey of CRC's across work settings by Rubin et al. (1984) revealed significant differences in the CRC's perceived importance of work tasks based upon the counselor's employment setting.

Leahy et al. (1987) studied rehabilitation counselors, job placement and development specialists and vocational evaluators across public, non-profit, and private rehabilitation agencies using the Rehabilitation Skills Inventory. A sample of 3614 participants was selected for this study, which had a 37.1% response rate. The results of this study demonstrated that the three rehabilitation specializations shared common core competencies although differences existed in the level of importance attributed to competencies by employment setting. A cluster analysis revealed 10 core rehabilitation functions: (a) vocational counseling, (b) assessment planning and interpretation, (c) personal adjustment counseling, (d) case management, (e) job placement, (f) group and behavioral techniques, (g) professional and community development, (h) consultation, (i) job analysis, and (j) assessment administration.

The perceived human resource and training needs for certified rehabilitation counselors were examined as part of the Council on Rehabilitation Education (CORE) and CRCC ongoing effort to validate knowledge requirements for accreditation and certification (Szymanski et al., 1993). A sample of 1535 CRC's reported training needs in vocational services, medical and psychosocial aspects of disability, case management and services, social cultural and environmental issues. The human resource development needs varied across job level, employment setting, and job title. Counselors in both the public and private for profit rehabilitation settings reported the highest level of training needs in the areas of Vocational Services, Case Management and Services.

Leahy et al. (2003) in a national study of 1400 Certified Rehabilitation Counselor's across service delivery systems identified seven major job functions and six primary knowledge domains required of rehabilitation counselors. The primary job

functions included: (a) vocational counseling and consultation; (b) counseling interventions; (c) community-based rehabilitation; (d) case management; (e) applied research; (f) assessment; and (g) advocacy. Knowledge domains rehabilitation counselors identified while performing their role included: (a) career counseling; (b) assessment and consultation services; (c) rehabilitation services and resources; (d) case and caseload management; (e) healthcare and disability systems; and (f) medical, functional, and environmental implications of disability. The recent study by Leahy et al. (2003) revealed numerous emerging knowledge and task domains for rehabilitation counselors, which require consideration to determine whether the knowledge areas should be included in the curriculum of pre-service educational programs. The authors commented that the number of new knowledge and task areas to consider for potential inclusion in the rehabilitation counselor curricula made the findings unique.

Chan et al. (2003) addressed the training needs of rehabilitation counselors for contemporary practice. Results of their analysis revealed 23 knowledge areas across the public, nonprofit, and proprietary rehabilitation settings. Consistent with rehabilitation counselors in the public sector, private sector rehabilitation counselors noted critical training needs in the areas of career counseling, assessment, and consultation. Rehabilitation counselors in the private sector also expressed their perception that they had limited preparation in the areas of accommodations, employer practices, job acquisition and retention, follow-up or post employment services, work conditioning, and the use of the internet resources for rehabilitation counseling. Unique to the private sector were the identification of critical training needs within the knowledge domains of healthcare and disability systems. Specific items in these domains included expert

testimony, workers compensation laws and practices, and employer-based disability prevention and management services. Multicultural counseling, ethical decision-making, financial resources as well as case and caseload management were identified as critical training needs.

Comprehensive assessment, case management and vocational planning, research methodology, program evaluation, and outcome analysis have been described as valuable rehabilitation consultation skills (Lynch et al., 1997). This conceptualization has implications for the inclusion of case management, research, and assessment skills within a broader construct of consultation.

Perceptions of Rehabilitation Educators

Emener, Rasch and Spector (1983) indicated that the ability of faculty to prepare students is based upon their own level of knowledge and mastery of the required competencies. Citing the dynamic rehabilitation environment and expanding research database, Emener et al., (1983) expressed that it was increasingly difficult for rehabilitation counselor educators to remain informed about the rehabilitation counseling profession. Rehabilitation educator' perceptions of their knowledge and training needs were surveyed by Emener et al., (1983). The survey population consisted of all 459 members of the NCRE with 235 participants or a 51.2% response rate. Overall, the educators rated their knowledge adequacy high across 12 instructional areas and their need for in-service training as low. Two areas that would appear to be strongly related to vocational service delivery, occupational information and job analysis as well as job development and job placement were not included among the highest educator knowledge ratings. Emener et al., (1983) indicated that despite a low response rate,

similar studies were warranted.

Wright and Ebener (1987) studied the demographic characteristics of 305 rehabilitation counselor educators. A total of 166 surveys were returned for a 55% response rate. The participants reported devoting an average of 6.3% of their time to private practice, consulting or employment outside of their educational setting. The frequency with which rehabilitation counselor educators described themselves as having developed specialized experience in functions associated with consultation included: forensic rehabilitation (28.3%), disability determination, (24.7%), and insurance compensation (11.4%) respectively. Similarly, rehabilitation counselor education faculty identified setting specific expertise with the following frequency: rehabilitation medical settings (26.5%), private for-profit rehabilitation firms (19.3%), and rehabilitation in industry (16.3%). Wright and Ebener also administered the Rehabilitation Skills Inventory (RSI) in order to address the importance of particular competencies in the educators' program curriculum and their perceived ability to teach each of the competencies.

Ebener, Berven, and Wright (1993) analyzed data from a 1987 study of the self-perceived abilities of rehabilitation counselor educators to teach competencies across 10 areas for rehabilitation practice. Consultation, as a competency domain, included the areas of consultation, expert opinion, and marketing, was rated the lowest of the 10 competency areas studied. Using an adapted version of the RSI, rehabilitation counselor educators rated their ability to teach consulting competencies as moderate to fair on a 5 point Likert-type scale. Noting the limitations of self-ratings Ebener et al., (1993)

indicated other measures of teaching proficiency would be difficult to identify or implement.

Potential Barriers to Inclusion

A study of rehabilitation counselor educators' current attitudes, beliefs, consultation related practices, pedagogical methods and the barriers to their implementation are important for several reasons. Brown (1993) suggested that counselor education programs often lack adequate resources to offer the comprehensive preparation required by counselors to in a variety of roles. The development of basic counseling skills required by accrediting organizations has been cited as leaving little time for the incorporation of additional coursework about consultation (Brown, 1993). Reasons suggested for rehabilitation counselor education programs' lack of consultation related course work include the lack of time, financial or personnel resources (Estrada-Hernandez & Saunders, 2005).

Attitudes may also present a barrier to the addition of consultation competencies to the curricula for counselor education. Counselor educators have been described as subscribing to colloquial definitions of consultation as simply giving advice and that anyone can become a consultant without training (Brown, 1993). Others appear to have opposed the inclusion of consultation skills in rehabilitation counselor curriculum as a matter of political principle, suggesting these broader competencies are within the realm of private practice rather than the traditional vocational rehabilitation counselor's human service role (Patterson and Parker, 2003).

Attitudinal barriers, accreditation requirements, lack of time, financial, institutional and personal resource have all been offered as explanations for the difficulty

counselor educator's may have incorporating consultation competencies or emerging trends into current curriculums. Although specific coursework in consultation and field experience is preferable, rehabilitation counselor education programs experiencing resource issues may infuse the application of consultation skills to rehabilitation settings through existing courses (Estrada-Hernandez & Saunders, 2005).

Chapter III

Methodology

The purpose of this concurrent nested mixed methods study was to gather quantitative data potentially useful for developing a better understanding of the relationship between rehabilitation counselor educator's knowledge of consultation as a professional activity, their consultation practices and perceptions of consultation training. The quantitative portion of this research study included both descriptive and ex post facto design components. Qualitative interview data from rehabilitation counselor educators who possess extensive experience in rehabilitation counselor education and/or expertise providing rehabilitation consultation services were used to explore how consultation skills can be integrated into rehabilitation counselor curricula and the barriers and obstacles to their implementation.

Participants

A national sample of participants was drawn from the listing of accredited member institutions, programs and the certified individual members obtained through the National Council on Rehabilitation Education (NCRE) for the quantitative portion of this study. Review of the 2005-2006 faculty and staff list for the member institutions and programs of NCRE reflect a total of 782 faculty and staff. Eligible participants will be defined as faculty that have attained the rank of Assistant Professor, Associate Professor, or Professor who are currently involved in teaching or clinical supervision. As reflected in the 2005-2006 NCRE Directory, 352 faculty members were identified using these criteria.

A purposive sub-sample of seven rehabilitation counselor educators was selected to participate in the qualitative portion of this investigation. Selection criteria included: employment as a rehabilitation counselor educator for 10 or more years, consulting experience; gender balance in the sample; participation in professional associations; and history of publication. These selection criteria were instrumental in establishing a priori assumptions regarding the participants' ability to address consultation in rehabilitation counseling from a clinical, disability management, educational and future perspective. Participants for the qualitative interview component of this investigation were selected from the alphabetical listing of all faculty and staff of NCRE members and NCRE member institutions and programs. The seven participants were selected from five of the 10 NCRE regions in the United States.

Instrumentation

A modified version of the Rehabilitation Skills Inventory – Revised (RSI-R) was used for the quantitative portion of this mixed methods investigation. The Consultation Competency Inventory (CCI) questionnaire (Appendix A) developed for this study represents a synthesis of items contained in the Rehabilitation Skills Inventory-Revised (RSI-R) and items inferred through a review of the literature regarding consultation (Leahy, et al., 2003).

The RSI-R is the most recent revision of the Rehabilitation Skills Inventory (RSI). The RSI originally consisted of 114 competency items rated on two, five point Likert-type scales (Leahy, Shapson, & Wright, 1987; Wright, Leahy, & Shapson, 1987). The RSI was designed to assess the importance of job tasks and functions in relation to a rehabilitation counselor's practice setting. The RSI-R was created following a review of

the RSI, Leahy et al. (2003). Twelve of the original 114 items were eliminated as they were related to another occupation or were now addressed in another inventory. Eighteen additional items and a frequency scale were added to the RSI to create a 120-item questionnaire with updated terminology and the ability to assess the frequency a participant performed each task. Common factor analysis was used to identify the principal job functions from the 120 job tasks performed by CRC's. The RSI-R uses two 5-point (0-4) Likert type scales to assess both the importance of and the frequency each of the 120 job tasks are performed (Leahy, et al., 2003).

The CCI, a 110 item web-based questionnaire containing consultation competency statements related to rehabilitation counseling practice was developed based on a review of the literature and items contained on the RSI-R. Items were developed according to five a priori domains: Assessment (11 items); Business and Case Management (9 items); Consultation Process and Application Skills (13items); Interpersonal Relationship Skills (9 items); and Problem Solving (13 items). A complete listing of the a priori domains and the individual items is provided in Appendix B. A pilot study of the modified RSI-R was conducted with a panel of rehabilitation counselor educators to obtain their feedback on the structured and unstructured items for clarity, consistency, representation of consultation practice, and to eliminate redundancy (Crawford, McCabe, & Pope, 2005).

The initial question in the quantitative portion of this study attempts to identify rehabilitation counselor educators' perceptions of the importance of consultation as a professional activity. In order to address the first question, participants were asked to rate their perceptions about the relative importance of each of the 55 consultation

competencies for rehabilitation counselor practice using a 5-point Likert scale. Participants were asked to rate the importance of each competency using the following 5-point Likert scale (1= not important, 2 = somewhat important, 3 = important, 4 = very important, and 5 = extremely important).

The second question in the quantitative portion of this investigation asked rehabilitation counselor educators' to rate their own ability to teach the same 55 consultation competencies. Modifying a scale used by Ebener et al. (1993) in their study of the self-perceived abilities of rehabilitation educators to teach rehabilitation counselor competencies, the present study asked participants to rate each specific area of competence according to their self-perceived ability to teach that competency. Specifically, participants were asked to rate each item in terms of "your own ability to teach this particular competency," on the following 5-point Likert Scale: (1= not proficient; 2 = somewhat proficient; 3= proficient; 4 = very proficient; and 5 = extremely proficient).

Demographic Questionnaire

Characteristics of the participants were gathered through the use of a 15 item demographic questionnaire (See Appendix A). This questionnaire requested information regarding four broad demographic categories of the participants. Information requested included: (a) identifying characteristics, (b) professional characteristics, (c) characteristics of their graduate program's consultation content, and (d) consultation experience.

Procedures

Due to the relatively small population of rehabilitation counselor educators and the intent to generalize the findings within the field of rehabilitation counselor education, participation in the web-based survey represents a non-probability, convenience method of sampling. Participants for the web-based survey portion of this study were solicited through individually addressed e-mail to the faculty and staff listed on the alphabetical list of all faculty and staff of NCRE member institutions and programs. Prospective participants were sent an explanation of the study, an invitation to participate and a link to the survey web site. A copy of the transmittal letters used to invite participation in the survey or the qualitative interview has been included in Appendices C and D respectively. A copy of the proposed study was submitted to and approved for distribution by the Research Committee of the National Council on Rehabilitation Educators.

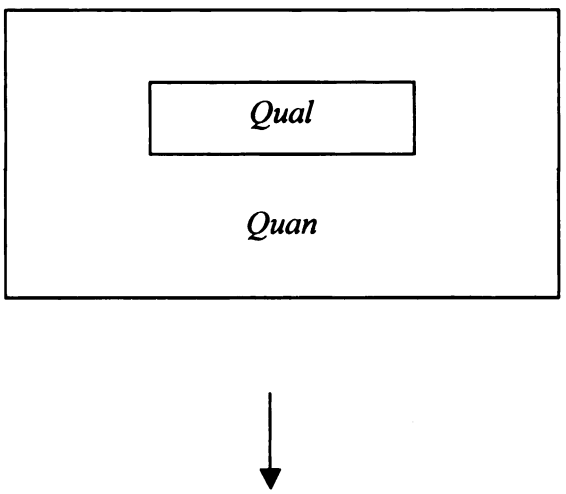
Design

The intent of this mixed methods design was three-fold. The CCI was used to identify which consultation competencies rehabilitation counselor educators' perceive to be important to rehabilitation counseling practice as well as their perceived level of proficiency for teaching the respective competencies. Finally, interviews with subject experts were used to explore the barriers to and the best methods for integrating the consultation competencies into the rehabilitation counseling curriculum The concurrent nested mixed methods design used in this investigation (see Figure 1) is one in which the qualitative interview data provides a supportive role to the quantitative survey data (Creswell, 2003; Creswell, Trout, & Barbuto, 2002). The design is considered useful when the quantitative and qualitative data are used to answer different questions

(Creswell, Fetters, & Ivankova, 2004; Creswell & Plano-Clark, 2006; Hansen, Creswell, Plano-Clark, Petska, & Creswell, 2005; Tashakkori & Teddlie, 1998).

This study was approved by Michigan State University's Social Institutional Review Board and classified as within the Expedited 7 category (SIRB# 07-214). Although initially anticipated to fall within the parameters of an exempt review categories of survey interview, education research, and internet based research, an application using the expedited category was required as the study involved audio taping the qualitative interviews of rehabilitation counselor educators. Advantages of web-based research include participant anonymity, the efficiency of recruiting participants, the ability to obtain heterogeneous samples, the ability to target potential participants, the ability to standardize procedures and the ease of replication (Birnbaum, 2004).

Figure 1: Concurrent Nested Design



consent, potential for coercion to participate, and confidentiality. The potential risks were considered and addressed as follows.

This study did not have a sponsor and therefore minimized the risk of conflict of interest. The targeted participants were not students or employees of this researcher, reducing the risk for coerced participation. Participants were not compensated for their participation. Participation in the study was voluntary and participants were able to withdraw participation at any point in the study. As a descriptive study focusing upon the perceptions of rehabilitation counselor educators, the proposal did not involve vulnerable populations.

Informed consent was addressed through a written form incorporated within the instructions accompanying the survey questionnaire (Appendix A) and a consent form forwarded to the participants who agreed to participate in the qualitative portion of the study (Appendix E). In an attempt to avoid a coercive tone, the consent forms were written in the second person. Individuals were asked to indicate whether they agreed to participate.

Data Collection

Quantitative and qualitative data collection began simultaneously in this concurrent nested mixed methods design. Upon obtaining the dissertation committee's approval, the proposal was forwarded to the NCRE Research Committee and the university's Social Institutional Review Board seeking their approval. Following approval by these bodies, an email solicitation/invitation containing an explanation of the study and a link to the web-based survey site was be sent to each of the eligible faculty identified on the NCRE member programs, institutions, and individual member list. A

second and third e-mail were sent to the faculty members over the course of three consecutive weeks as a thank you letter to those who have participated and a repeat request for others to participate. A final thank you e-mail was sent to all participants with a request for those who did not complete the survey to voluntarily disclose the reasons for discontinuing the survey.

The present research design addressed potential participant concerns regarding confidentiality and anonymity. The quantitative portion of this concurrent nested mixed method research design involved the use of a web based, automated survey instrument through Survey Monkey. Although demographic information will be collected to enhance the ability of the researcher to generalize the results, no personally identifying information will be required. Demographic information obtained will be viewed in aggregate and drawn from a population of rehabilitation counselor educators. Individual survey results were maintained on Survey Monkey. Viewing the responses from the questionnaire as an aggregate further protected the privacy of the responses. The only direct contact participants in the quantitative survey component of this design could potentially have with the researcher would be volitional and initiated by the participant to address a question regarding the study or to request a summary of the aggregate findings of this study.

Confidentiality of the subject experts participating in the qualitative interview component of this mixed methods investigation was also addressed. Each potential participant was sent an individual e-mail invitation requesting their participation accompanied by an electronic description of the study and informed consent form. Individuals who agree to participate returned an e-mail acknowledgement of their consent

to participate, which will be maintained in a separate file. In the event a reply is not received within three weeks, educators' identified as potential participants in the qualitative aspect of this study were recontacted by telephone and e-mailed with attachments containing a cover letter requesting their participation, a study description, a demographic questionnaire, copy of the interview questions and an informed consent form. Each participant was randomly assigned a numerical code. The participant codes were maintained separately from the interview transcription. Interviews were conducted orally by telephone or in person at the participant's discretion. Interview transcription and notes were maintained in a separate file and maintained in a locked cabinet. Qualitative data has been maintained in password-protected computer files based upon the numerical coding.

Telephone interviews were conducted individually with the subject experts using an interview protocol containing three unstructured open-ended questions in order to elicit the participants' views and opinions regarding the barriers to and the best methods for integrating consultation competencies into the rehabilitation counselor curriculum. Interviews will be recorded using handwritten notes and transcribed. As an alternative, two participants elected to participate through in person interviews. Documents collected were numerically coded and maintained in a separate file from transcription in order to maintain participant confidentiality.

Data Analysis

Quantitative Data

Descriptive statistics were computed for the participant characteristics based upon the demographic portions of the questionnaire. Age was used as a continuous variable.

Group means, medians, and standard deviations were computed and displayed in tables for the continuous variables in the entire sample.

In an attempt to further describe this population of rehabilitation counselor educators, frequencies and percentages were computed for the following categorical variables: (a) gender, (b) publications regarding consultation in the past 1, 3, and 5 years, (c) formal training in consultation, (d) format of consultation training, (e) consultation related grants, (f) years of experience as a rehabilitation counselor educator, (g) degree major, (h) certification and/or licensing status, (i) whether the rehabilitation counselor educator reads journals related to the topic of consultation, (i) the availability of an elective emphasizing consultation knowledge and skill, (k) availability of a required course emphasizing consultation knowledge and skill, (l) whether their practicum or internship placements emphasize consultation knowledge or skill, and (m) program plans to develop a course emphasizing consultation knowledge or skills, (n) years of experience as a paid consultant, and (o) NCRE membership region.

Exploratory factor analysis was originally proposed as the statistical method to obtain a factor solution for the CCI items. However, the participant sample was not sufficient to meet the assumptions of exploratory factor analysis and the following data analysis plan was implemented.

Research questions one and four were designed to address the rehabilitation counselor educator's perception of the importance of consultation competencies to rehabilitation counseling practice and their self-perceived level of proficiency for teaching the competencies. Descriptive statistics were computed for each consulting competency item listed on the questionnaire, the five respective a priori importance and

proficiency domains, and the total sample scores. Descriptive statistics were computed based upon the participant responses to the five point Likert-type scales of importance and proficiency. Group means and standard deviations were calculated for each item and displayed in a table format. Reliability coefficients were calculated using Cronbach's alpha to derive the internal consistency and the reliability of the items identified within the respective a priori competency domains.

Multivariate analysis of variance (MANOVA) was used to address the second and sixth research questions. These questions were designed to determine whether the participants perceived level of importance and proficiency differed across the five respective a priori competency domains. Multivariate analysis of variance evaluates whether subgroups, or combinations of subgroups constitute different populations in terms of the dependent variable (Tabachnick & Fidell, 2007; Williams & Monge, 2001). The 55 importance and 55 proficiency items that were inferred through a review of the literature were assigned to five a priori categories related to consultation (assessment, business and case management, consultation process and application skills, interpersonal relationship skills, and problem solving). Two sets of MANOVAs were conducted. The first MANOVA used the five a priori importance domains as independent variables and overall importance was used as the dependent variable. The second MANOVA used the five a priori proficiency domains as independent variables and overall proficiency as a dependent variable. Post hoc Bonferroni procedures were conducted following each MANOVA.

In order to answer research questions two and five, independent-sample t tests and one-way analysis of variance were conducted (Howell, 2002; Williams & Monge, 2001).

Independent-sample t tests were conducted to address the significance of the differences between the means of the dichotomous variables, gender and degree major, in terms of the educators' perceptions of the overall importance of the consultation competencies and their self-perceived proficiency teaching the respective competencies. A series of one way analysis of variance were conducted to address the significance of the mean differences between the participants demographic variables (age, years of experience as a rehabilitation counselor educator, years of experience as a paid consultant, and the number of credit hours required to obtain a master's degree from the faculty's respective rehabilitation counseling education program) in terms of their perceived overall level of importance and instructional proficiency.

Pearson's product moment correlation was used to address whether there was a relationship between the educators' perceptions of the importance of the consultation competencies and their proficiency in teaching the consultation competencies. The level of significance, direction of the relationship, and magnitude were used to interpret the statistic (Williams & Monge, 2001).

Qualitative Data

Demographic information was collected with the qualitative demographic questionnaire (Appendix F). Each interview participant was provided summary information regarding consultation and a set of interview questions prior to their scheduled interview (Appendix G). Interviews were audio taped and transcribed. Following the transcription of the audio taped interviews the data was reviewed and coded by themes or categories (Akinson & Delamont, 2005; Charmaz, 2006: Maxwell, 1996; Perakyla, 2005). Categories included the perspectives held by the participants, process issues,

relationship, and strategies. Material developed during the unstructured interview process and open-ended survey questions were coded to identify developing themes among the subject experts and survey participants. Themes were analyzed through each individual case and across cases to develop a grounded theory (Ambert, Adler, Adler, & Detzner, 1995; Charmaz, 2006; Hanley-Maxwell, C., Al Hano, L., & Skivington, M., 2007).

The qualitative data analysis of this investigation will be aided with the use of a computer assisted qualitative data analysis system (CAQDAS). The HyperResearch 2.7 program was among a number of systems analyzed by Lewins and Silver (2006). According to Lewins and Silver (2006), this CAQDAS system is part of a very small body of qualitative data analysis software available for Apple Computers. Advantages of the system include simplicity, the case is the unit of analysis rather than a file, and the system contains a hypothesis tester to facilitate the identification of themes that can be assigned to cases providing a method of classifying cases by higher order concepts.

Data Integration

Creswell and Plano Clark (2006) provide a number of guidelines for analyzing data from concurrent nested mixed methods research. Initially, the quantitative data analysis from the web-based survey and the qualitative interviews were conducted separately. This phase of the data analysis involves descriptive and inferential analysis of the quantitative data and coding, theme development, and identifying the interrelationship of the themes during qualitative data analysis. After these independent analyses have been conducted, the researcher merged the two datasets. Merging the primary quantitative data with the qualitative data requires transformation of the data (Caracelli &

Greene, 1993). The interview transcripts were analyzed for codes or themes and the occurrences of the codes or themes were counted. The frequency of the themes within the sample and the percentage of total associated themes were calculated and presented in a table. The similarities between the quantitative and qualitative data are also addressed in the discussion section, allowing specific quotes or information about a theme to confirm, expand upon, or refute the quantitative data (Creswell & Plano Clark, 2006; Jick, 1979; Morgan, 1998; Morgan, 2007; Tashakkori & Teddlie, 1998).

Chapter IV

Results

This chapter provides an extensive review of the quantitative results of this mixed methods investigation. Emergent qualitative themes, the relative contribution the two groups of qualitative data have made to the formation of these themes and select subthemes are also summarized in this chapter. Comparison of the quantitative and qualitative results in the discussion rather than the results section is a frequently used approach in mixed methods research (Creswell & Plano-Clark, 2006). This study has employed this mixed methods approach in order to thoroughly integrate and synthesize the findings.

Response Rate

Of the original 352 NCRE faculty members throughout the United States who were sent individual e-mail invitations 81 (23%) could not be contacted (returned as undeliverable), two (.28%) declined participation in the study, eight (2%) indicated they were no longer employed as rehabilitation counselor educators, five (1.4%) were out of the office, one (.28%) was unable to access the electronic survey and one (.28%) was determined deceased. Invitations to participate were forwarded to NCRE faculty over the course of three consecutive weeks beginning April 9, 2007. A list of the undeliverable e-mail addresses for the NCRE members or member institutions were forwarded to the secretary of the NCRE for her review and verification of addresses. Following receipt of the NCRE Secretary's review of the undeliverable e-mail addresses, 35 addresses were revised and an additional 35 individual e-mail invitations were forwarded. Five (14 %) of the corrected 35 e-mail invitations were again returned as undeliverable. Of the

remaining faculty invited to participate in the electronic survey portion of this mixed methods study (n=284) 83 participated for an overall response rate of 29.2%. Another seven faculty members participated in the qualitative interview portion of this study.

Babbie (1990) expressed that a response rate of at least 50% is considered adequate for survey analysis and reporting. However, current trends in survey research reflect that refusal and nonresponse rates have doubled for all surveys regardless of type in the past decade (Birnbaum, 2004; Tourangeau, 2004). Lacking an established acceptable survey response rate, survey research is often published with less than 40% response rates (Heppner, Kivlinghan, & Wampold, 1992).

Of the 83 participants, two completed two or less of the demographic items and did not complete any of the importance or proficiency items. A total of six (7 %) did not complete any of the proficiency items, and another 10 (12 %) did not complete either the importance or proficiency items. In order to determine why 19% of the participants did not complete the proficiency items, a final thank you e-mail was sent to the sample of NCRE faculty, thanking the participants for participating in the survey and requesting voluntary feedback regarding reasons for dropping out of the survey. This request for feedback resulted in 11 replies. Seven of the eleven participants who replied to this request for information indicated that any lack of completion would have been unintentional and they did not recall failing to complete the proficiency items. Two of the participants indicated that they did not complete the proficiency items as they did not consider themselves competent to answer. One participant expressed that he assumed the items were skills acquired during a rehabilitation counseling education program. This participant suggested that the survey should have addressed the actual skills involved in

consultation that would be ranked only within the type of consulting performed. Although the percentage of participants who did not complete the proficiency items appears high (19%), it appears consistent with recent web-based survey research. Porter and Whitcomb (2003) studied the impact of contact type on a web survey with a sample of 12,433 high school students. Survey click-through rates in Porter and Whitcomb's (2003) sample of 12,433 high school students, regardless of salutation or who signed the invitation to participate ranged between 20.8% and 22.5%.

Characteristics of the Sample

The final sample of this study consisted of 77 faculty who are members of NCRE or employed by NCRE member institutions or programs. Tables 1 through 3 provide the analysis of the participants' demographic and professional characteristics as well as the characteristics of their respective programs. The participant sample consisted of 44 males (57.9%) and 32 females (42.1%). The participants' age ranged from 30 to 70, with a mean age of 51.12 years. The faculty (n=77) reported a wide range of experience as rehabilitation counselor educators, with 22.1% indicating that they had five or less years of experience, 26% had six to ten years, 19.5% had 11 to 20 years, and 32.5% had 21 or more years of experience. With respect to their own formal training in consulting, 56.8% (n=42) reported participating in workshops, 44.6% (n=33) participated in on-the-job training, 33.8% (n=25) practicum or internship experience, and 31.1% (n=23) have taken specific coursework.

In terms of credentials, 94.5% (n=68) of the participants reported that they held a CRC, with 41.7% (n=30) holding a CRC along with another credential. Only 36 (43.4%) of the possible respondents addressed the demographic question regarding their licensure

status, with 61.2% (n=22) of those responding indicating that they held a license as a licensed professional counselor (LPC) and one (2.8%) indicating that they were licensed as a mental health counselor (LMHC). Educationally, the faculty reported rehabilitation counselor education (47.2%, n=34) as the predominant academic preparation for their faculty position, followed by rehabilitation psychology (18.1%, n=13), other (18.1%, n=13), counselor education (9.7%, n=7) and (4.2%, n=3) a doctorate in rehabilitation.

Approximately 90% (n=69, 89.6%) of the faculty responding indicated that they have engaged in paid consulting activity. Responses to several demographic variables suggest that consultation is a scholarly focus for a minority of faculty engaged in rehabilitation counselor education. Approximately 20% (n=15, 20.3%) indicated that they have authored publications regarding consultation, 38.7% (n=29) have written grants or requests for proposals involving consultation, and 45.6% (n=36) read journals devoted to consultation.

Rehabilitation counselor education programs apparently vary in the extent of course content emphasizing consultation knowledge and skill preparation. Approximately half of the respondents (n= 38, 49.4%) indicated "Not Applicable" when asked whether their curriculum offered coursework for students emphasizing the development of consultation knowledge and skill preparation. The primary methods of providing consultation related knowledge and skill development were through a required course (n=14, 18.2%) and through practicum or internship (n=13, 16.9%). Two of the participants (2.6%) indicated that their programs were currently developing a course emphasizing consultation content. Of the faculty with courses that have consultation content in their rehabilitation counselor education programs, 41.6% (n=32) were taught

by full-time faculty in the rehabilitation counselor education program, 35.1% (n=27) indicated the question was not applicable, and 18.2% (14) reported the courses were taught by a combination of interdepartmental, adjunct, or rehabilitation counselor education faculty.

The largest group of respondents indicated that their master's degree rehabilitation counselor education programs required 48 credit hours to complete degree requirements (n=33, 42.9%). Another 22.1% (n=17) indicated that their programs required 48 to 60 credit hours or 60 credit hours (n=17, 22.1%) respectively to graduate. Geographic location of the participants was addressed through a demographic question regarding the participant's college or university NCRE membership region. The largest groups of participants identified themselves as being from NCRE Region's V (n=15, 22.7%), IV (n=12, 18.2%), and VI (n=9, 13.6%) respectively.

Table 1 - Demographic Characteristics of the Quantitative Sample

Variable	N	Valid %
Gender		
Male	44	57.9
Female	32	42.1
Professional Credential*		
CRC	38	52.8
Other	4	5.6
CRC, NCC	12	16.7
CRC, NCC, Other	5	6.9
CRC, Other	12	16.7
CRC, NCC, CCM, Other	1	1.4
License(s)*		
LPC	19	52.8
LMHC	1	2.8
Psychologist	7	19.4
Other	6	16.7
LPC, Psychologist	1	2.8
LPC, Other	2	5.6
Degree Major		
Counselor Education	7	9.7
Psy D	2	2.8
Rehabilitation Counselor Education	34	47.2
Rehabilitation Psychology	13	18.1
Other	13	18.1
Doctor of Rehabilitation	3	4.2
Years as an RCE		
1 year or less	2	2.6
2-5 years	15	19.5
6-10 years	20	26.0
11-15 years	10	13.0
16-20 years	5	6.5
21-25 years	9	11.7
Over 26 years	16	20.8

*Participants could report more than one.

Table 2 - Demographic Characteristics of the Quantitative Sample

Variable	N	Valid %
Years Paid Consultant		
Less than 1	5	6.5
1-5 years	20	26.0
6-10 years	10	13.0
11-15 years	10	13.0
16-20 years	11	14.3
21 or more years	13	16.9
Not Applicable	8	10.4
Types of Formal Training*		
Workshops	42	56.8
Practicum/Internship	25	33.8
Specific Coursework	23	31.1
OJT	33	44.6
Combination of Two or More	39	52.0
Not Applicable	16	21.6
Read Journals Devoted to the Topic		
No	43	54.4
Yes	36	45.6
Grant Writing or RFP's Involving Consultation		
No	46	61.3
Yes	29	38.7
Publications in the Past		
Year	3	4.1
3 Years	4	5.4
6-10 Years	2	2.7
11-15 Years	1	1.4
16-20 Years	4	5.4
20 + Years	1	1.4
Not Applicable	59	79.7

Note: The N's do not sum to 77 due to missing data.

* Participants could report more than one form of formal training.

Table 3 - Demographic Characteristics of the Quantitative Sample

Variable	N	Valid %
NCRE Region		
Region I	4	6.1
Region II	5	7.6
Region III	6	9.1
Region IV	12	18.2
Region V	15	22.7
Region VI	9	13.6
Region VII	6	9.1
Region VIII	2	3.0
Region IX	2	3.0
Region X	5	7.6
Credits Hours Required for Completion of a Master's Degree		
48 Credits	33	42.9
60 Credits	17	22.1
48 or 60 Credits	17	22.1
Between 49-59	4	5.2
Other	6	7.8
Program Curriculum Offerings*		
Required Course	14	18.2
Required Course Interdepartmental	3	3.9
Elective	7	9.1
Practicum	13	16.9
Currently Developing	2	2.6
Not Applicable	38	49.4
Consultation Course Instructor*		
FT Faculty RCE	32	41.6
FT Faculty Interdepartmental	2	2.6
Adjunct or PT Faculty	2	2.6
Combination of 2 or More	14	18.2
Not Applicable	27	35.1

Note: Ns do not sum to 77 due to missing data.

*Participants could report more than one type of curriculum offering or instructor.

Seven participants, four male and three female, participated in the qualitative interview portion of this study. The participants were initially recruited through individual e-mail invitations. Follow-up telephone calls were made to schedule interview appointments at the participants' convenience. The participants ranged in age from 45 to 58 and had a mean age of 53 years old. All of the interview participants are credentialed as Certified Rehabilitation Counselors and one also reported being credentialed as a Nationally Certified Counselor (NCC). Five of the seven participants reported holding a professional license. Three of the participants indicated that they are Licensed Professional Counselor's (LPCs) and two reported that they are Licensed Mental Health Counselor's (LMHCs). Participants reported their doctoral degree majors as counselor education (n =1), rehabilitation counseling education (n = 2), and rehabilitation psychology (n = 4). The qualitative interview participants have been employed as rehabilitation counselor educators for a range of 11 to 31 years and a mean of 21.45 years. Participants reported having been engaged in paid consulting activities for a range of 2 to 25 years and a mean of 16.43 years.

Consultation Knowledge and Skills

In order to address the first research question and to identify the consultation competencies that rehabilitation counselor educators perceive as important for future practice by rehabilitation counselors the mean and standard deviation for each item on the CCI was calculated. The items were then rank ordered within each a priori domain and a mean score and standard deviation was computed for each domain. Conceptually, an a priori criterion level of ($\geq$ 3.00) as the mid-point on the CCI's Likert-type scale was used for group mean scores on an item to signify importance. The relative importance of the

consultation competencies will be discussed using this criterion. Domain and item means and standard deviations are contained in Tables 4 through 8.

Perceived Importance

The first importance domain, Assessment (Table 4), contains 11 items related to conducting consultative assessments. Participating faculty rated 10 of the 11 items as important (≥3.00). Faculty rated item six, employ computerized assessment techniques (M=2.89) as somewhat important. The overall mean score (M=3.97) for this domain suggests faculty perceive competency in assessment to be of moderate to very high importance to the role of a practicing rehabilitation counselor engaged in consulting. The Cronbach's alpha coefficient calculated for the total sample was .87 indicating a moderate to high level of internal consistency for the items in this domain.

The second importance domain, Business and Case Management Applications (Table 5) contains nine items related to business operations and case management applications and techniques. Faculty rated all items as having moderate or above levels of importance (≥3.00). The overall mean score (M =3.82) for this domain indicates that faculty perceived consultation competencies related to business and case management applications to be of moderately high importance for the rehabilitation counselor working in a consulting role. The Cronbach's alpha coefficient for the total domain was .86, indicating moderate internal consistency of the items included in this domain.

The third importance domain, Consultation Process Application and Skills (Table 6), includes 13 items related to the process and application of consulting competencies within a rehabilitation setting. Faculty rated all items at least important (≥3.00). The overall mean score (M = 3.69) for this domain indicates that the rehabilitation counselor

educators perceived consultation process and application competencies at least moderately important for rehabilitation counselors practicing as consultants. The Cronbach's alpha coefficient calculated for this domain was .86 indicating a moderate internal consistency for the items included in this domain.

Table 4 - Importance Domain: Assessment

Means and Standard Deviations

	M	*SD*
Assessment Domain Item Means	3.97	.43
1. Interview to collect and verify accuracy of case information.	4.45	.73
2. Evaluate support systems.	4.14	.82
4. Identify transferable work skills by analyzing client's work history, functional assets and limitations.	4.25	.95
5. Select evaluation instruments and strategies according to their appropriateness and usefulness to a particular client.	4.11	1.01
6. Employ computerized assessment techniques.	2.89	.93
7. Administer appropriate standardized tests.	3.76	1.01
8. Interpret tests and assessment results.	4.17	1.01
9. Integrate assessment data to describe assets, limitations, and preferences for rehabilitation planning.	4.29	1.01
23. Analyze tasks of a job.	3.78	.91
46. Conduct a review of the literature on a given topic, case, or problem.	3.66	1.02
52. Conduct labor market analysis.	3.76	.93

Table 5 - Importance Domain: Business and Case Management

Means and Standard Deviations

	M	*SD*
Business and Case Management Domain Items	3.82	.30
34. Provide information regarding your organization's programs to current and potential referral sources.	3.94	1.02
37. Understand insurance claims processing and professional responsibilities.	3.52	.91
38. Refer to appropriate specialties and/or special services.	3.98	.89
39. Compile, document, and interpret information to maintain a current case record.	4.14	.88
40. Write notes, summaries, and reports, so that others can read them.	4.22	.92
41. Negotiate financial responsibilities with the referral sources.	3.40	1.03
42. Market rehabilitation services to businesses and organizations.	3.56	.97
45. Read professional literature related to business, labor markets, medicine, and rehabilitation.	3.71	.92
54. Use effective time management skills.	4.15	.80

Table 6 - Importance Domain: Consultant Process and Application

Means and Standard Deviations

	M	*SD*
Consultant Process and Application Domain Items	3.69	.38
18. Use behavioral techniques.	3.19	.98
19. Consult using group methods.	3.16	.97
21. Conduct group activities or programs.	3.07	1.00
24. Recommend modification of jobs.	3.87	.94
28. Respond to perspective employer biases.	4.12	.93
29. Negotiate with employers or labor union representatives to reinstate/rehire an injured worker.	3.49	1.01
30. Provide prospective employers with appropriate information on client work skills and abilities.	3.94	1.02
31. Provide consultation to employers regarding accessibility and issues related to ADA compliance.	3.86	.91
32. Serve as a vocational expert to public agencies, law firms, and/or private businesses.	3.43	1.08
33. Provide expert opinion or testimony regarding employability and rehabilitation feasibility.	3.41	1.18
36. Consult with medical professionals regarding functional capacities, prognosis, and treatment plan for clients.	3.97	.89
49. Educate your consultees regarding their rights under federal and state law.	4.03	.92
51. Discuss return to work options with an employer.	3.93	.93

Table 7 - Importance Domain: Interpersonal Skills

Means and Standard Deviations

	M	*SD*
Interpersonal Skills Domain Items	4.17	.19
10. Develop relationships with unconditional positive regard.	4.26	.95
11. Clarify mutual expectations and the nature of the consulting relationship.	4.41	.75
12. Identify one's own biases and weaknesses, which may effect the development of healthy consulting relationship.	4.30	.79
13. Adjust consulting approaches or styles according to the consultee's characteristics.	4.13	1.00
15. Employ group consulting techniques.	4.06	.87
20. Develop mutually agreed upon goals.	4.47	.76
35. Collaborate with other providers so that services are coordinated, appropriate and timely.	4.13	.85
53. Use conflict resolution strategies.	3.91	.96
55. Develop rapport/network with physicians and other professionals.	3.99	.99

Table 8 - Importance Domain: Problem Solving Skills

Means and Standard Deviations

	M	*SD*
Problem Solving Skills Domain Items	4.11	.30
3. Determine appropriate services for consultees identified needs.	4.41	.82
14. Apply organizational systems theories to develop strategies for rehabilitation interventions.	3.67	.83
16. Identify social, economic, and environmental factors that may present barriers to plan implementation.	4.39	.79
17. Prepare rehabilitation plans with mutually agreed upon goals, interventions, and conclusion of services.	4.26	.99
22. Monitor outcomes to determine need for additional services.	4.00	1.00
25. Apply knowledge of assistive technology in job accommodation.	3.97	.87
26. Use labor market or other occupational information from sources such as the DOT, OOH, O*Net and other applications.	3.84	1.00
27. Understand the application of current legislation.	3.96	.90
43. Identify and comply with ethical and legal implications of client and consultee relationships.	4.59	.79
44. Abide by ethical and legal considerations of case communication and recording (e.g., Confidentiality).	4.62	.79
47. Apply published research results to professional practice.	3.82	.92
48. Apply principles of rehabilitation legislation to every day practice.	3.87	.94
50. Identify and challenge stereotypical views toward persons with disabilities.	4.16	1.00

The fourth importance domain, Interpersonal Relationship Skills (Table 7) includes nine items related to the development and maintenance of interpersonal relationships while consulting. Faculty rated all items to have at least moderate to very high levels of importance (≥3.00). The overall means score (M=4.17) for this domain reflects that participating faculty considered the rehabilitation counselor's ability to establish and maintain interpersonal relationships very important for rehabilitation counselor's practicing in a consulting role. The Cronbach's alpha for the Interpersonal Relationships Skills domain was .86 indicating a moderately high internal consistency for items in this domain.

The fifth importance domain, Problem Solving Skills (Table 8) consisted of 13 items that addressed various forms of problem solving a rehabilitation counselor may engage in while practicing as a consultant. Faculty rated all items in the problem solving domain to be of moderately to very high importance (≥ 3.00). The overall mean score (M = 4.11) for this domain indicates that rehabilitation counselor educators perceive competency in problem solving knowledge and skills to be very important for rehabilitation counselors working in the role of a consultant. The Cronbach's alpha coefficient for the total sample was .89 indicating high moderate levels of internal consistency for the items in this domain.

Perceived Proficiency

In order to address the third research question and determine the rehabilitation educators' perceptions of their own instructional and pedagogical proficiency to teach consultation competencies, the means and standard deviations were calculated for each item on the CCI proficiency scale (Refer to Appendices H and I). The items were then

organized into the a priori domains, rank ordered within each domain, and a mean score for each domain was calculated.

Conceptually, four a priori criterion levels were established for the aggregate means for each item to reflect the perceived level of proficiency: Very high proficiency (≥ 4.00), proficient (M = 3.00 – 3.99), somewhat proficient (M = 2.00 – 2.99), and not proficient (≤ 1.99). These criterion levels will be used to discuss the perceived proficiency in each domain and item. Proficiency domain and item means and standard deviations are provided in Tables 9 through 13.

The first proficiency domain, Assessment (Table 9), contains 11 items. Rehabilitation counselor educators indicated that they had a very high level of teaching proficiency (≥ 4.00) related to instructing how to: Conduct a literature review regarding a topic, interview to collect and verify the accuracy of information, evaluate support systems, and integrate assessment data to describe assets, limitations, and preferences for rehabilitation planning. Proficient levels of teaching ability were reported for seven items related to assessment in consultation (M = 3.00 – 3.99). The faculty reported feeling somewhat proficient teaching how to employ computerized assessment techniques (M = 2.99). The overall mean score (M = 3.83) for this domain suggests rehabilitation counselor educators perceive themselves as highly proficient in their ability to teach consultation competencies for assessment.

Business and Case Management Applications (Table 10), the second proficiency domain, contains nine items. Faculty perceived themselves as being very proficient at teaching how to write notes, summaries and reports so that others may read them and how to compile, document, and interpret information to maintain a case record. Faculty

considered themselves somewhat proficient (M = 2.00-2.99) addressing how to negotiate financial responsibilities with the referral source and understanding insurance claims processing and professional responsibilities. The overall mean score (M = 3.55) for this domain suggests that rehabilitation counselor educators consider themselves proficient at teaching business and case management knowledge and skills.

The third proficiency domain, Consultation Process and Application Skills (Table 11), contains thirteen items. Faculty perceived themselves as being very proficient ($M \geq$ 4.00) at teaching students how to respond to employer biases and educating consultees about their rights under federal and state law. Faculty considered themselves only somewhat proficient (M = 2.00-2.99) at teaching three of the items in this proficiency domain. Items ranked by faculty as somewhat proficient appear related to teaching prospective counselors how to consult from an "expert" role and included: Negotiate with employers or labor union representatives to reinstate/rehire an injured worker (M = 2.85), serve as a vocational expert to public agencies, law firms, and/or private businesses (M = 2.80), and providing expert opinion or testimony regarding employability and rehabilitation feasibility (M = 2.78). Although the overall mean score (M = 3.39) for this domain represents the lowest overall mean for either the importance or proficiency domains, it suggests that overall, rehabilitation counselor educators consider themselves proficient at teaching consultation process and application skills.

The fourth proficiency domain, Interpersonal Relationship Skills (Table 12) includes nine items related to teaching students how to develop and maintain interpersonal relationships while consulting. Faculty indicated that they were proficient (M = 3.00 – 3.99) to very proficient ($M \geq$ 4.00) teaching interpersonal relationship

competency items. The overall mean score (M=3.93) for this domain reflects that faculty perceive themselves as moderately to highly proficient teaching interpersonal relationship skills. The Cronbach's alpha for the Interpersonal Relationships Skills domain was .90 indicating high internal consistency for items in this domain.

The fifth proficiency domain, Problem Solving Skills (Table 13) consisted of 13 items that addressed the rehabilitation counselor educator's proficiency in teaching the various forms of problem solving a rehabilitation counselor may engage in while practicing as a consultant. Faculty rated themselves as very proficient ($M \geq 4.00$) at teaching four of the competency items in the problem solving domain and proficient (M= 3.00 – 3.99) for teaching the remaining nine competency items. The overall mean score (M = 3.90) for this domain indicates that rehabilitation counselor educators perceive themselves as proficient at teaching problem solving knowledge and skills. The Cronbach's alpha coefficient for the total sample was .88 indicating high moderate levels of internal consistency for the items in this domain.

Scale means were also calculated for the five a priori importance and five a priori proficiency domains on the CCI (Table 14). The overall scale item means for importance items (M = 43.49) suggests that rehabilitation counselor educators perceive the five a priori consultation competencies as very important to the role of a practicing rehabilitation counselor. Rehabilitation counselor educators also perceived their instructional and pedagogical proficiency as moderately high as reflected in the overall item mean for the five a priori consultation competency domains (M = 40.61).

Table 9 - Proficiency Domain: Assessment

Means and Standard Deviations

	M	*SD*
Assessment Proficiency Domain Items	3.83	.36
1. Interview to collect and verify accuracy of case information.	4.16	.83
2. Evaluate support systems.	4.03	.97
4. Identify transferable work skills by analyzing client's work history, functional assets and limitations.	3.90	1.00
5. Select evaluation instruments and strategies according to their appropriateness and usefulness to a particular client.	3.87	1.07
6. Employ computerized assessment techniques.	2.99	1.21
7. Administer appropriate standardized tests.	3.72	1.19
8. Interpret tests and assessment results.	3.87	1.09
9. Integrate data to describe assets, limitations, and preferences for rehabilitation planning.	4.01	1.00
23. Analyze tasks of a job.	3.89	1.07
46. Conduct a review of the literature on a given topic, case, or problem.	4.35	.80
52. Conduct labor market analysis.	3.76	1.27

Table 10 - Proficiency Domain: Business and Case Management

Means and Standard Deviations

	M	*SD*
Business and Case Management Domain Items	3.55	.61
34. Provide information regarding your organization's programs to current and potential referral sources.	3.79	.92
37. Understand insurance claims processing and professional responsibilities.	2.41	1.30
38. Refer to appropriate specialties and/or special services.	3.80	.89
39. Compile, document, and interpret information to maintain a current case record.	4.06	.94
40. Write notes, summaries, and reports so that other can read them.	4.18	.93
41. Negotiate financial responsibilities with the referral source.	2.86	1.26
42. Market rehabilitation services to businesses and organizations.	3.20	1.20
45. Read professional literature related to business, labor markets, medicine, and rehabilitation.	3.95	.93
54. Used effective time management skills.	3.80	.88

Table 11 - Proficiency Domain: Consultation Process and Application

Means and Standard Deviations

	M	*SD*
Consultant Process and Application Domain Items	3.39	.43
18. Use behavioral techniques.	3.50	1.19
19. Consult using group methods.	3.21	1.20
21. Conduct group activities or programs.	3.33	1.07
24. Recommend modification of jobs.	3.74	1.13
28. Respond to perspective employer biases.	3.97	1.02
29. Negotiate with employers or labor union representatives to reinstate/rehire an injured worker.	2.85	1.13
30. Provide prospective employers with appropriate information on client work skills and abilities.	4.02	.90
31. Provide consultation to employers regarding accessibility and issues related to ADA compliance.	3.50	1.07
32. Serve as a vocational expert to public agencies, law firms, and/or private businesses.	2.80	1.36
33. Provide expert opinion or testimony regarding employability and rehabilitation feasibility.	2.78	1.41
36. Consult with medical professionals regarding functional capacities, prognosis, and treatment plan for clients.	3.79	1.03
49. Educate your consultees regarding their rights under federal and state law.	3.62	1.01
51. Discuss return to work options with an employer.	3.30	1.12

Table 12 - Proficiency Domain: Interpersonal Skills

Means and Standard Deviations

	M	*SD*
Interpersonal Skills Domain Items	3.93	.71
10. Develop relationships with unconditional positive regard.	4.42	.78
11. Clarify mutual expectations and the nature of the consulting relationship.	4.14	.82
12. Identify one's own biases and weaknesses, which may effect the development of healthy consulting relationship.	4.17	.80
13. Adjust consulting approaches or styles according to the consultee's characteristics.	3.80	.98
15. Employ group consulting techniques.	3.21	1.20
20. Develop mutually agreed upon goals.	4.29	.87
35. Collaborate with other providers so that services are coordinated, appropriate and timely.	3.85	.95
53. Use conflict resolution strategies.	3.45	1.08
55. Develop rapport/network with physicians and other professionals.	4.05	.92

Table 13 - Proficiency Domain: Problem Solving Skills

Means and Standard Deviations

	M	*SD*
Problem Solving Skills Domain Items	3.90	.34
3. Determine appropriate services for consultees identified needs.	3.97	.85
14. Apply organizational systems theories to develop strategies for rehabilitation interventions.	3.33	1.10
16. Identify social, economic, and environmental factors that may present barriers to plan implementation.	3.95	.95
17. Prepare rehabilitation plans with mutually agreed upon goals, interventions, and conclusion of services.	4.00	.97
22. Monitor outcomes to determine need for additional services.	3.91	.96
25. Apply knowledge of assistive technology in job accommodation.	3.33	1.17
26. Use labor market or other occupational information from sources such as the DOT, OOH, O*Net and other applications.	3.74	1.07
27. Understand the application of current legislation.	3.68	.96
43. Identify and comply with ethical and legal implications of client and consultee relationships.	4.29	.84
44. Abide by ethical and legal considerations of case communication and recording (e.g., Confidentiality).	4.42	.77
47. Apply published research results to professional practice.	4.05	.93
48. Apply principles of rehabilitation legislation to every day practice.	3.07	1.02
50. Identify and challenge stereotypical views toward persons with disabilities.	4.20	.97

Table 14 - Importance and Proficiency Scale Means and Standard Deviations

	M	*SD*
Importance Scale*	43.49	7.60
Proficiency Scale**	40.61	7.33

(248) $n = 54$, ** $n = 60$

Cronbach's index of internal consistency (α), the probability of Type I error, was computed for each item contained in the CCI's five a priori importance and proficiency domains, the five a priori domains for importance and proficiency, the importance and proficiency domains, and the overall instrument. The internal consistency of the two overall importance and proficiency scales is $\alpha = .7311$ (Table 15). Cronbach's alpha ranged between .8566 for the importance of the a priori business and case management domain and .8966 for problem solving (Table 16). Cronbach's alpha for the proficiency scales ranged between .8521 for the business and case management domain to .9092 for the assessment domain. Review of the corrected item-total correlations and the corresponding alpha if an item were to be deleted suggests minimal yield in terms of improving interitem reliability through item deletion (Tables 17 – 26).

Table 15 - Overall Importance and Proficiency Reliability

Domain	Corrected Item-Total Correlation	Alpha if Item Deleted
Importance	.5804	.
Proficiency	.5804	.

Reliability Coefficients 2 items. $N = 49$

Alpha = .7311 Standardized item alpha = .7345

Table 16 - Reliability CCI Importance and Proficiency Domains

Domain	α
Importance	
Assessment	.8744
Business and Case Management	.8566
Consultation Process and Application	.8621
Interpersonal Relationship	.8579
Problem Solving	.8966
Proficiency	
Assessment	.9092
Business and Case Management	.8521
Consultation Process and Application	.8761
Interpersonal Relationship	.9023
Problem Solving	.8762

Table 17 - Assessment Importance Interitem Reliability

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
INTERVW	.5619	.8651
EVALUATE	.4766	.8701
IDENTIFY	.7110	.8557
SELECT	.7461	.8519
EMPLOY	.4372	.8728
ADMIN	.6565	.8580
INTERPRT	.7726	.8496
INTEGRAT	.6299	.8601
ANALYZE	.6629	.8581
LITREV	.3420	.8819
LMA	.4607	.8727

Reliability Coefficients 11 items

Alpha = .8744 Standardized item alpha = .8782

Table 18 - Business and Case Management Importance Interitem Reliability

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
PROVINFO	.6250	.8370
INSCLMS	.5411	.8452
REFERRAL	.6698	.8330
COMPILE	.5913	.8406
WRITE	.5750	.8420
NEGFINAN	.4646	.8545
MARKET	.5230	.8474
READ	.6241	.8371
TIMEMGMT	.6466	.8365

Reliability Coefficients 9 items

Alpha = .8566 Standardized item alpha = .8598

Table 19 - Consultation Process & Application Skills Importance Interitem Reliability

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
BEHAVIOR	.6405	.8455
GPMTHDS	.4390	.8573
GPACTIV	.5631	.8500
JOBMODS	.5934	.8489
EMPLBIAS	.6257	.8465
NEGOTIAT	.5588	.8502
PRSPCTER	.5350	.8517
ACCESSIB	.6539	.8450
VOCEXPER	.3298	.8659
EXPRTTES	.3778	.8639
CNSLTMDS	.4804	.8549
EDUCATE	.5505	.8511
RTW	.6151	.8472

Reliability Coefficients 13 items

Alpha = .8621 Standardized item alpha = .8679

Table 20 - Interpersonal Relationship Skills Importance Interitem Reliability

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
DEVELOP	.5544	.8460
CLARIFY	.5421	.8468
IDENTIFY	.6192	.8398
ADJUST	.6453	.8368
MPLOY	.6459	.8367
DVLPGOLS	.5635	.8450
COLLABOR	.6440	.8368
CONFLICT	.4197	.8606
RAPPORT	.6486	.8361

Reliability Coefficients 9 items

Alpha = .8579 Standardized item alpha = .8609

Table 21 - Problem Solving Importance Interitem Reliability

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
DETERMN	.5145	.8926
APPLY	.6688	.8858
BARRIERS	.6784	.8855
PLANS	.5968	.8891
MONITOR	.6167	.8880
ASSISTEC	.5972	.8891
LMI	.6545	.8861
APPLYADA	.5810	.8897
ETHLEGAL	.6071	.8888
ABIDEEL	.4664	.8946
APPLYPUB	.6213	.8878
APLYPRIN	.6885	.8844
CHALSTER	.4996	.8946

Reliability Coefficients 13 items

Alpha = .8966 Standardized item alpha = .8977

Table 22 - Proficiency in Teaching Assessment Interitem Reliability

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
INTVCOL	.6158	.9035
EVALSUPP	.5498	.9062
TRANSKIL	.6995	.8988
SELEVAL	.7049	.8983
COMASSES	.6335	.9027
ADMNASSE	.8088	.8919
INTTEST	.7769	.8942
INTASSES	.8167	.8926
JOBANALY	.6049	.9037
REVWLIT	.3997	.9121
CONDUCT	.6169	.9042

Reliability Coefficients 11 items

Alpha = .9092 Standardized item alpha = .9089

Table 23 - Interpersonal Relationship Skills Importance Interitem Reliability

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
ORGINFO	.5844	.8359
INSURANC	.6116	.8337
SPFERRAL	.7238	.8241
DOCUMENT	.5268	.8410
CASENOTE	.5895	.8354
FINRESPO	.5566	.8403
MKTSERV	.5823	.8364
PROLIT	.4789	.8453
TIMEMGT	.5782	.8369

Reliability Coefficients 9 items

Alpha = .8521 Standardized item alpha = .8589

Table 24 - Proficiency Teaching Consultation Process Interitem Reliability

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
BEHTECH	.5145	.8679
CSLTGP	.3479	.8790
CDTGPACT	.6208	.8636
JOBMODIF	.6002	.8645
ERBIAS	.4895	.8704
NEGEMPLR	.4957	.8701
ERINFORM	.6483	.8636
ACCESS	.5400	.8678
VE	.5917	.8653
XPRTTEST	.5903	.8656
MEDCNSLT	.6591	.8619
TCHRGHTS	.5106	.8693
DSRTW	.6382	.8625

Reliability Coefficients 13 items

Alpha = .8761 Standardized item alpha = .8800

Table 25 - Proficiency Teaching Interpersonal Skills Interitem Reliability

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
RELATION	.6888	.8913
CLAREXPE	.7184	.8889
BIAS	.6993	.8905
CSLTAPPR	.8154	.8801
CSLTGP	.5772	.9028
MUTGOALS	.6682	.8919
PROVCOLA	.6274	.8948
CNFLCTRE	.7147	.8885
NETWORK	.6372	.8940

Reliability Coefficients 9 items

Alpha = .9023 Standardized item alpha = .9076

Table 26 - Proficiency Teaching Problem Solving Interitem Reliability

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
SERVNEED	.7781	.8562
ORGSYSTM	.5827	.8658
PBLMEXPL	.3208	.8784
PLANIMPL	.6105	.8641
MNTROUT	.7032	.8590
OCCINFO	.3637	.8786
LEGASPCT	.5518	.8673
LEGALIMP	.5844	.8660
ABIDELEG	.5704	.8671
APLYRESC	.6324	.8630
PRINALPLI	.6778	.8600
STEREOTY	.5758	.8659
TECASIST	.3639	.8799

Reliability Coefficients 13 items

Alpha = .8762 Standardized item alpha = .8810

Differences Across Competency Groupings

In order to determine whether the rehabilitation counselor educators' perceptions of importance and their proficiency in teaching consultation competencies differs across the five a priori components of the importance and proficiency domains on the CCI, two

series of multivariate analysis of variance (MANOVA) were conducted. The five a priori importance and proficiency competency groupings included: Assessment, business and case management skills, consultation process and application skills, interpersonal relationship skills and problem solving skill competency groupings were set as the dependent variables. Both the overall importance and proficiency domains were used as the independent variables.

An alpha level of .05 was used. Post hoc univariate ANOVA's were completed when the results reflected significant multivariate F statistics. Post hoc Bonferonni contrasts were conducted for the five dependent variables contained in the importance and proficiency domains. Type I error for each pair wise comparison was addressed by dividing alpha by the five competency components for each domain (alpha = .05/5 = .01) (Howell, 2002). The MANOVAs were computed using the General Linear Model multivariate procedure with Type IV method of sums of squares (GLM Multivariate SPSS 11 for Mac OS X). The Type IV sums of squares method is designed for any balanced or unbalanced models with empty cells and equally distributes the parameters of F throughout the higher order effects in a design (SPSS, 2002).

Overall, there were significant differences in the rehabilitation counselor educators' mean ratings of the perceived level of importance. Among the five groupings of consultation competencies, rehabilitation counselor educators' ranked problem solving as the most important ($M = 53.10$), followed by consultation process and application skills ($M = 48.527$), assessment ($M = 43.029$), interpersonal relationship skills ($M = 37.797$), and business and case management competencies ($M = 35.053$). A significant multivariate Wilks' lambda $F(10, 94) = .144$, $p < .001$ was obtained for overall

importance. The partial η^2 of .620 indicates that overall importance, by itself, accounted for 62% of the overall variance. All of the multiple post hoc Bonferroni comparisons of the mean differences between the rehabilitation counselor educators' rankings of relative importance (important, very important, and extremely important) within each of the five a priori competency clusters were found to be significant at $p < .01$. The results indicate that rehabilitation counselor educators did perceive differing levels of importance among the five a priori consulting competencies for the role of a practicing rehabilitation counselor.

Overall, there were significant differences in the rehabilitation counselor educators' mean ratings of their perceived proficiency teaching the consultation competencies. Among the five a priori groupings of consultation competencies, rehabilitation counselor educators' ranked their teaching proficiency as follows: problem solving skills as the most proficient ($M = 46.299$), followed by consultation process and application skills ($M = 40.209$), assessment ($M = 39.774$), interpersonal relationship skills ($M = 32.706$), and business and case management competencies ($M = 29.835$). A significant multivariate Wilks' lambda $F(15, 143.951) = .116$, $p < .01$ was obtained for overall proficiency. The partial η^2 of .513 indicates that overall proficiency by itself, accounted for 51.3% of the overall variance. The multiple post hoc Bonferroni comparisons of the mean differences between the rehabilitation counselor educators' somewhat proficient – proficient and extremely proficient rankings of relative proficiency within each of the five a priori competency clusters were found to be significant at $p < .01$. The results indicate that rehabilitation counselor educators perceive differing levels of proficiency among the five a priori consulting competencies for the role of a practicing

rehabilitation counselor.

Demographic Differences Importance and Proficiency

Demographic Differences and Importance

The third research question addresses whether demographic variables influence the rehabilitation counselor educators' perception of the importance of the a priori groupings of the consultation competencies on the CCI. An independent-samples t test was conducted to assess gender's influence on the faculty's perception of the importance of consultation competencies. Although the mean for males ($M = 218.87$, $SD = 32.148$, $N = 30$) was greater than that of females ($M = 215.63$, SD = 24.707, $N = 24$) the difference was not statistically significant at the .05 level. The t-test for gender differences on the mean values for overall importance on the CCI is not significant at the .05 level, two-tailed $t(52) = .407$, $p = .686$. The 95% confidence interval for the difference between male and female rehabilitation counselor educators runs from -12.746 to 19.929.

Due to the relatively small and unbalanced sample size of participants with other degree majors when compared to the number of survey participants who indicated that they had a major in rehabilitation counselor education, the degree major variable was transformed to create a dichotomous variable that contained two groups, rehabilitation counselor education and all other degree majors. An independent-samples t test was conducted to assess the influence of degree major on the faculty's perception of the importance of consultation competencies. The difference between the total mean rankings of importance for rehabilitation counselor educators ($M = 217.52$, $SD = 29.954$, $N = 25$) and that of other degree majors ($M = 217.340$, SD = 28.421, $N = 29$) was not significant at the .05 level, two-tailed $t(52) = .022$, $p = .983$. The 95% confidence interval for the

difference between the group means for rehabilitation counselor educators and other degree majors was -15.782 to 16.133.

A series of four, one-way analysis of variance (ANOVAs) were conducted to determine whether a rehabilitation counselor educators' perception of the importance of consultation competencies differed due to age, years of experience as a rehabilitation counselor educator, years of experience as a paid consultant, or the number of credit hours required for completion of a master's degree at the faculty's respective rehabilitation counselor education program. An alpha of .05 was established for the tests of significance. As reflected in Tables 27 through 30, none of the four ANOVAs showed that the effect of the dependent variables were significant.

Table 27 - One Way Analysis of Variance for Age and Overall Importance

Source	*SS*	*df*	*MS*	*F*	*p*
Between	440.654	3	146.885	.177	.912
Within	40676.025	49	830.123		
Total	41116.679	52			

Table 28 - One Way Analysis of Variance for Years as an Educator and Importance

Source	*SS*	*df*	*MS*	*F*	*p*
Between	831.688	4	207.922	.242	.913
Within	41308.614	48	860.596		
Total	42140.302	52			

Table 29 - One Way Analysis of Variance for Years as a Paid Consultant and Importance

Source	*SS*	*df*	*MS*	*F*	*p*
Between	6719.328	6	1119.888	1.406	.232
Within	37431.876	47	796.423		
Total	44151.204	53			

Table 30 - One Way Analysis of Variance for Master's Degree Credit Hours and Importance

Source	*SS*	*df*	*MS*	*F*	*p*
Between	3261.292	3	1087.097	1.370	.263
Within	38879.010	49	793.449		
Total	42140.302	52			

Demographic Variables and Proficiency

The fifth research question addresses whether demographic variables influence the rehabilitation counselor educators' perception of their instructional and pedagogical proficiency in teaching consultation competencies contained in the five a priori groupings on the CCI. An independent-samples t test was conducted to assess gender's influence on the faculty's perception of their own teaching proficiency. Although the mean for males ($M = 205.24$, $SD = 40.119$, $N = 34$) was slightly greater than that of females ($M = 200.36$, SD = 28.736, $N = 25$) the difference was not statistically significant at the .05 level. The t-test for gender differences on the mean values for overall proficiency on the CCI is not significant at the .05 level, two-tailed $t(57) = .517$, $p = .607$. The 95% confidence interval for the difference between male and female rehabilitation counselor educators was -13.996 to 23.747.

An independent-samples t test was also conducted to assess the influence of degree major on the faculty's perception of their instructional and pedagogical proficiency in teaching the five a priori groupings of consultation competencies contained on the CCI. The difference between the total mean rankings of teaching proficiency for

rehabilitation counselor educators (M = 207.88, SD = 28.260, N = 25) and that of other degree majors (M = 199.57, SD = 39.544, N = 35) was not significant at the .05 level, two-tailed $t(57) = .517, p = .607$. The 95% confidence interval for the difference between the group means for rehabilitation counselor educators and other degree majors was -13.996 to 23.747.

Another series of four, one-way analysis of variance (ANOVAs) were conducted to determine whether a rehabilitation counselor educators' perception of their proficiency teaching consultation competencies differed due to age, years of experience as a rehabilitation counselor educator, years of experience as a paid consultant, or the number of credit hours required for completion of a master's degree at the faculty's respective rehabilitation counselor education program. An alpha of .05 was established for the tests of significance. As reflected in Tables 31 through 34, the four ANOVAs conducted for age, years of teaching experience, years of experience as a paid consultant, or the number of credit hours required to complete a master's degree at the faculty's rehabilitation counselor education program failed to demonstrate a significant effect on the faculty's perception of their proficiency teaching consultation competencies.

Table 31 - One Way Analysis of Variance for Age and Perceived Instructional Proficiency

Source	*SS*	*df*	*MS*	*F*	*p*
Between	3312.857	3	1104.286	.854	.471
Within	69856.247	54	1293.634		
Total	73169.103	57			

Table 32 - One Way Analysis of Variance Years of Experience as an Educator and Proficiency

Source	*SS*	*df*	*MS*	*F*	*p*
Between	6675.905	4	1668.976	1.432	.236
Within	61750.250	53	1165.099		
Total	68426.155	57			

Table 33 - One Way Analysis of Variance Years as a Paid Consultant and Proficiency

Source	*SS*	*df*	*MS*	*F*	*p*
Between	6866.690	6	1144.448	.912	.493
Within	66473.244	53	1254.212		
Total	73339.933	59			

Table 34 - One Way Analysis of Variance Credit Hours Required and Proficiency

Source	*SS*	*df*	*MS*	*F*	*p*
Between	4013.353	3	1337.784	1.122	.349
Within	64412.803	54	1192.830		
Total	68426.155	57			

Relationship Between Perceptions of Importance and Proficiency

In order to address the seventh research question, a Pearson's product moment correlation was computed to address the relationship between the educators' perceptions of importance and their proficiency in teaching consulting competencies (Table 35). The educators' perception of the importance of the consultation competencies was used as the constant and teaching proficiency as the dependent variable. The correlation between the educators' perceptions of importance was significantly and positively related to their own proficiency in teaching consultation competencies, $r(n = 49) = .58, p < .01$. The

correlation has a medium effect size, $r^2 = .336$ (Cohen, 1988). A 95% confidence interval for r extends from .386 to .926.

Table 35 - Correlation Overall Importance and Proficiency

		Overall Importance	Overall Proficiency
Overall Importance	Pearson Correlation	1	.580*
	Sig. (2-tailed)	.	.000
	N	54	49
Overall Proficiency	Pearson Correlation	.580*	1
	Sig. (2-tailed)	.000	.
	N	49	60

*Correlation is significant at the .01 level (2-tailed).

Qualitative Data Analysis

Qualitative and quantitative data were gathered concurrently during this study in order to develop a comprehensive perspective of consultation in rehabilitation counselor education and rehabilitation counseling practice. The three qualitative research questions were designed to address how rehabilitation counselor educators described consultation skills in relation to rehabilitation counselor practice, how consultation competencies could be incorporated into the rehabilitation counselor education curriculum, and to identify the perceived barriers or obstacles to their incorporation. These research questions were addressed through a combination of subject expert interviews and open

ended text responses on the CCI.

Seven qualitative interviews were conducted between April 9, 2007 and May 15, 2007. Participants in the qualitative interviews were asked to address four questions in order to obtain their perspective of compensation competencies and their role in rehabilitation counseling practice and education. The four interview questions included: How would you generally describe consultation skills in relation to rehabilitation counselor practice?; What consultation competencies do you feel are most important for rehabilitation counseling practice?; How would you describe your experience incorporating consultation competencies into the RC curriculum?; and How would you characterize what we know about consultation in terms of evidenced based practice? Follow-up questions were asked in order to explore the participant's perceptions of consultation as a rehabilitation counseling practice and rehabilitation counselor education.

Qualitative data was also obtained through the text responses of the survey participants to three open-ended response items on the CCI. The three open ended response items included: Please describe the process you have used to incorporate consultation strategies into your curriculum; Describe any obstacles your program has experienced incorporating consultation competencies into your curriculum; and What strategies has your program used to overcome these obstacles? These open-ended items were primarily designed to address the second and third qualitative research questions.

Forty-two of the 83 survey participants provided responses to the open ended questions on the CCI. The combined total of the interview participants and open-ended survey responses provided a qualitative sample of 49 participants. One of the qualitative

interview tapes was damaged during transcription. General themes were extracted from the notes taken during the course of that interview, although the transcript developed from this participant's interview was essentially lost.

Interview and text transcripts were reviewed and coded to identify emerging themes. Preliminary coding of the transcripts and text responses to the open ended questions yielded 1180 references and 102 codes using HyperResearch 2.7, a computer assisted qualitative data analysis software system. Following the preliminary coding process, each transcript and the master code list was reviewed for theme development. The 102 codes were reduced to five fundamental themes: Perceptions, the consultant as a scientist-practitioner, obstacles to incorporation, strategies and methods of incorporation, and preparation. The final theme, reference frequency, and the proportion of a theme's contribution to the total study are represented in Table 36.

Table 36 - Qualitative Themes

Theme	Frequency	%
Perceptions	308	26
Consultant as a Scientist Practitioner	169	14
Obstacles to Incorporation	128	11
Strategies and Methods of Incorporation	342	29
Preparation	233	20
Total	1180	100

Table 37 provides perspective regarding the relative weight the seven interview participants' references contributed to the overall development of the emergent themes in this study. Reviewing Table 37, it is apparent that despite the lower number of qualitative interview participants, the frequency of the subject expert's contributions exceeds the relative contribution of the open ended item respondents for the themes of perception, consultant as a scientist practitioner, obstacles to incorporation, and preparation of rehabilitation counselors for consulting activities. The relative contribution may also reflect the nature of the questions asked. The subject experts were asked their perception of consultation in rehabilitation practice. Open-ended questions focused on the barriers or obstacles to incorporation as well as strategies and methods of incorporation since the survey participants had already been asked to address their perception of the relative importance of 55 competency items on the CCI.

Table 37 - Participant's Content Contribution to the Total Theme Development

Qualitative Theme	Theme N	Percentage of Subject Experts*	Percentage Open Ended Participants**
Perceptions	308	68	32
Consultant as Scientist Practitioner Preparation342	169	94	6
Obstacles to Incorporation	128	54	46
Strategies and Methods of Incorporation	342	29	71
Preparation	233	67	33

*Subject Expert (N = 7). **Open End Item Partcipants (N = 42)

Text and qualitative interview data reflected that the educator's perception of consultation accounted for 26% of the educator's aggregate references. Qualitatively, an educator's perception of the importance of consultation competencies appeared indicative of whether they employed strategies or methods of incorporating these knowledge and skill areas in their respective curricula. Thirty of the 49 qualitative participant's references (61%) supported the emergent hypotheses that educators who perceived consultation competencies as rehabilitation counseling strategies rather than obstacles identified strategies for inclusion or incorporation. Similarly, 29 of 49 participant's references (59%) supported the emergent hypothesis that when consultation competencies were perceived as an advanced practice educators were less inclined to incorporate competencies into their curriculum.

The educators' conceptualization of employment sectors or context also appeared related to the definition of consultation and their references regarding the incorporation or exclusion of consultation competencies into program curricula. Two of the seven qualitative interview participants were not aware that a definition of consultation was

included in the CRC Scope of Practice (2000). References made by 33 of 49 (67%) of the qualitative participants regarding the perception of traditional rehabilitation counseling education programs, contexts or sectors of rehabilitation counseling were indicative of not including consultation competencies in program curricula.

Approximately 14%, or 169 of the 1180 content references were related to the consultant as a scientist-practitioner. Content references included the identification of consultation competencies, observing that these competencies could be applied as transferable skills across discipline or settings, the need for content and process knowledge and the application of theory to practice.

Characteristics considered important for effective consultants included creativity, integrity, objectivity and task orientation. Consulting competencies identified by qualitative participants supported the inclusion of a number of competency items included within the CCI. Examples of competencies that could be applied in individual, organizational or systems settings identified through the qualitative process include: active listening skills, analysis, communication skills, conflict resolution skills, critical thinking, interviewing skills, negotiation skills, problem solving skills, research skills. Ninety-six of the 169 references (57%) in this theme were related to consultation competencies.

Content references to the obstacles to incorporating consultation competencies throughout the interview and survey transcripts comprised 128 of the total 1180 citations (11%). Accreditation standards and content, credit hour limitations, student as well as faculty developmental issues, time limitations, faculty shortages, faculty skill sets, financial constraints, geography, institutional policy, lack of evidenced based research,

and program funding source requirements were all cited as reasons consultation competencies could not be included in rehabilitation counselor education curricula. Eight of the 42 educators who provided text responses to the open ended questions indicated there were not any obstacles to incorporating the consulting competencies into their curriculum.

Approximately 29% (342) of the total qualitative content references addressed strategies for incorporating, current methods of incorporation, or conceptualizations of how consultation competencies could be integrated into the curriculum of rehabilitation counseling programs.

Qualitative interview data were also transformed into dichotomous variables in order to control for more verbal participants or participants who reiterated concepts (Creswell & Plano-Clark, 2006). The participants were assigned a 1 if a code was present or a 0 if a code or sub-theme was absent. Codes or sub-themes present in all (100%) of the qualitative interviews included: attention to consultation as a concept; consultation as a competency; definitional issues; didactic instruction; guest speakers as a strategy of incorporation; the importance of consultant objectivity; the influence of perception on the perceived importance of consultation as a rehabilitation counseling practice; problem-solving as a consultation competency; the need for research regarding consultation in rehabilitation; the importance of role, setting or context; the perception of consultation as a systems process or approach; the perception of consultation competencies as a transferable skill for rehabilitation counselors; and that there were no substantive obstacles for including consultation competencies in rehabilitation counseling education.

In summary, the qualitative research questions were addressed through qualitative interviews with subject experts and through text responses to open ended response items at the conclusion of the CCI. The four qualitative interview questions explored the subject expert's perception of consultation in rehabilitation counseling, the state of the research regarding consultation, the anticipated obstacles to including consultation competencies and strategies for incorporation. The open end response items focused on the educators' current methods of incorporating consultation competencies into their curriculum, obstacles encountered and strategies to overcome these barriers. In contrast to traditional quantitative studies, mixed methods research frequently incorporates statistical results with qualitative quotes or thematic information in the discussion (Creswell & Plano-Clark, 2006). The qualitative data analysis in this study supports the existence of a relationship between the rehabilitation counselor educators' perception of the importance of consultation competencies and their strategies and methods for incorporating the competencies into their curriculum. Qualitative data will be integrated with this study's empirical findings to discuss and explore the results and their implications for practice, education, and future research.

Chapter V

Discussion

The purpose of this study was three-fold. The intent was to identify which consultation competencies rehabilitation counselor educators perceived as important for rehabilitation counseling practice, their perceived level of proficiency in teaching these competencies, and to explore strategies for incorporating these knowledge and skills areas into the rehabilitation counseling curriculum. In addition, this study addressed whether the educators' perceptions of importance and proficiency differed according to demographic characteristics.

A concurrent nested mixed methods design was used to allow simultaneous data collection. An a priori criterion of ($\geq$ 3.0) was established as the threshold for the importance and proficiency of a consultation competency item or domain of items on the CCI. A review of the item mean scores revealed 54 of the 55 importance items met or exceeded the criterion established for importance. Only one of the importance items approached, but did not meet the a priori criterion level for importance. A review of the mean scores for proficiency items reflects that on average, rehabilitation counselor educators met or exceeded the a priori criterion established for proficiency on 49 of the 55 items. The item mean scores for the five domains comprising importance and proficiency are represented in Table 38.

Rehabilitation counselor educators indicated that on average, they felt that the five a priori clusters were important or very important and that they were at least proficient teaching the five a priori consultation competency domains. A moderately strong positive empirical correlation was also demonstrated in this study, suggesting a relationship

between the rehabilitation counselor educators' perception of the importance of consultation competencies and their self-reported instructional and pedagogical proficiency in teaching consultation competencies. The qualitative data analysis supports the existence of a relationship between the rehabilitation counselor educators' perception of the importance of consultation competencies and their strategies and methods for incorporating the competencies into their curriculum. Qualitative data will be integrated with this study's empirical findings to discuss and explore the results and their implications for practice, education, and future research.

Table 38 - Importance and Proficiency Item Means A Priori Competency Domains

Domain	Importance	Proficiency
Assessment	3.97	3.83
Business and Case Management	3.82	3.55
Consulting Process and Application	3.69	3.39
Interpersonal Relationship	4.17	3.93
Problem Solving	4.11	3.90

Perceived Importance

Overall, the rehabilitation counselor educators regarded the five a priori consultation competency domains as important to very important for rehabilitation

counseling practice. The interpersonal relationship skills development and problem solving skills domains were considered very important for consultation in rehabilitation counseling practice. Twenty-five of the individual importance items exceeded the a priori criterion of very important ($M \geq 4.0$). Only one item, the importance of "Employ computerized assessment techniques" ($M = 2.89$, $SD = .928$) approached but was slightly below the threshold criterion for importance.

Among the highest ranked individual importance items were: abiding by ethical and legal considerations of case communication and recording (confidentiality) ($M = 4.62$, $SD = .792$), identifying and complying with ethical and legal implications of client and consultee relationships ($M = 4.59$, $SD = .738$), developing mutually agreed upon goals ($M = 4.47$, $SD = .756$), the importance of interviewing to collect and verify accuracy of case information ($M = 4.45$, $SD = .727$) and clarifying the mutual expectations of the consulting relationship ($M = 4.41$, $SD = .752$). Ethical practice, potential boundary issues, and the consultee's active participation in goal development appear to be of paramount importance to rehabilitation counselor educators when they consider rehabilitation consulting competencies and rehabilitation counselor practice.

The importance of ethical behavior and integrity are referenced in the qualitative data as well. Several of the participants in the interview component of this study referenced consultation in relation to ethics. For one of the interview participants, the application of the consultation process was perceived as an extension of the ethical process, particularly in the area of providing or rehabilitation counselors understanding when to seek supervision. Another participant emphasized the importance of a consultant's credibility and integrity as a competency or characteristic as evidenced in the

following passage:

> I think the first the over-riding competency if this was a competency, but a Consultant has to have credibility with whoever they are consulting with. They have to have credibility. They have to have integrity. They have to show ethics and show that the Consultation is a neutral type of Consultation that you're not just telling people what you think they want to hear.

Although the educators considered each of the consultation competency domains important, significant mean differences were identified between the educators' perceptions of their relative importance for the practicing rehabilitation counselor. Among the five a priori domains of consultation competencies, rehabilitation counselor educators ranked problem solving as the most important competency domain, followed by consultation process and application skills, assessment, interpersonal relationship skills, and business and case management competencies.

No significant differences were identified in relation to the educator's perception of the importance of the five competency domains and the educator's age, gender, years of experience as a rehabilitation counselor educator, years of experience as a paid consultant, doctoral degree major, or the number of credit hours required for completion of a master's degree at their respective rehabilitation counselor education programs.

A rehabilitation counselor educator's perception of the importance of consultation competencies for rehabilitation counseling practice did emerge as a central theme during the analysis of the qualitative data. Text and qualitative interview data reflected that the educator's perception of consultation accounted for 26% of the educator's aggregate references. Qualitatively, an educator's perception of the importance of consultation

competencies appeared indicative of whether they employed strategies or methods of incorporating these knowledge and skill areas in their respective curricula. Thirty of the 49 qualitative participant's references (61%) supported the emergent hypotheses that educators who perceived consultation competencies as rehabilitation counseling strategies rather than obstacles identified strategies for inclusion or incorporation. Similarly, 29 of 49 participant's references (59%) supported the emergent hypothesis that when consultation competencies were perceived as an advanced practice educators were less inclined to incorporate competencies into their curriculum.

The educators' conceptualization of employment sectors or context also appeared related to the definition of consultation and their references regarding the incorporation or exclusion of consultation competencies into program curricula. References made by 33 of 49 (67%) of the qualitative participants regarding the perception of traditional rehabilitation counseling education programs, contexts or sectors of rehabilitation counseling were indicative of not including consultation competencies in program curricula.

The differing perspectives of the importance of consultation competencies can in part be attributed to the lack of a uniformly accepted definition of consultation in the profession of rehabilitation counseling. It is noteworthy that although all of the qualitative interview participants indicated that they are CRC's, two of the seven interview participants were not aware that consultation was defined in the Scope of Practice for rehabilitation counselors (CRCC, 2000). The qualitative data in this study supports the conclusion that counseling and psychology lack a uniform definition of consultation (Estrada-Hernandez & Saunders, 2005; Schein, 1999, & Zins, 1993).

Reviewing the generic definition of the consultation process authored by Kurpius, Fuqua, and Rozecki (1993), one qualitative interview participant stated the following:

> What I found interesting about the definition you did provide though, what he said, it looks an awful lot like the Rehab process. There's an assessment phase, an information, an intervention, an evaluation and you terminate it, so that was just an observation, but I found that the definition you use closely parallels the Rehab process as it is used with our Clients even in the public sector. I think that anything that one does in the Rehab process or in Vocational Rehabilitation, if you want to look at it differently, I think anything Rehab Counselors do that relate to the roles and functions in which they have been trained can be done on a Consultative basis. I think that we are frequently asked to do things as Consultants that are kind of narrow aspects of Rehabilitation Counseling to solve particular problems that third parties are having.

Acknowledging a parallel between consultation and the rehabilitation process, the preceding quote reflects the educator's perception of consultation as a process that transcends setting or context. The parallels drawn between the definitions of consultation and the rehabilitation counseling process also reflects the differences in the perspectives between an expanded and traditional perception of rehabilitation counseling practice. This contrast is reflected in a comparison of the previous quote and the observations of another qualitative interview participant who expressed a potential linkage between the definition of consultation and the terminology's use in the traditional rehabilitation setting or context in the following exchange:

Q Do you feel that there are certain settings where consultation might have more direction application?

A I thought, let's see... I took some notes on that. I said that perhaps in my view, all settings are appropriate.

Q Okay.

A But, maybe as a field, we don't necessarily perceive this and that's where, maybe, the terminology comes into play. That we don't... maybe typically we wouldn't use the term consultation in the more traditional rehab setting, such as the state/federal system.

Chan et al.'s (2003) study of certified rehabilitation counselors training needs for contemporary practice indicated rehabilitation counselors in both the public and private sectors noted critical training needs in the areas of career counseling, assessment, and consultation. Responses to the open ended questions contained on the CCI support the findings of Chan et al. and suggest that an emphasis on "sectors" of rehabilitation practice reflects an obstacle to including consultation competencies into rehabilitation counseling and represents an ongoing identity issue in the profession. A representative comment is contained in the text response of participant 54:

> When other professions talk about workplaces for their graduates, I don't think they put so much emphasis on where someone works (e.g., a P. T. working in a private clinic vs a public hospital is still a respected PT). We have a long ways to go to get this straight – and should probably start by not making such an emphasis on the different " sectors" of employment.

The qualitative comments generally support the importance of consultation

competencies to rehabilitation practice as reflected in the breath and depth of comments regarding strategies and methods of incorporating consultation competencies into graduate curricula. However, the educator's comments do represent diverse perceptions of consultation and perhaps the perceived role of rehabilitation counseling profession within the academic community. Regardless of their demographic characteristics, the quantitative results suggest that rehabilitation counselor educators consider consultation skills important to very important for rehabilitation counseling practice. The absence of significant quantitative differences on six demographic factors suggest that although the competencies are perceived as important other influences contribute to their incorporation into the rehabilitation counseling education programs.

Perceived Proficiency

As a group, rehabilitation counselor educator's rated themselves as instructionally and pedagogically proficient on 49 of the 55 consultation competency proficiency items. Educators rated themselves as very proficient (≥ 4.00) on 18 of the 55 proficiency items. Among the highest rated proficiencies were: Teaching relationship development (M = 4.42, SD = .781), teaching how to abide by ethical and legal considerations of case communication and recording (M = 4.42, SD = .762), teaching how to conduct a review of the literature on given topic or case problem (M = 4.35, SD = .799), teaching how to identify and comply with ethical and legal implications of client and consultee relationships (M = 4.29, SD = .843), and how to develop mutually agreed upon goals (M = 4.29, SD = .873).

Six of the 55 proficiency items were ranked as below the a priori proficiency criterion level established for proficiency (≥ 3.0): Teaching how to employ computerized

assessment techniques (M = 2.99, SD = 1.212), how to negotiate financial responsibilities with a referral source (M = 2.86, SD = 1.261), understanding insurance claims and professional responsibilities (M = 2.41, SD = 1.301), how to negotiate with employers or labor unions to reinstate or rehire an injured worker (M = 2.85, SD = 1.126), serve as a vocational expert (M = 2.80, SD = 1.361), or provide expert opinion or testimony regarding employability and rehabilitation feasibility (M = 2.78, SD = 1.401).

The item how to employ computerized assessment techniques had been assigned to the a priori grouping of assessment proficiency. Negotiate financial responsibilities with a referral source and understanding insurance claims processes and professional responsibilities were assigned to the a priori grouping of business and case management proficiency. Three of these six items had been assigned to the a priori grouping variable of consultation process and application skills. Despite differences in scale, the current study's finding that rehabilitation counselor educators perceive themselves as somewhat proficient teaching consultation competencies is consistent with the findings of Ebener, Berven, and Wright (1993). It is interesting that Ebener, et al. (1993) analyzed data gathered during a 1987 study of the self-perceived abilities of rehabilitation counselor educators' teaching proficiency across 10 competency areas of rehabilitation practice. Consultation, which included the areas of consultation, expert opinion and marketing was ranked moderate to fair and was the lowest ranked of the 10 competency domains. Rehabilitation counselor educators continue to rank items associated with these activities among their least proficient area of instruction.

Qualitatively, seven of 49 participants (14%) referenced the lack of faculty skill sets as obstacles to incorporating consultation competencies in their program's

curriculum. These references reflect Cumming's (2002) concerns about faculty being inadequately prepared to teach 11 of the consulting competencies recommended in the principles for the education and training of psychological consultants. One of the participants responding to the open ended questions indicated that new faculty lack applied experience. Sixteen participants did not complete any of the proficiency items on the CCI. Two of the sixteen participants indicated that they dropped out of the survey when they arrived at the proficiency items on the CCI as they did not perceive themselves as competent to respond. Another participant commented that he only answered those CCI teaching proficiency items that were within the realm of his own personal experience as a consultant. These comments suggest the importance of the educator's perception of what constitutes consultation and their personal experience as mediators of proficiency as well as importance.

On average, rehabilitation counselor educators rated themselves as instructionally and pedagogically proficient to teach each of the five competency domains on the proficiency scale of the CCI. Significant differences were noted in the educator's perceived level of proficiency on the five a priori proficiency domains. Among the item mean scores in the five domains, educator's indicated that they were most proficient at teaching interpersonal relationship skills, followed by problem solving, assessment, business and case management and consultation process and application. Each of the five domains was within the "proficient" criterion range of (M = 3.00- 3.99).

No significant differences were identified in relation to the educators' perception of their instructional proficiency and the demographic characteristics of age, gender, years of experience as a rehabilitation counselor educator, years of experience as a paid

consultant, degree major, or the number of credit hours required to complete a master's degree at their respective program institutions.

Consultation Skills in Relation to Rehabilitation Counselor Practice

A number of educators offered their perceptions about consultation in relation to rehabilitation counselor practice. Approximately 14%, or 169 of the 1180 content references were related to the emergent theme of the consultant as a scientist-practitioner. Content references included the identification of consultation competencies, observing that these competencies could be applied as transferable skills across discipline or settings, the need for content and process knowledge and the application of theory to practice.

Characteristics considered important for effective consultants included creativity, integrity, objectivity and task orientation. Consulting competencies identified by qualitative participants supported the inclusion of a number of competency items included within the CCI. Examples of competencies that could be applied in individual, organizational or systems settings identified through the qualitative process include: active listening skills, analysis, communication skills, conflict resolution skills, critical thinking, interviewing skills, negotiation skills, problem solving skills, research skills. Ninety-six of the 169 references (57%) in this theme were related to consultation competencies. Consultation competencies, as distinguished from the consultation process, were often perceived as being commonly taught in current rehabilitation counselor curricula although not identified with consultation. One of the educators expressed his perspective regarding consultation competencies and rehabilitation counseling skills in the following excerpt:

I don't necessarily see that there are Rehab Counseling skills and then there are these advanced Consultation skills, but rather than that people are asking more experienced Rehab Counselors to come and give them just a piece of their skill bank or knowledge bank and that could be virtually any professional activity that a Rehab Counselor was trained to do. Often applied in a more creative way than we think of it in the traditional jobs we do either in the public or private sector.

Educators in the qualitative interview portion of this study noted that although the field of rehabilitation may perceive consultation as a sector specific process or skill, from their perspective, it was a cross-setting or cross-disciplinary skill. One educator offered during the course of their interview that the setting mediates the process although the process has broad application across any setting:

Well you know you can do Consulting in public and in private forums. You can work with State Rehabilitation Agency people. You can work in sheltered facilities, or you can do Consultation with private sector areas. You can apply this in a variety of settings, and depending upon the needs that the constituent group has, you would take the theory that best approaches what the problem is and then apply it as I said before.

Consultation competencies were also perceived as transferable skills that expanded the employment potential of rehabilitation counseling graduates. This conceptualization is reflected in the excerpt from the transcript of one of the educator's interviews.

When I try to recruit students to the program and they ask, "What job I can get?" I do tell them about the jobs they can get in the first 3-5 years, but I can tell them

with enormous enthusiasm about the jobs they will have in 10-20 years is why one would come into this. The opportunities are absolutely extraordinary. But you can't be thinking about it or you are never going to be successful trying to recruit people to go to work for State P.R. for $30,000.00 a year and go to an out of state school and pay $60,000.00 a year to get the degree to do that.

However, among the qualitative participants in this study awareness of consultation as a professional rehabilitation activity does not appear universal. Discussing consultation skills in relation to rehabilitation counseling practice, one educator stated, "I don't think we have actually attended to what it could or should mean in the field. I think that is kind of a very developing area within the practice." Raising awareness, through the labeling and identification of consultation applications within the context of existing courses was among the most frequently referenced strategies for, or the current method of incorporating consultation content in existing curricula.

Obstacles to Incorporation

Obstacles to incorporating consultation competencies into the rehabilitation counselor curriculum include the previously cited perceptions that some rehabilitation counselor educators may hold about consultation as a professional activity, the definitional issues, and lack of awareness. The qualitative responses obtained from rehabilitation counseling educators during this research also support the conclusions of (Brown, 1993; Estrada-Hernandez & Saunders, 2005). Brown (1993) suggested that counselor education programs lacked adequate resources to offer comprehensive preparation required by the diversity of employment roles and settings. Brown noted that the requirements of accrediting bodies were frequently cited as leaving insufficient room

to incorporate consultation coursework. Estrada-Hernandez and Saunders (2005) speculated that the barriers to including consultation competencies into the curriculum include the lack of time, financial or personal resources.

Content references to the obstacles to incorporating consultation competencies throughout the interview and survey transcripts comprised 128 of the total 1180 citations (11%). Accreditation standards and content, credit hour limitations, student as well as faculty developmental issues, time limitations, faculty shortages, faculty skill sets, financial constraints, geography, institutional policy, lack of evidenced based research, and program funding source requirements were all cited as reasons consultation competencies could not be included in rehabilitation counselor education curricula.

Although many of the text references in response to the open ended questions regarding obstacles to incorporating consultation competencies were brief, they do appear to represent the perspectives of a segment of the sample of rehabilitation counselor educators that participated in this research. Beyond the perceptions of consultation, issues of definition, or awareness, the identified obstacles to incorporating consultation competencies appear overwhelming. The sense of being overwhelmed with content was articulated throughout the text responses and during one of the faculty interviews:

> You know I think maybe another barrier too is that our scope of practice is so broad that trying to get everything into a 48-hour program in any kind of depth at all seems like an insurmountable barrier.

However, the emphasis of this study was on consultation competencies that focus on the foundational knowledge, skill, and abilities required to competently perform work. Eight of the 42 educators who provided text responses to the open ended questions

indicated there were not any obstacles to incorporating the consulting competencies into their curriculum and another indicated " very few". Educators also identified a variety of strategies and methods that may prove beneficial as a resource for faculty interested in incorporating these competencies into their curriculum in the future.

Strategies and Current Methods of Incorporation

Rehabilitation counselor educators provided a diverse range of strategies and methods for incorporating consultation competencies into their curriculum. Approximately 29% (342) of the total qualitative content references addressed strategies for incorporating, current methods of incorporation, or conceptualizations of how consultation competencies could be integrated into the curriculum of rehabilitation counseling programs. Strategies for incorporation included adjunct faculty; advocacy projects; alternate supervision; awareness through identification or labeling of consultative activities; use of case examples (actual or hypothetical); curriculum appraisal, design, and syllabus revision; discussion with colleagues; dialogue with students and needs assessment; elective course; emphasizing measurable goal development; encourage and support student participation and presentations at state or national conferences; experiential learning through practicum or internship; focusing on competencies as content; group learning experiences; use of guest speakers; independent study; infusion; use of media; research; role play; specific course(s); units within specific courses; and teaching critical thinking and problem solving skills in a holistic manner throughout the curriculum. Of the strategies reported, infusion was the most frequently recommended strategy for incorporating programs that do not have the resources for the development and implementation of specific coursework devoted to consultation.

Faculty identified a number of existing courses in their institution's program as appropriate for the infusion of consultation competency content. Identified courses included: assessment, case management, ethics, job placement, foundations of rehabilitation, medical aspects of disability, multi-cultural competency courses, private rehabilitation, psychosocial aspects of disability, organizational development and program development, research methods, practicum and internship. Review of the strategies and methods of incorporation into current curricula suggest that in part incorporation of consultation strategies is a matter of faculty interest and prioritization. One of the interview participants attributed the incorporation or infusion of consulting competencies to the " ... the qualifications of the faculty and priorities of the faculty. It's not only that we know how to do it, it's that we think it's important that our students recognize that they have the skill set to do it if they choose to."

Preparation

Participants in this study offered disparate opinions regarding their perceptions of when a rehabilitation counseling student or practitioner should be exposed to consultation competencies. Perspectives about the timing of exposure to this skill and knowledge base ranged from the master's degree level, to post-graduate certificate programs through doctoral study. A proponent of introducing consultation competencies at the master's degree level expressed:

> I feel fairly strongly that it should be at the masters level, and the reason is you won't necessarily have that many people who will go straight out of school and start right in with consultation because you just don't know enough at that point to consult with anybody about anything. It doesn't take that long if you are a go

getter until you are in that place. Usually people don't want to wait to capitalize on that skill set that they realize they have. Well they go back and get a doctoral Degree. Most people are going to become consultants with a master's degree.

In contrast, a proponent of the development consultation competencies viewed them as developmental and felt the post-master's certificate program was a more appropriate venue to develop consultation skills.

I think the best place to handle this kind of training is in a Post Master Certificate Program. You can do them in almost any University and typically about 15 credits or 12 credits, and you design a program where we talk about the things that we are talking about in this phone call and we organize it into a four or five course curriculum, maybe a three course curriculum with a Clinical opportunity, and then students that have been out for five years or more, and want to come back and get that and when they are ready to get it, understand and appreciate it and apply it, would do so. I really don't think that you can and should be training any professional for jobs they might or might not do in twenty years, and I don't think you should do that for all students.

Noting the developmental aspect of consultation skill development, an example of a certificate program in development was provided among the text responses to the open ended survey questions contained in the text response of participant # 32:

Currently in process of developing and implementing a 5-course (advanced graduate) program in Forensic Rehabilitation Consultation (15 semester credits). Four courses will be offered online and the final course will combine both online and face-to-face. Capstone experience involves the development of a

rehabilitation opinion for a simulated case and final delivery in a trial setting, with both examination and cross-examination. First course is scheduled for Spring 2008, with the Specialized Graduate Certificate being reviewed and ideally being approved by the university and state university system by end of Fall semester 2007.

Whether consultation competencies are perceived as an advanced practice skill or a foundation competency also appeared to be influence the qualitative participants perception of when the competencies could be incorporated. Discussing the appropriate timing for the introduction of this knowledge and skill base timing of students,

> My thought is that in the Masters Program especially you have to really spend a lot of time building those foundational aspects of Counseling both an understanding of professional identity, learning the basic content skills and applications, and getting enough practice as a Counselor so that you have a basic capability. I view that there are a number of other skills that I had mentioned earlier that are advanced skills that are certainly appropriate and valid, but I think that they are kind of if you will second or third order kinds of things. Once you have mastered the core, then you can go on to these. Because the Masters curricular is so crowded, I think in many cases it is unrealistic to expect. A lot of involvement with the second or third order of skill sets of these advanced practice skill sets, and I see Consultation as one of those.

Reviewing the qualitative data, the range of opinions regarding the appropriate timing for the introduction of consultation competencies reflects a lack of consensus among the academe. The qualitative transcripts reflect the importance of an experiential

component to the development of consultation competencies. Whether that occurs pre-service, through service learning, on-the-job, or through advanced study or post-graduate work remains unresolved and requires research and further discussion.

Consensus did emerge during this study regarding the absence of and need for evidenced based research regarding consultation in rehabilitation counseling. Research was cited as a tool for making informed decisions regarding the inclusion of consultation competencies in the curriculum. Participants cited the need for evidenced based research in the areas including: best practices with employer consultation; models of employer development; the role, contexts and settings of consultation in rehabilitation counseling; role and function studies; and social justice or advocacy counseling.

Qualitatively, the areas identified as having potential for future rehabilitation consultation preparation were also described as having previously emerged rather than emergent. Existing niche areas were primarily identified as topics for expanded education and training of rehabilitation counselors interested in consultation. Potential topics included geriatric care management and life care planning, assistive technology, career counseling with non-disabled populations, disability management, social justice and advocacy counseling, and loss of earning capacity analysis. The educators participating in the interview process expressed these were subject areas that had not received adequate academic attention.

Limitations

The overall response rate for the quantitative portion of this mixed methods study (29.2%) is an acknowledged limitation. The response rate did not yield a sufficient sample to conduct the intended exploratory factor analysis of the CCI. Approximately

21% of the e-mail invitations to participate were returned as undeliverable. Post-survey follow-up contact from rehabilitation counselor educators who initiated but dropped out of the survey prior to completion primarily yielded comments that it was unintentional and precipitated offers to complete the survey. However two participants did express they dropped out rather than complete the proficiency items as they did not feel sufficiently competent to participate.

Another possible limitation is the instrument used for data collection. The CCI was primarily developed through a review of the literature, modification of the RSI-R, and through pilot testing. Each scale contained 55 items for a total of 110 items in addition to 15 demographic items. Pilot testing yielded an average completion time of 20 to 25 minutes. Two participants responded to the open-ended survey questions expressing that they felt the competency items bore too close of a resemblance to rehabilitation counseling. One person who dropped out expressed similar concerns and added any questions should have been asked within the contexts for which they applied. Another participant expressed he only answered proficiency items that were within his experience as a consultant.

The sample of rehabilitation counselor educators is also noted to have been a sample of convenience. The sample belongs to a small, and what was thought to be a known population of rehabilitation counselor educators. It is possible that only those rehabilitation counselor educators interested in consultation participated in the survey, further limiting the ability to generalize the results.

The primary underlying assumption of this study is the validity of using a self-report methodology. It was assumed that rehabilitation counselor educators possessed the

requisite abilities, skills, and judgment to accurately assess the importance of consultation competencies to rehabilitation counseling practice and their own instructional and pedagogical proficiency to teach the respective competencies.

Implications

Implications for the Profession

The results of this investigation appear to have several potential applications for the profession of rehabilitation counseling. This investigation represents an initial empirical attempt towards defining the importance, role and functions of consultation in rehabilitation counseling. Consultation lacks a commonly accepted definition in rehabilitation counseling, counseling, and psychology (Estrada-Hernandez & Saunders, 2005; Shein, 1999; Zins, 1993). The consultation competencies identified as important for rehabilitation counseling practice in this study could be used to develop a tangible definition of consultative practice in the rehabilitation counseling profession. The lack of a commonly accepted definition also suggests a lack of accepted standards of practice for rehabilitation counselors engaged in consultation. The results of this study could be used to facilitate a dialogue about the definition consultation in rehabilitation, the perceptions of its application and best practice methods of providing service within our profession's scope of practice. As evidenced in this study, consultation competencies are considered important for rehabilitation counseling practice. Perhaps the greatest implications of this study are for rehabilitation counselor educators.

Implications for Rehabilitation Education

The perception that consultation competencies are a sector specific skill appears to be among the primary obstacles to their incorporation in the rehabilitation counselor

curriculum. All of the subject experts perceived consultation competencies as cross-disciplinary skills that were not restricted to a specific sector of employment. Rehabilitation counselors can be employed in a myriad of settings in this dynamic work environment. Rehabilitation counselor educators play a pivotal role in promoting the identity of a profession. Student recruitment and retention of trained professionals are among the major challenges in the profession of rehabilitation counseling education (Chan, 2003). Segmentation of the profession does not facilitate recruitment or retention. Emphasis needs to be placed on developing a unified professional identity with skill sets that can be applied regardless of employment environments.

Practitioners in the field have expressed that they feel inadequately prepared for consulting activities and require additional training (Chan, et al., 2003; Leahy, et al., 2003). It is noteworthy that the 2003-2004 CORE Accreditation requirements include consultation. As CORE does not accredit doctoral programs, it is apparent that the standards apply to master's level programs. Rehabilitation counselor educators will need to analyze their curriculum in order to address these revised standards. The findings from this study could be used to develop strategies and methods for rehabilitation counselor educators to incorporate consultation competencies into their existing curriculum.

The results of this study could be used to promote a discussion among rehabilitation counseling educators regarding the appropriate timing or developmental introduction of consultation competencies in rehabilitation education. Whether consultation can be addressed with sufficient depth or breadth through infusion of competencies, or requires the incorporation of specific courses or post-graduate certificate programs or advanced degree training remains unresolved. Addressing these

issues, educators may be well served by considering the perspective of cross-setting or cross-disciplinary competency development as a holistic or integrated approach to curriculum development. In the interim, facilitating student awareness through the identification or labeling of developing skills, knowledge or approaches that would be useful in a consulting application during existing courses could provide a foundation for future development.

Although curriculum guides have been developed for the development of consultation knowledge and skills in counselor education, there does not appear to be equivalent guidelines for rehabilitation counseling (Brown, 1993; Froehle, 1978). The current findings could be utilized as a basis for generating curriculum guidelines to assist faculty who are interested in including consultation competencies although feel to overwhelmed with the current expectations to creatively explore alternatives.

These findings also suggested areas rehabilitation counselor educators could pursue for their own professional development. On average, educators ranked themselves as being only somewhat proficient teaching negotiation skills, understanding insurance claims processing and professional responsibilities, computerized assessment and vocational expert services and roles.

Implications for Research

This is the first empirical study to attempt to focus exclusively on the importance of consultation competencies in rehabilitation counseling. It is hoped that this study will provide the impetus for role and function studies as well as evidenced based research regarding the application of consultation competencies in rehabilitation counseling contexts. Participants cited the need for evidenced based research in the areas including:

best practices with employer consultation; models of employer development; the role, contexts and settings of consultation in rehabilitation counseling; role and function studies; and social justice and advocacy counseling.

The findings also suggest a moderately strong relationship between the perceived level of importance of consultation competencies and educators instructional proficiency. In addition to future research regarding the field application of consultation competencies, additional research regarding the best methods of teaching consultation competencies also seems indicated. Research could be directed towards addressing whether approaching the content developmentally, integrating the pragmatic strategies for incorporating consultation competencies into the curricula using the suggestions of faculty peers is as effective as alternate strategies identified during the course of this investigation. Addressing the differences between the instructional effectiveness of teaching consultation competencies through a didactic course, an experiential course or blended course would also be of interest.

Finally further research regarding the consultation competencies within the profession of rehabilitation counseling is recommended. The current investigation employed a priori groupings of items and variables based upon the literature, modification of the RSI-R, and pilot testing. Consideration of the context in which the competencies applied may provide additional data regarding the relative importance of consultation competencies in rehabilitation counseling.

Conclusions

The purpose of this mixed methods study was to identify which consultation competencies rehabilitation counselor educators perceived as important for rehabilitation

counseling practice, their perceived level of proficiency in teaching these competencies, and to explore strategies for incorporating these knowledge and skills areas into the rehabilitation counseling curriculum. In addition, this study addressed whether the educators' perceptions of the importance of consultation competencies and their self-reported instructional proficiency differed according to demographic characteristics.

Rehabilitation counselor educators indicated that the a priori domains of assessment, business and case management, consultation process and application, interpersonal relationship skills, and problem solving skills were important to very important for rehabilitation counseling practice. The participants in the survey also expressed that they were instructionally proficient teaching each of the five a priori competency domains. A moderately strong positive relationship was demonstrated between a rehabilitation counselor educators' perceived importance of a consultation competency and their self-reported instructional proficiency. Comparisons of demographic variables did not reveal any significant differences in the educator's perceived level of importance of the competency domains or the educator's perceived level of instructional proficiency. The empirical results appear to suggest that rehabilitation counselor educators perceive consultation competencies as important to rehabilitation counseling practice.

Analysis of the qualitative data revealed five broad themes regarding consultation competencies and rehabilitation counselor education. Emergent themes included the influence of perception, the consultant as a scientist-practitioner, obstacles to incorporation, strategies and methods of incorporation and preparation. Competencies identified during the qualitative aspect of this study supported the item and a priori

groupings of the consultation competency domains utilized during the quantitative portion of this study.

Review of the quantitative data alone would convey the impression of the universal endorsement of consultation competencies in rehabilitation counselor education. The mixed methods design provides a rich portrayal of how consultation is perceived and the diversity within the rehabilitation education community. Considering our dynamic practice environment and the expanding employment alternatives available to rehabilitation counselors, consultation as a theme seems to parallel current underlying debate about our professional identity, role, and future within the rehabilitation counselor education community.

APPENDICES

Appendix A: Consultation Competencies Inventory

Consultation Competencies in Rehabilitation Counselor Education

Rehab litation Consultat on Competencies Survey

If you are a faculty member n a master's or doctoral degree program ir rehabi itat on counseling, I hope that you w l consider participating n this study about consu tat or competenc es n rehabi itation counse or education.

PLEASE READ THE ENTIRE PAGE CAREFULLY.

Please read the instructions and nformed consent statement. If you decice to partic pate, you car then proceed to comp eting the questionnaire.

Directions and Informed Consent:

I am a Ph.D. candidate ir rehabi itation counse or education at M chigan State Un versity. I am participating in doctoral dissertation research under the supervision and gu dance of Dr. Michael Leahy. The purpose of th s research is to obtain your percept on about the importance of consultation ski ls n rehabi itation counseling pract ce and how you perce ve your own ab l ty to teach these consu tation competencies.

Participation wil requ re 20-25 minutes of your t me in order to read and complete the questionnaires. You will be asked questions about the importance of a variety of consultation competenc es for rehab l tat on counsel ng practice and your perceived abi ity to teach these competencies. Demographic questions will be asked in order to identify general characteristics of participants, your current graduate program's consultation content, professiona and consultat on exper ence.

There will be no direct benefit to you through your participation in this study other than the personal insights that may be ga ned through reflecting upon the questions that are asked. You can end your participat on at any time without consequence. A though no information car be guaranteed comp etely safe, we have attempted to protect your privacy to the max mum e tent al owable by law by hav ng you provide responses through this Website. No dentifying information is requested in the questionnaires. It will not be possible to persona ly associate you with your responses. During the survey, your responses are saved after each se ection when you press the "next" button. You car discontinue the survey and return to complete it at any time. It will not be possible to withdraw or delete your responses after they are submitted.

The information n the study will be used for the secondary researcher's doctoral dissertat on research. On y the researchers wil have access to the database. All indiv dual responses w l be protected to the maximum e tent al owed by law. Only group data wi l be included in reports from the project, not individual data.

If you have any questions about the study, you may contact the researchers:

Steve Zanskas, M.S., ABD, CRC, LPC: zanskas1@msu.edu
Michael Leahy, Ph.D., CRC: leahym@msu.edu

Office of Rehabilitation & Disabil ty Stucies
Michigan State University
463 Erickson Hall
East Lansing, MI 48224

If you have questions about your rights as a participant in this research, please contact:
Peter Vasi erko, Ph.D.
Director of Human Research Protect ons
Michigan State University
202 Olds Hall
East Lansing, Michigan 48824-1047
(517) 355-2180
Fax: (517) 432-4503
E-mai : irb@msu.edu

Consultation Competencies in Rehabilitation Counselor Education

Please print a copy of this page for your records.

Click the "Complete Questionnaire" Button below*

* By clicking the button, you acknowledge that you have agreed to participate in this study, that you are at least 18 years of age, have read the information presented on this page, and that your responses are being provided for the purpose of research at Michigan State University. Your privacy will be protected to the maximum extent allowable by law.

Thank you

◯ Complete Questionnaire

1. Please enter your current age:

2. Please click one to indicate your gender:

3. Please indicate all current professional certifications:

[ ] CRC [ ] NCC [ ] CCM [ ] CDMS [ ] Other

4. Please indicate all current professional licenses:

[ ] LPC [ ] LMHC [ ] Licensed Psychologist [ ] Other

5. Please enter your degree major:

☐ Behavioral Psychology ☐ Counselor Education ☐ Psy D ☐ Rehabilitation Counselor Education ☐ Rehabilitation Psychology ☐ Rh D ☐ Other

6. Please indicate the number of years you have been employed as a Rehabilitation Counselor Educator:

7. Please indicate the number of years that you have engaged in paid consulting activities:

◯ Less than one year ◯ 1-5 years ◯ 6-10 years ◯ 11-15 years ◯ 16-20 years ◯ 21 or more years ◯ Not Applicable

8. Have you participated in any of the following forms of formal consultation training?
(Please indicate all that apply)

☐ Workshops ☐ Practicum/Internship Experience ☐ Specific Coursework ☐ On-The-Job Training ☐ Not Applicable

9. Do you read journals devoted to the topic of consultation?

◯ Yes ◯ No

10. Have you authored or co-authored any articles regarding consultation that have been published in peer reviewed journals, book chapters, or books during the past:

◯ Year ◯ 3 Years ◯ 5 Years ◯ 6-10 Years ◯ 11-15 Years ◯ 16-20 Years ◯ 20 or more Years ◯ Not Applicable

11. Have you written any grants or completed requests for proposals (rfp's) involving consultation services?
(includes program evaluation)

◯ Yes ◯ No

12. Does your current Rehabilitation Counselor Education (RCE) curriculum offer students a course emphasizing consultation knowledge and skill preparation through any of these options?

☐ A required course as part of the RCE curriculum
☐ A required course as part of an interdepartmental curriculum
☐ An elective course
☐ Practicum or Internship experience
☐ Currently developing a course
☐ Not applicable

13. Please click to indicate your college or university's NCRE membership region:

◯ Region I ◯ Region II ◯ Region III ◯ Region IV ◯ Region V ◯ Region VI ◯ Region VII ◯ Region VIII ◯ Region IX

14. Please indicate the number of semester credit hours your institution requires to complete the requirements for a master's degree:

[ ] 48 [ ] 60 [ ] 48 or 60 credit hour option [ ] Between 49 and 59 hours [ ] Other

15. Courses with consultation content in your rehabilitation counselor education program are taught by (Please click on all that apply):

[ ] Full-time Faculty in the Rehabilitation Counselor Education Program [ ] Full-Time Faculty from an Interdisciplinary Counselor Education Program [ ] Adjunct or Part Time Faculty [ ] Full Time Faculty from the College of Business [ ] Faculty from the areas of Industrial, Organizational or School Psychology [ ] Not Applicable

INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE:

Consultation for the purpose of this study is defined as the application of scientific principles and procedures in counseling and human development to provide assistance in understanding and solving problems that the consultee may have in relation to a third party, be it individual, group, or organization.

This questionnaire contains two (2) sections.

General Instructions Section I:

In Section I, you will be asked to rate your perception of the importance of each competency statement for practicing rehabilitation counselors.

Please rate the IMPORTANCE of each consulting competency described in the statements below to the role of rehabilitation counselors in the settings in which they work:

SCALE FOR IMPORTANCE

1 = Not Important
2 = Somewhat Important
3 = Important
4 = Very Important
5 = Extremely Important

General Instructions Section II:

In Section II, you will be asked to rate your own proficiency to teach the tasks described in the consulting competency statements.

For the purpose of this study, teaching proficiency is operationally defined as possessing the subject-matter knowledge, the ability to use this knowledge in practice to appraise and adapt instructional materials to present the content, the ability to plan and conduct instruction, and to assess what students are learning.

Please rate your own PROFICIENCY to teach the tasks described in the following competency statements:

SCALE FOR PROFICIENCY

1 = Not Proficient
2 = Somewhat Proficient
3 = Proficient
4 = Very Proficient
5 = Extremely Proficient

Please read each item carefully.

4. Section I - Scale for Importance

I. SCALE FOR IMPORTANCE

Rate each statement on a scale of 1-5 for the IMPORTANCE of the consulting competency to the role of a practicing rehabilitation counselor.

	Not Important	Somewhat Important	Important	Very Important	Extremely Important
1. Interview to collect and verify accuracy of case information.	◯	◯	◯	◯	◯
2. Evaluate support systems (individual, family, groups, organizations, community relationships)	◯	◯	◯	◯	◯
3. Determine appropriate services for consultees ' identified needs.	◯	◯	◯	◯	◯
4. Identify transferable work skills by analyzing client's work history, functional assets, and limitations.	◯	◯	◯	◯	◯
5. Select evaluation instruments and strategies according to their appropriateness and usefulness for a particular client.	◯	◯	◯	◯	◯
6. Employ computerized assessment techniques.	◯	◯	◯	◯	◯
7. Administer appropriate standardized tests and ecological assessment techniques.	◯	◯	◯	◯	◯
8. Interpret test and ecological assessment outcomes to others.	◯	◯	◯	◯	◯
9. Integrate assessment data to describe assets, limitations and preferences for rehabilitation planning purposes.	◯	◯	◯	◯	◯
10. Develop relationships characterized by empathy and positive regard.	◯	◯	◯	◯	◯

5. Scale for Importance Continued

Rate each statement on a scale of 1-5 for the IMPORTANCE of the consulting competency to the role of a practicing rehabilitation counselor.

	Not Important	Somewhat Important	Important	Very Important	Extremely Important
11. Clarify mutual expectations and the nature of the consulting relationship.	◯	◯	◯	◯	◯
12. Identify one's own biases and weaknesses, which may affect the development of a healthy consulting relationship.	◯	◯	◯	◯	◯
13. Adjust consulting approaches or styles according to the consultees' characteristics.	◯	◯	◯	◯	◯
14. Apply organizational, psychological and systems theory to develop strategies for rehabilitation intervention.	◯	◯	◯	◯	◯
15. Employ counseling techniques (e.g., reflection, interpretation, summarization) to facilitate problem exploration.	◯	◯	◯	◯	◯
16. Identify social, economic and environmental forces that may present barriers to plan implementation.	◯	◯	◯	◯	◯
17. Prepare rehabilitation plans with mutually agreed upon interventions, goals and conclusion of service.	◯	◯	◯	◯	◯
18. Use behavioral techniques such as shaping, rehearsal, modeling and contingency management.	◯	◯	◯	◯	◯
19. Consult using group methods.	◯	◯	◯	◯	◯
20. Develop mutually agreed upon goals.	◯	◯	◯	◯	◯

6. Scale For Importance Continued

Rate each statement on a scale of 1-5 for the IMPORTANCE of the consulting competency to the role of a practicing rehabilitation counselor.

	Not Important	Somewhat Important	Important	Very Important	Extremely Important
21. Conduct group activities or programs regarding work and disability issues.	◯	◯	◯	◯	◯
22. Monitor outcomes to determine need for additional services.	◯	◯	◯	◯	◯
23. Analyze the tasks of a job.	◯	◯	◯	◯	◯
24. Recommend modifications of job tasks to accommodate functional limitations using ergonomic principles.	◯	◯	◯	◯	◯
25. Apply knowledge of assistive technology in job accommodation	◯	◯	◯	◯	◯
26. Utilize labor market or other occupational information from sources such as the DOT, OOH, O*Net and other publications.	◯	◯	◯	◯	◯
27. Understand the applications of current legislation affecting the employment of disabled individuals (e.g., ADA).	◯	◯	◯	◯	◯
28. Respond to employer biases and concerns regarding hiring persons with disabilities.	◯	◯	◯	◯	◯
29. Negotiate with employers or labor union representatives to reinstate/rehire an injured worker.	◯	◯	◯	◯	◯
30. Provide prospective employers with appropriate information on clients' work skills and abilities.	◯	◯	◯	◯	◯

7. Scale for Importance Continued

Rate each statement on a scale of 1-5 for the IMPORTANCE of the consulting competency to the role of a practicing rehabilitation counselor.

	Not Important	Somewhat Important	Important	Very Important	Extremely Important
31. Provide consultation to employers regarding accessibility and issues related to ADA compliance.	◯	◯	◯	◯	◯
32. Serve as a vocational expert to public agencies, law firms, and/or private businesses.	◯	◯	◯	◯	◯
33. Provide expert opinion or testimony regarding employability and rehabilitation feasibility.	◯	◯	◯	◯	◯
34. Provide information regarding your organization's programs to current and potential referral sources.	◯	◯	◯	◯	◯
35. Collaborate with other providers so that services are coordinated, appropriate and timely.	◯	◯	◯	◯	◯
36. Consult with medical professionals regarding functional capacities, prognosis, and treatment plan for clients.	◯	◯	◯	◯	◯
37. Understand insurance claims processing and professional responsibilities.	◯	◯	◯	◯	◯
38. Refer to appropriate specialists and/or for special services.	◯	◯	◯	◯	◯
39. Compile, document, and interpret information to maintain a current case record.	◯	◯	◯	◯	◯
40. Write notes, summaries, and reports so that others can understand the case.	◯	◯	◯	◯	◯

8. Scale for Importance Continued

Rate each statement on a scale of 1-5 for the IMPORTANCE of the consulting competency to the role of a practicing rehabilitation counselor.

	Not Important	Somewhat Important	Important	Very Important	Extremely Important
41. Negotiate financial responsibilities with the referral source.	◯	◯	◯	◯	◯
42. Market rehabilitation services to businesses and organizations.	◯	◯	◯	◯	◯
43. Identify and comply with ethical and legal implications of client and consultee relationships.	◯	◯	◯	◯	◯
44. Abide by ethical and legal considerations of case communication and recording (e.g., confidentiality).	◯	◯	◯	◯	◯
45. Read professional literature related to business, labor markets, medicine and rehabilitation.	◯	◯	◯	◯	◯
46. Conduct a review of the rehabilitation literature on a given topic or case problem.	◯	◯	◯	◯	◯
47. Apply published research results to professional practice.	◯	◯	◯	◯	◯
48. Apply principles of rehabilitation legislation to daily practice.	◯	◯	◯	◯	◯
49. Educate your consultees regarding their rights under federal and state law.	◯	◯	◯	◯	◯
50. Identify and challenge stereotypical views toward persons with disabilities.	◯	◯	◯	◯	◯

9. Scale for Importance Continued

Rate each statement on a scale of 1-5 for the IMPORTANCE of the consulting competency to the role of the practicing rehabilitation counselor.

	Not Important	Somewhat Important	Important	Very Important	Extremely Important
51. Discuss return-to-work options with an employer.	◯	◯	◯	◯	◯
52. Conduct labor market analyses.	◯	◯	◯	◯	◯
53. Use effective conflict resolution strategies.	◯	◯	◯	◯	◯
54. Use effective time management strategies.	◯	◯	◯	◯	◯
55. Develop rapport/network with physicians and other professionals.	◯	◯	◯	◯	◯

13. Scale for Teaching Proficiency Continued

Please rate your own PROFICIENCY to teach the competency described in the statements below.

	Not Proficient	Somewhat Proficient	Proficient	Very Proficient	Extremely Proficient
31. Provide consultation to employers regarding accessibility and issues related to ADA compliance.	◯	◯	◯	◯	◯
32. Serve as a vocational expert to public agencies, law firms, and/or private businesses.	◯	◯	◯	◯	◯
33. Provide expert opinion or testimony regarding employability and rehabilitation feasibility.	◯	◯	◯	◯	◯
34. Provide information regarding your organization's programs to current and potential referral sources.	◯	◯	◯	◯	◯
35. Collaborate with other providers so that services are coordinated, appropriate and timely.	◯	◯	◯	◯	◯
36. Consult with medical professionals regarding functional capacities, prognosis, and treatment plan for clients.	◯	◯	◯	◯	◯
37. Understand insurance claims processing and professional responsibilities.	◯	◯	◯	◯	◯
38. Refer to appropriate specialists and/or for special services.	◯	◯	◯	◯	◯
39. Compile, document, and interpret information to maintain a current case record.	◯	◯	◯	◯	◯
40. Write notes, summaries, and reports so that others can understand the case.	◯	◯	◯	◯	◯

10. Section II: Scale For Teaching Proficiency

Please rate your own PROFICIENCY to teach the tasks described in the following competency statements:

Scale for Proficiency

1 = Not Proficient
2 = Somewhat Proficient
3 = Proficient
4 = Very Proficient
5 = Extremely Proficient

II. Please rate your own PROFICIENCY to teach the competency described in the statements below.

	Not Proficient	Somewhat Proficient	Proficient	Very Proficient	Extremely Proficient
1. Interview to collect and verify the accuracy of case information.	◯	◯	◯	◯	◯
2. Evaluate support systems (individual, family, groups, organizations or community relationships).	◯	◯	◯	◯	◯
3. Determine appropriate services for consultees' identified needs.	◯	◯	◯	◯	◯
4. Identify transferable work skills by analyzing clients' work history and functional assets and limitations.	◯	◯	◯	◯	◯
5. Select evaluation instruments and strategies according to their appropriateness and usefulness for a particular client.	◯	◯	◯	◯	◯
6. Employ computerized assessment techniques.	◯	◯	◯	◯	◯
7. Administer appropriate standardized tests and ecological assessment techniques.	◯	◯	◯	◯	◯
8. Interpret test and ecological assessment outcomes to others.	◯	◯	◯	◯	◯
9. Integrate assessment data to describe assets, limitations and preferences for rehabilitation planning purposes.	◯	◯	◯	◯	◯
10. Develop relationships characterized by empathy and positive regard.	◯	◯	◯	◯	◯

11. Scale for Teaching Proficiency

Please rate your own PROFICIENCY to teach the competency described in the statements below.

	Not Proficient	Somewhat Proficient	Proficient	Very Proficient	Extremely Proficient
11. Clarify mutual expectations and the nature of the consulting relationship.	◯	◯	◯	◯	◯
12. Identify one's own biases and weaknesses, which may affect the development of a healthy consulting relationship.	◯	◯	◯	◯	◯
13. Adjust consulting approaches or styles according to the consultees' characteristics.	◯	◯	◯	◯	◯
14. Apply organizational, psychological and systems theory to develop strategies for rehabilitation intervention.	◯	◯	◯	◯	◯
15. Employ counseling techniques (e.g., reflection, interpretation, summarization) to facilitate problem exploration.	◯	◯	◯	◯	◯
16. Identify social, economic and environmental forces that may present barriers to plan implementation.	◯	◯	◯	◯	◯
17. Prepare rehabilitation plans with mutually agreed upon interventions, goals and conclusion of service.	◯	◯	◯	◯	◯
18. Use behavioral techniques such as shaping, rehearsal, modeling and contingency management.	◯	◯	◯	◯	◯
19. Consult using group methods.	◯	◯	◯	◯	◯
20. Develop mutually agreed upon goals.	◯	◯	◯	◯	◯

12. Scale for Teaching Proficiency Continued

Please rate you own PROFICIENCY to teach the competency described in the statements below.

	Not Proficient	Somewhat Proficient	Proficient	Very Proficient	Extremely Proficient
21. Conduct group activities or programs regarding work and disability issues.	◯	◯	◯	◯	◯
22. Monitor outcomes to determine need for additional services.	◯	◯	◯	◯	◯
23. Analyze the tasks of a job.	◯	◯	◯	◯	◯
24. Recommend modifications of job tasks to accommodate functional limitations using ergonomic principles.	◯	◯	◯	◯	◯
25. Apply knowledge of assistive technology in job accommodation	◯	◯	◯	◯	◯
26. Utilize labor market or other occupational information from sources such as the DOT, OOH, O*Net and other publications.	◯	◯	◯	◯	◯
27. Understand the applications of current legislation affecting the employment of disabled individuals (e.g., ADA).	◯	◯	◯	◯	◯
28. Respond to employer biases and concerns regarding hiring persons with disabilities.	◯	◯	◯	◯	◯
29. Negotiate with employers or labor union representatives to reinstate/rehire an injured worker.	◯	◯	◯	◯	◯
30. Provide prospective employers with appropriate information on clients' work skills and abilities.	◯	◯	◯	◯	◯

14. Scale for Teaching Proficiency Continued

Please rate your own PROFICIENCY to teach the competency described in the statements below.

	Not Proficient	Somewhat Proficient	Proficient	Very Proficient	Extremely Proficient
41. Negotiate financial responsibilities with the referral source.	◯	◯	◯	◯	◯
42. Market rehabilitation services to businesses and organizations.	◯	◯	◯	◯	◯
43. Identify and comply with ethical and legal implications of client and consultee relationships.	◯	◯	◯	◯	◯
44. Abide by ethical and legal considerations of case communication and recording (e.g., confidentiality).	◯	◯	◯	◯	◯
45. Read professional literature related to business, labor markets, medicine and rehabilitation.	◯	◯	◯	◯	◯
46. Conduct a review of the rehabilitation literature on a given topic or case problem.	◯	◯	◯	◯	◯
47. Apply published research results to professional practice.	◯	◯	◯	◯	◯
48. Apply principles of rehabilitation legislation to daily practice.	◯	◯	◯	◯	◯
49. Educate your consultees regarding their rights under federal and state law.	◯	◯	◯	◯	◯
50. Identify and challenge stereotypical views toward persons with disabilities.	◯	◯	◯	◯	◯

15. Scale for Proficiency Continued

Please rate your own PROFICIENCY to teach the competency described in the statements below.

	Not Proficient	Somewhat Proficient	Proficient	Very Proficient	Extremely Proficient
51. Discuss return-to-work options with an employer.	◯	◯	◯	◯	◯
52. Conduct labor market analyses.	◯	◯	◯	◯	◯
53. Use effective conflict resolution strategies.	◯	◯	◯	◯	◯
54. Use effective time management strategies.	◯	◯	◯	◯	◯
55. Develop rapport/network with physicians and other professionals.	◯	◯	◯	◯	◯

14. Scale for Teaching Proficiency Continued

Please rate your own PROFICIENCY to teach the competency described in the statements below.

	Not Proficient	Somewhat Proficient	Proficient	Very Proficient	Extremely Proficient
41. Negotiate financial responsibilities with the referral source.	◯	◯	◯	◯	◯
42. Market rehabilitation services to businesses and organizations.	◯	◯	◯	◯	◯
43. Identify and comply with ethical and legal implications of client and consultee relationships.	◯	◯	◯	◯	◯
44. Abide by ethical and legal considerations of case communication and recording (e.g., confidentiality).	◯	◯	◯	◯	◯
45. Read professional literature related to business, labor markets, medicine and rehabilitation.	◯	◯	◯	◯	◯
46. Conduct a review of the rehabilitation literature on a given topic or case problem.	◯	◯	◯	◯	◯
47. Apply published research results to professional practice.	◯	◯	◯	◯	◯
48. Apply principles of rehabilitation legislation to daily practice.	◯	◯	◯	◯	◯
49. Educate your consultees regarding their rights under federal and state law.	◯	◯	◯	◯	◯
50. Identify and challenge stereotypical views toward persons with disabilities.	◯	◯	◯	◯	◯

15. Scale for Proficiency Continued

Please rate your own PROFICIENCY to teach the competency described in the statements below.

	Not Proficient	Somewhat Proficient	Proficient	Very Proficient	Extremely Proficient
51. Discuss return-to-work options with an employer.	◯	◯	◯	◯	◯
52. Conduct labor market analyses.	◯	◯	◯	◯	◯
53. Use effective conflict resolution strategies.	◯	◯	◯	◯	◯
54. Use effective time management strategies.	◯	◯	◯	◯	◯
55. Develop rapport/network with physicians and other professionals.	◯	◯	◯	◯	◯

Consultation Competencies in Rehabilitation Counselor Education

16. Other Information

1. Please describe the process you have used to incorporate consultation competencies into your curriculum.

2. Describe any obstacles your program has experienced incorporating consultation competencies into your curriculum.

3. What strategies has your program used to overcome these obstacles?

17. Thank you!

Thank you for participating in our study regarding Consultation Competencies in Rehab-litation Counselor Education.

Appendix B: A Priori Competency Domains

Assessment (11 Items):

1. Interview to collect and verify accuracy of case information.
2. Evaluate support systems.
4. Identify transferable work skills by analyzing client's work history, functional assets, and limitations.
5. Select evaluation instruments and strategies according to their appropriateness and usefulness to a particular client.
6. Employ computerized assessment techniques.
7. Administer appropriate standardized tests.
8. Interpret tests and assessment results.
9. Integrate assessment data to describe assets, limitations, and preferences for rehabilitation planning.
23. Analyze tasks of a job.
46. Conduct a review of the literature on a given topic, case, or problem.
52. Conduct labor market analysis.

Business and Case Management Applications (9 Items):

34. Provide information regarding your organization's programs to current and potential referral sources.
37. Understand insurance claims processing and professional responsibilities.
38. Refer to appropriate specialties and/or special services.
39. Compile, document, and interpret information to maintain a current case record.
40. Write notes, summaries, and reports, so that others can read them.
41. Negotiate financial responsibilities with the referral source.
42. Market rehabilitation services to businesses and organizations.
45. Read professional literature related to business, labor markets, medicine, and rehabilitation.
54. Use effective time management skills.

Consultation Process and Application Skills (13 Items):

18. Use behavioral techniques.
19. Consult using group methods.
21. Conduct group activities or programs.
24. Recommend modification of jobs.
28. Respond to prospective employer biases.
29. Negotiate with employers or labor union representatives to reinstate/rehire an injured worker.
30. Provide prospective employers with appropriate information on clients' work skills and abilities.

31. Provide consultation to employers regarding accessibility and issues related to ADA compliance.
32. Serve as a vocational expert to public agencies, law firms, and/or private businesses.
33. Provide expert opinion or testimony regarding employability and rehabilitation feasibility.
36. Consult with medical professionals regarding functional capacities, prognosis, and treatment plan for clients.
49. Educate your consultees regarding their rights under federal and state law.
51. Discuss return to work options with an employer.

Interpersonal Relationship Skills (9 Items):

10. Develop relationships with unconditional positive regard.
11. Clarify mutual expectations and the nature of the consulting relationship.
12. Identify one's own biases and weaknesses, which may effect the development of a healthy consulting relationship.
13. Adjust consulting approaches or styles according to the consultee's characteristics.
15. Employ group consulting techniques.
20. Develop mutually agreed upon goals.
35. Collaborate with other providers so that services are coordinated, appropriate and timely.
53. Use conflict resolution strategies.
55. Develop rapport/network with physicians and other professionals.

Problem Solving (13 Items):

3. Determine appropriate services for consultees identified needs.
14. Apply organizational systems theories to develop strategies for rehabilitation interventions.

16. Identify social, economic, and environmental factors that may present barriers to plan implementation.
17. Prepare rehabilitation plans with mutually agreed upon goals, interventions, and conclusion of services.
22. Monitor outcomes to determine need for additional services.
25. Apply knowledge of assistive technology in job accommodation.
26. Use labor market or other occupational information from sources such as the DOT, OOH, O*Net and other applications.
27. Understand the application of current legislation.
43. Identify and comply with ethical and legal implications of client and consultee relationships.
44. Abide by ethical and legal considerations of case communication and recording (e.g., Confidentiality).
47. Apply published research results to professional practice.

48. Apply principles of rehabilitation legislation to every day practice.
50. Identify and challenge stereotypical views toward persons with disabilities.

Appendix C: Quantitative Survey Transmittal Letter

Re: Consultation in Rehabilitation Counselor Education

Dear Dr._____:

You have been selected to participate in this nationwide survey of rehabilitation educators regarding consultation skills for rehabilitation counseling practice. Consultation has consistently been identified as an important professional knowledge and skill domain by practicing rehabilitation counselors. However, very limited information is available concerning how these competencies are addressed in pre-service curriculums.

Your participation in this survey would provide a valuable contribution to the further understanding of this competency area, and how educators address these competencies in their teaching role. The research is being conducted by Steve Zanskas, a doctoral candidate in rehabilitation counselor education at Michigan State University. Dr. Michael Leahy is his dissertation chair and advisor.

Consultation has been defined as "the application of scientific principles and procedures in counseling and human development to provide assistance in understanding and solving problems that the consultee may have in relation to a third party, be it individual, group, or organization" (CRCC Scope of Practice, 2000, p.2).

Participation will require about 15-20 minutes of your time to read and complete the set of instruments. In addition to basic demographic information, you will be asked to identify which consultation competencies you perceive to be important to rehabilitation counseling practice, as well as your perceived level of proficiency for teaching the respective competency The instruments are available on the website link below. The questions will be asked without obtaining any identifying information. It will not be possible to identify you or associate you with your responses.

The NCRE Research Committee has reviewed and approved this national study. This research study has also been approved by the Social Science, Behavioral and Education Institutional Review Board (SIRB) located at Michigan State University. Inquiries may be addressed to Peter Vasilenko, Ph.D., Director of Human Research, Michigan State University, 202 Olds Hall, East Lansing, Michigan 48824. Phone: (517) 355-2180; Fax: (517) 432-4503 or via email: Irb@msu.edu. The IRB # is: 07 – 214.

We hope that you will participate in this study. As a rehabilitation educator, your contributions will be of great value in advancing knowledge, practice, and preparation in this area.

If you are willing to participate, please copy and paste the following link into your web browser and you will be taken to the informed consent page of the survey.

http://www.surveymonkey.com/s.asp?u=811713186218

If you have any questions, please contact Steve Zanskas at zanskas1@msu.edu, or Dr. Michael Leahy at leahym@msu.edu.

Thank you for your assistance and contribution to our further understanding of consultation as a professional rehabilitation activity.

Respectfully,

Steve Zanskas, MS, ABD, CRC, LPC
Doctoral Candidate
Office of Rehabilitation & Disability Studies
Michigan State University
455 Erickson Hall
East Lansing, Michigan 48824

Appendix D: Qualitative Transmittal Letter

Transmittal Letter
Invitation to Participate in Qualitative Interview

Re: Consultation in Rehabilitation Counselor Education: A Mixed Methods Study

Dear Dr. :

You have been selected to participate in this nationwide survey regarding consultation skills for rehabilitation counseling practice. Consultation has consistently been identified as an important professional knowledge and skill domain by practicing rehabilitation counselors. However, very limited information is available concerning how these competencies are addressed in pre-service curriculums.

Your participation in this survey would provide a valuable contribution to the further understanding of this competency area, and how educators address these competencies in their teaching role. The research is being conducted by Steve Zanskas, a doctoral candidate in rehabilitation counselor education at Michigan State University. Dr. Michael Leahy is his dissertation chair and advisor.

Consultation has been defined as "the application of scientific principles and procedures in counseling and human development to provide assistance in understanding and solving problems that the consultee may have in relation to a third party, be it individual, group, or organization" (CRCC Scope of Practice, 2000, p.2).

Considering the depth and breadth of your content expertise in the field of rehabilitation, you have been selected as someone we would like to interview regarding your perceptions of the value of consultation to the rehabilitation counseling profession, and how consultation could be effectively incorporated into graduate rehabilitation education.

The interview will be audio taped and may last up to 30 minutes. It will address your perception of the value of consultation competencies in rehabilitation counseling practice, your experiences incorporating consultation competencies into courses, potential strategies for incorporating these competencies into a curriculum and the barriers or obstacles to their implementation. We hope that you will participate in this study. As a rehabilitation educator, your contributions will be of great value in advancing the knowledge, practice, and preparation in this area. Participation in this study is voluntary. All participants will be randomly assigned a numerical code and your identity will be protected to the maximum extent allowable by law. There are no expected harmful effects to participants. An informed consent form is also attached to this e-mail for your review.

This research study has also been approved by the Social Science, Behavioral and Education Institutional Review Board (SIRB) located at Michigan State University. Inquiries may be addressed to Peter Vasilenko, Ph.D., Director of Human Research,

Michigan State University, 202 Olds Hall, East Lansing, Michigan 48824. Phone: (517) 355-2180; Fax: (517) 432-4503 or via email: Irb@msu.edu. The IRB # is: 07 - 214.

Should you have any questions or concerns, please feel free to contact me directly, or Dr. Michael Leahy, my dissertation chairperson at leahym@msu.edu.

I will follow up with you by telephone in a few days in order to determine your interest in participating in this research study and schedule an appointment to conduct the telephone interview, if you agree to participate. Thank you very much for your consideration.

Respectfully,

Steve Zanskas, M.S., ABD, CRC, LPC
Doctoral Candidate
Michigan State University
Office of Rehabilitation and Disability Studies
455 Erickson Hall
East Lansing, MI 48224

(248) 231-8096

Appendix E: Qualitative Interview Consent Form

Consultation in Rehabilitation Counselor Education: A Mixed Methods Study
Qualitative Interview Consent Form

I, _____, agree to participate in an interview study as part of doctoral dissertation research titled "Consultation in Rehabilitation Counselor Education: A Mixed Methods Study" conducted by Steve Zanskas under the supervision of Micahel J. Leahy Department of Counseling, Educational Psychology, and Research at Michigan State University. My participation is voluntary. I can stop taking part without giving any reason, and without penalty. I can ask to have all of the information about me returned to me, removed from the research records, or destroyed.

The reason for this study is designed so that the interviewer can gain some understanding about consultation in rehabilitation education.

If I volunteer to take part in this study, I will be asked to do the following things:

1) Participate in a one-hour recorded telephone interview with the interviewer.
2) Clarify any follow-up questions the interviewer might have when interpreting my words.

As a participant

- The researcher will audiotape conversations and interviews that occur between the researcher and me.
- The data will be kept by the researcher and will be shared while maintaining confidentiality with Dr. Michael Leahy.
- The researcher will analyze the data and keep it for three years for educational and research purposes.
- There is no direct benefit for me for participating in the project.
- No risk is expected but if I experience some discomfort or stress during observations or conversations, then I can choose to discontinue my participation in the study without any penalty.

No information about me, or provided by me during the research, will be shared with others, except if it is necessary to protect my welfare (for example, if I were injured and need physician care) or if required by law. I will be assigned a random numerical code which will be used in interview transcript and all other data documents.

The researcher will answer any further questions about the research, now or during the course of the project.

My electronic signature on this form reflects my agreement to participate in this research project. I will receive a signed copy of this consent form for my records.

Steve Zanskas, ABD, M.S., CRC, LPC

Name of Researcher	Signature	Date
Telephone: 248.231.8096		
E-mail: zanskas1@msu.edu		

Name of Participant	Signature	Date

Please electronically sign and date your copy, attach and return the document to the researcher via e-mail. Once received, the researcher will acknowledge receipt, sign and return an electronically signed copy to your attention by e-mail. E-mail accompanying the consent forms will be maintained with a copy of the authorization to verify consent to participate. Your privacy will be protected to the maximum extent allowable by law.

Additional questions or problems regarding your rights as a research participant should be addressed to Dr. Michael Leahy, Office of Rehabilitation & Disability Studies, Michigan State University, 463 Erickson Hall
East Lansing, MI 48824. E-mail: leahym@msu.edu.

If you have questions about your rights as a participant in this research, please contact the Social Science Institutional Review Board (SIRB), Michigan State University: Peter Vasilenko, Ph.D., Director of Human Research, Michigan State University, 202 Olds Hall, East Lansing, Michigan 48824. Telephone: (517) 355-2180; Fax: (517) 432-4503 Irb@msu.edu.

Please print a copy of this page for your records.

Appendix F: Qualitative Demographic Questionnaire

Qualitative Participant Demographic Questionnaire

1. Gender: **M_____**

F_____

2. Age: **_____**

3. Certification Status: **CRC _____**

NCC _____

CCM _____

CDMS_____

Other (Please Identify) _____

4. Licensure Status: **LPC _____**

LMHC _____

Licensed Psychologist_____

Other (Please Identify) _____

5. Degree (Major): **Counselor Education_____**

Psy. D. _____

Rehabilitation Counselor Education_____

Rehabilitation Psychology _____

Rh. D._____

Other (Please Identify)_____

6. Number of years of employed as a Rehabilitation Counselor Educator? _____

7. Number of years engaged in paid consulting activities? _____

Appendix G: Qualitative Interview Questions

There are many definitions and models of consultation. For the purpose of this study, I am using the definition contained in the CRC Scope of Practice (2000):

Consultation: The application of scientific principles and procedures in counseling and human development to provide assistance in understanding and solving current or potential problems that the consultee may have in relation to a third party, be it an individual, group, or organization.

The process is essentially the same regardless of the model, duration, whether it is individual or organizational (Kurpius, Fuqua, & Rozecki, 1993):

1. Pre-entry - A self-assessment and evaluation by the consultant considering their own competency to address the needs of the referral source.
2. Entry - Problem exploration. The consultee (referral source) explores the problem with the consultant. A verbal or written contract may be developed.
3. Information Gathering - Gathering information, problem configuration, and goal setting. Qualitative and quantitative data are gathered. The consultee's are involved in defining or confirming problems. There could be many examples here that are more traditional, but it is also evident in prevention programs, social action or participatory research.
4. Intervention - Searching for a solution, selecting an intervention.
5. Evaluation of the success of the intervention. It may be determined that redefinition of the problem is necessary.
6. Termination - Reflection on the process, debriefing, etc.

It might be helpful to consider the parallels among the counseling process, case or disability management processes, and the definition and the consultation process described above.

Qualitative Interview Questions

1. How would you generally describe consultation skills in relation to rehabilitation counselor practice?

    A. How did you form that view?
    B. Are there certain practice settings that you feel are more appropriate for consultation?
    C. How do you feel the field of rehabilitation perceives consultation?

2. What consultation competencies do you feel are most important for rehabilitation counseling practice?

A. Why do believe these are important?

3. How would you describe your experience incorporating consultation competencies into the RC curriculum?

    A. What would have to be done to effectively incorporate consultation competencies into rehabilitation counseling programs?
    B. What obstacles would you anticipate?
    C. What strategies would you recommend to over come these obstacles or barriers?

4. How would you characterize what we know about consultation in terms of evidenced based practice?
    A. Where do you feel the research needs
    B. Are there any emerging areas of practice that you think would require additional training for consultation?

Appendix H: Descriptive Statistics Importance Items Means and Standard Deviations

Descriptive Statistics: Importance Items Means and Standard Deviations

	N	Mean	Std. Deviation
1. Interview Importance	73	4.45	.727
2. Evaluation Importance	73	4.14	.822
3. Service Identification Importance	73	4.41	.779
4. Identify Transferable Skills	72	4.25	.946
5. Select Evaluationnstruments	72	4.11	1.015
6. Comupterized Assessment	72	2.89	.928
7. Administer tests	72	3.76	1.014
8. Interpret Test Results	72	4.17	1.035
9. Integrate Data	72	4.29	1.013
10. Develop Relationships	72	4.26	.949
11. Clarify Expectations	70	4.41	.752
12. Identify One's Biases	70	4.30	.787
13. Adjust Consulting Approaches	70	4.13	1.006
14. Apply Systems Theory	69	3.67	.834
15. Employ Counseling Techniques	70	4.06	.866
16. Identify Plan Barriers	69	4.39	.790
17. Prepare Plans	69	4.26	.995
18. Use Behavioral Techniques	68	3.19	.981
19. Consult with Group Methods	70	3.16	.973
20. Develop Mutual Goals	70	4.47	.756
21. Conduct Group Activities	68	3.07	.997
22. Monitor Outcomes	69	4.00	1.000
23. Analyze Tasks	68	3.78	.912
24. Recommend Modifications	69	3.87	.938
25. Apply Assistive Technology	69	3.97	.874
26. Use Labor Market Information	69	3.84	1.009
27. Apply ADA	69	3.96	.898
28. Respond to Employer Bias	69	4.12	.932
29. Negotiation	70	3.49	1.100
30. Provide Employers Information	70	3.94	1.020
31. Consult Regarding Accessibility	69	3.86	.912
32. Serve as a Vocational Expert	69	3.43	1.078
33. Expert Testimony	69	3.41	1.180
34. Provide Information re: Services	69	3.75	1.020
35. Collaborate with Providers	67	4.13	.851
36. Consult with Medical Pro's	67	3.97	.887
37. Understand Insurance Claims	67	3.52	.911
38. Appropriate Referrals	66	3.98	.886
39. Compile Document Interpret	66	4.14	.875
40. Write Notes & Reports	67	4.22	.918
41. Negotiate Financial	67	3.40	1.031
42. Marketing	68	3.56	.968
43. Identify Ethical & Legal	68	4.59	.738
44. Abide by Ethical & Legal	68	4.62	.792
45. Read Prof. Literature	68	3.71	.915
46. Conduct Literature Review	67	3.66	1.023
47. Apply Rs. to Practice	67	3.82	.920
48. Apply Legislation to Practice	67	3.87	.936

49. Educate About Rights	67	4.03	.921
50. Challenge Stereotypes	68	4.16	1.002
51. Discuss Return to Work	68	3.93	.935
52. Conduct Labor Market Analyses	66	3.76	.993
53. Conflict Resolution Strategies	68	3.91	.958
54. Time Management	67	4.15	.803
55. Develop Rapport	67	3.99	.992
Valid N (listwise)	55		

Appendix I: Descriptive Statistics Proficiency Items Means and Standard Deviations

Proficiency Items Means and Standard Deviations

Proficiency Item	N	Mean	Std. Deviation
1. Teach Interview Skills	67	4.16	.828
2. Teach Support System Evaluation	67	4.03	.969
3. Teach Needs Identification	67	3.97	.852
4. Teach Transferable Skill Analysis	67	3.90	1.002
5. Teach Selection of Evaluation	67	3.87	1.072
6. Teach Computerized Assessment	67	2.99	1.212
7. Teach Test Administration	67	3.72	1.191
8. Teach Test Interpretation	67	3.87	1.086
9. Teach Integration of Results	67	4.01	1.007
10. Teach Relationship Development	67	4.42	.781
11. Teach Goal Clarificatiom	66	4.14	.821
12. Teach Self-Assessment	66	4.17	.796
13. Teach Consulting Styles	66	3.80	.980
14. Teach Systems Theory	66	3.33	1.100
15. Teach Problem Exploration	66	4.21	.869
16. Teach Plan Implementation	66	3.95	.952
17. Teach Plan Development	65	4.00	.968
18. Teach Behavioral Techniques	66	3.50	1.193
19. Teach Group Consulting Methods	66	3.21	1.196
20. Teach Goal Development	66	4.29	.873
21. Teach Group Activities	66	3.33	1.072
22. Teach Outcome Monitoring	66	3.91	.956
23. Teach Job Analysis	65	3.89	1.077
24. Teach Job Modification Techniques	66	3.74	1.127
25. Teach Application of Assistive Tech	66	3.33	1.168
26. Teach use of LMI	66	3.74	1.071
27. Teach Application of Legislation	66	3.68	.963
28. Teach Responding to ER Biases	66	3.97	1.022
29. Teach Negotiation Skills	66	2.85	1.126
30. Teach Employer Consultation	66	4.02	.903
31. Teach Accessibility Consultation	66	3.50	1.071
32. Teach Vocational Expert Services	66	2.80	1.361
33. Teach Expert testimony	65	2.78	1.409
34. Teach Informational Marketing	66	3.79	.920
35. Teach Intergroup Collaboration	66	3.85	.949
36. Teach Medical Consultation	66	3.79	1.031
37. Teach about Insurance Systems	66	2.41	1.301
38. Teach Referral Protocols	65	3.80	.887
39. Teach Case Documentation	66	4.06	.943
40. Teach Writing	66	4.18	.927
41. Teach Financial Negotiation	65	2.86	1.261
42. Teach Marketing	65	3.20	1.202
43. Teach Ethical & Legal Implications	65	4.29	.843
44. Teach how to Abide by Ethical/Legal	65	4.42	.768
45. Teach Reading Prof. Literature	65	3.95	.926
46. Teach to Conduct Literature Reviews	65	4.35	.799

47.Teach Application of Rs. to Practice	65	4.05	.926
48. Teach Application of Legislation	64	3.77	1.020
49. Teach Federal & State Rights	65	3.62	1.011
50. Teach how to Challenge Stereotypes	65	4.20	.971
51. Teach Return to Work Discussions	66	3.39	1.122
52. Teach How to Conduct LMA's	66	3.45	1.267
53. Teach Conflict Resolution	66	3.45	1.084
54. Teach Time Management	66	3.80	.881
55. Teach Rapport Development	66	4.05	.919
Valid N (listwise)	60		

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