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PERCEIVED IMPORTANCE, EDUCATOR PROFICIENCY AND STUDENT PREPAREDNESS IN DISABILITY MANAGEMENT KNOWLEDGE DOMAINS

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PERCEIVED IMPORTANCE, EDUCATOR PROFICIENCY AND STUDENT PREPAREDNESS IN DISABILITY MANAGEMENT KNOWLEDGE DOMAINS

By

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ABSTRACT

PERCEIVED IMPORTANCE, EDUCATOR PROFICIENCY AND STUDENT PREPAREDNESS IN DISABILITY MANAGEMENT KNOWLEDGE DOMAINS

By

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The purpose of this quantitative study was to determine how rehabilitation counselor educators perceived identified disability management tasks in relation to importance to the field of rehabilitation counseling, their own proficiency to teach as well as student preparedness. This study also looked at whether importance, proficiency and preparedness differed across three disability management domains according to participant demographics. Originally, 697 individuals with the rank of assistant, associate, professor, adjunct instructor or instructor rank as members of the National Council on Rehabilitation Education (NCRE) or faculty of NCRE member institutions were identified as potential participants. Of the initial 697 individual email invitation sent to potential participants, 101 were returned as invalid or undeliverable email addresses. An additional 16 declined to participate as they were not involved in the field of rehabilitation counseling and 16 opted out of the survey (no reason given). Of the total 564 potential participants, 89 responded. Of those 89 15 were deemed not valid due to participants not completing any further questions past the first. In the end a total of 67 surveys were deemed usable, for a response rate of 12%. Empirical data was gathered using a modified web based version of the

Certification of Disability Management Specialists Commission Role and Function Study. Quantitative data was obtained for three Likert-type scales, importance, proficiency and preparedness, for each of the 26 disability management tasks. These tasks were part of the three disability management domains, domain I (disability case management), domain II (disability prevention and workplace intervention) and domain III (program development, management and evaluation). Overall survey participants ranked all 26 items as important to the field of rehabilitation counseling, ranked themselves as proficient to teach 22 of the 26 tasks and identified students as prepared on only 6 of the 26 tasks. Significant demographic differences were identified on a few of the characteristics across some, or all, of the domains. A high correlation was found between an educators perceived importance of a task (or domain) and their perceived proficiency to teach. Implications for rehabilitation counselor practice, education and future research are discussed.

To Kurt, Cale and Kenzie. Without your love, support, patience and understanding, none of this would have been possible. I love you

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Chapter I

Introduction

Disability management, as defined by the Certification of Disability Management Specialists Commission (2008), "is a workplace program that seeks to reduce the impact of injury and disability and to accommodate employees who experience functional work limitations (p.1). Disability management utilizes services, people and materials to reduce the impact and costs of disability to both the employer and employee and promotes return-to-work as soon as possible (Schwartz, Watson, Galvin, & Lippoff, 1989).

Efforts to control disability costs began in the mid 1980's which led to the development of disability management programs (Flynn, 2001). Disability management programs were self-insured employers' response to the increasing costs in healthcare, workers' compensation and other disability costs (Habeck, 1999). These costs still challenge employers today. The Census Bureau estimates for the year 2000 the total costs of disability (medical, income replacement, and productivity related costs) were more than $340 billion (Watson Wyatt, 1998).

Since the mid 1980's, many companies have incorporated some aspect of disability management into their organization. The Washington Business Group conducted a survey in 1999 which reported that out of 178 companies with 1000 or more employees, virtually all had some form of a disability management component in place to deal with work injury issues (Leahy, Chan, & Saunders, 2003). Since direct and indirect costs of disability in the workplace add up to

about 18% of payroll costs, disability management programs are a great way to assist in reducing and/or eliminating some of those costs for employers (Scardellette, 2003). Disability management programs are intended to achieve a win-win solution for employers and employees, if implemented and administered effectively (Habeck, Leahy, Hunt, Chan, & Welch, 1991).

Rehabilitation counseling has been identified as a profession practicing in the area of disability management (Goodwin, Taylor, Chan & Currier, 2000). Habeck and Kirchner (1999) identified two separate levels on which disability management can operate. Level I, or big disability management, is described as being administrative and managerial in nature and with more of an organizational focus. Level II, or little dm, is more human service orientated and involves the direct provision of services to individual clients.

Major areas of study were recognized for the professionals working on the Level I disability management practice. These included: rehabilitation counseling, industrial and organizational psychology, risk management and insurance, human resource management, medicine (occupational health specialty), business administration and nursing (occupational health specialty). Areas of study identified for professionals operating on Level II dm practice included: rehabilitation counseling, occupational health nursing and rehabilitation psychology (Habeck et al., 1999).

For Certified Disability Management Specialist (CDMS) eligibility criteria, rehabilitation counseling has been recognized as one of the accepted degrees that are "in a field directly related to disability management" (Certification of

Disability Management Specialists Commission, 2008, p.3). However, there have been no studies to determine whether or not students in rehabilitation counseling education programs are being taught the identified knowledge areas necessary for disability management. In fact "little has been done to examine the preservice or continuing education training needs specific to rehabilitation professionals practicing disability management" (Goodwin, et al., 2000, p. 231). Szymanksi, Linkowski, Leahy, Diamond, & Thoreson (1993) report that specific knowledge is the source for successful service delivery in any occupation or specialty area.

Rehabilitation counselors are practicing more often in areas of disability management in private rehabilitation settings (Leahy, et al., 2003). The field of rehabilitation counseling has changed dramatically and has been drastically affected by trends, such as the emerging disability management models in private rehabilitation (Chan, Leahy, Saunders, Tarvydas, Ferring & Lee, 2003). Leahy et al., (2003) reports that "many of the emerging knowledge areas (e.g., disability management) may not even be emphasized in many current rehabilitation counselor education curricula" (p. 83).

Deficiency of knowledge is an obstacle to effective disability management practice (Goodwin, et al., 2000). The field of rehabilitation counseling cannot afford to be ill prepared in the field of disability management if it wants to remain a pertinent profession. Jenkins & Strauser (1999) contend that in order for rehabilitation counselors to be competitive in the future, the Counsel of Rehabilitation Educators (CORE) should expand career development (C.2.4) and

job development and placement (C.2.6) educational standards. Jenkins & Strauser (1999) also recommend including topics such as "disability management, staffing (specifically employee recruitment and selection), work motivation, organizational culture, psychological effects of unemployment, human resource management, economics and job design" (p. 10). These issues will become even more critical based on the unprecedented workforce changes we are about to encounter.

Statement and Significance of the Problem

Today's workforce is changing dramatically. With the aging of the baby boomer generation we are about to experience an unparalleled shift, which some have referred to as a "demographic and aging tsunami" (The Aging Workforce, 2007, p. 3). Critchley (2004) has stated that "there is a tidal wave of change occurring within today's workplace due to dynamic demographic changes, yet many organizations and their leaders are oblivious to the consequences and are not implementing necessary strategies for future survival" (p. xi).

According to Dychtwald, Erickson & Morison (2006) those over the age of 50 will account for 80% of the native-born workforce growth in North America over the next 15 years. Those in the age group between 55-64 will increase by 11 million persons between 2000-2010, more than any other group, while persons age 35-44 will decline by 5.1 million. Additionally, labor force participation is expected to be the greatest for those aged 65-74 from 2000-2010. (Fullerton & Toossi, 2001).

Rising life expectancy and lower fertility rates have also been factors in the demographic changes affecting the workforce (Brooke, 2003). Toossi (2002) reports that the labor force growth rate will remain steady at 1.1% during the 2000-2010 period, falling to 0.6% in 2010-2015 and 0.2% between 2015-2020. Thus employers should be preparing to double the proportion of employees aged fifty-five and above (Dychtwald, et al., 2006).

Workers' have also been remaining in the workforce longer, increasing the number of older workers. Reasons for workers' remaining employed include: decreased retirement savings, a need for health care benefits, increase in the age requirements needed to collect Social Security as well as the elimination of mandatory retirement by some employers (Hursh, Lui, & Pransky, 2006). In addition, changes in the stock market, either positive or negative, impact older workers' assets along with their decisions to retire, or not (National Institute on Aging, 2007). The recent volatility of the stock market will more than likely hinder more people's ability to retire in the near future.

As workers age the incidence, severity and duration of disability also increases (Bruyere, 2006). In relation to chronic illness and the impact on the ability to work, only 1.9% of those aged 18-24 are unable to work while the rate dramatically increases to 18.6% for those age 65-69 (Stoddard, Jans, Ripple & Kraus, 1998). Remaining employed is "far more desirable for individuals with disabilities, their families, and society-at-large, than a life of relying on private or public disability benefits as a substitute for wages" (National Institute of Disability Management and Research, 2005, p. 6).

Vargo & Grzanowicz (2002) reports it will become even more imperative to identify proven strategies to return employees to work after an injury or illness. Employers are seeking ways to keep their costs down. Due to challenges employers are facing, including rising medical costs associated with disability, the aging workforce and increased foreign competition, more employers are seeking strategies to return employees to work and reduce their costs related to disability (Gottlieb, Vandergoot & Lutsky, 1991).

One such strategy is disability management. Over 95% of all disabilities are acquired during working life and with increasing age the likelihood of acquiring a disability sharply escalates. Disability management strategies assist in assuring productivity of workers during all phases of life, especially in an aging society (National Institute of Disability Management and Research, 2005). Bruyère (2006) reports that "disability management and accommodation policies and practices readily lend themselves to addressing the challenges employers will face with an aging workforce, and the increasing prevalence of disability that these demographics bring" (p. 149).

Disability management is an "active process of minimizing the impact of an impairment (resulting from injury, illness or disease) on the individual's capacity to participate competitively in the work environment (Shrey & Lacerte, 1995, p. 5). Unfortunately disability management has been conceptualized at so many levels by various parties (e.g., medical providers, claims managers, insurance carriers, rehabilitation professionals), that each party uses the term

disability management for its' own interest, leaving it as one of the most broadly defined and distorted terms in health care (Shrey et al., 1995).

Since there is no formal educational degree program for disability management and the interplay between so many concepts of what disability management actually is and who is involved, the process of disability management has been diluted. Without a concrete educational program in place, with specifics related to the separate professions involved and the responsibilities of each profession in the disability management process, it is difficult to determine the best way to disseminate knowledge, skills and abilities required to practice disability management successfully.

Specific disability management knowledge and skills have been identified through various role and functions studies involving disability management experts. One such study was conducted to establish an empirical basis for the main certification in disability management, the Certified Disability Management Specialist (Rosenthal, Hursh, Lui, Isom, & Sasson, 2007). This study identified three disability management knowledge domains: (a) disability case management; (b) disability prevention and workplace intervention; and (c) program development, management and evaluation.

While organizations are grappling with an aging workforce, professions directly involved with disability management should be preparing as well, such as rehabilitation counseling. Szymanski (1985) defined rehabilitation counseling as "a profession that assists persons with disabilities in adapting to the environment, assists environments in accommodating the needs of the individual, and works

toward full participation of persons with disabilities in all aspects of society, especially work" (p.3).

Although rehabilitation counseling is a resource in assisting employers with regards to an aging workforce through disability management programs, there is "little information to guide rehabilitation professionals in the areas with which employers seem most to need assistance" (Gottlieb, et al, 1991 p. 23). Rosenthal, et al., (2007) contend that "as employers, insurers, and other stakeholders become more knowledgeable about the range of services and the knowledge and expertise needed to improve productivity, and reduce the impact of illness, injury, and disability, the demand for evidence-based practice will increase" (p. 83). This research project will look at identifying rehabilitation counseling educators' perceptions of identified disability management knowledge tasks (within three domains) in relation to perceived importance, educator proficiency to teach these tasks, and overall student preparedness.

Purpose of the Study

Multiple studies have been conducted to identify knowledge and skills necessary for working in the disability management field (Habeck, 1991; Currier, Chan, Taylor, & Wood, 1997; Habeck & Kirchner, 1999; Currier, et al., 2001; Castle Worldwide Psychometrics, 2004; Rosenthal, et al., 2007). There have been no studies however surveying rehabilitation counseling educators to determine the level at which identified disability management knowledge is being taught within rehabilitation counseling programs.

This study examined empirically based knowledge areas specific to disability management and surveyed rehabilitation counseling educators to determine participants perceived: (a) importance of disability management tasks for rehabilitation counseling practice; (b) educators perceived proficiency to teach disability management tasks for rehabilitation counseling practice; and (c) overall student preparedness in identified disability management tasks upon completion of a Master's level rehabilitation counseling program.

A quantitative survey, based on a modified version of the Certification of Disability Management Specialists Commission (CDMSC) Role and Function Analysis Survey for the Certified Disability Management Specialist (CDMS) constructed for the 2004 study to determine the prevailing domains of disability management practice was used (Rosenthal, et al., 2007). A descriptive ex post facto research design was used to identify which disability management knowledge tasks rehabilitation counseling educators perceived as important to the field of rehabilitation counseling, their own proficiency to teach in these areas, and overall student preparedness. A demographic questionnaire was included to determine how demographic characteristics among participants related to responses to the research questions below.

The research questions of interest in this study are as follows:

1. According to rehabilitation counselor educators, how important are disability management tasks for effective rehabilitation counseling practice?

    a) Does the level of importance differ across the three disability management domains?

b) Are there differences in the level of importance in the components of the three disability management domains relative to specific demographic characteristics of faculty (i.e. gender, years of experience as a rehabilitation counselor educator, engaged in paid disability management activities)?

2. How do rehabilitation counselor educators' perceive their own instructional proficiency to teach disability management tasks for rehabilitation counseling practice?

a) Are there differences in the level of perceived proficiency in the three disability management domains relative to specific demographic characteristics of educators (i.e. gender, years of experience as a rehabilitation counselor educator, engaged in paid disability management activities)?

b) Do the perceptions of rehabilitation counselor educators' own instructional proficiency to teach disability management tasks differ across the components of the disability management domains?

c) What is the relationship between educators' perceptions of the importance and their perceived instructional proficiency to teach disability management tasks?

3. How do rehabilitation counselor educators perceive overall student preparedness in identified disability management tasks?

a) Are there differences in the perceived overall student preparedness in the three disability management domains relative to specific demographic

characteristics of faculty (i.e. gender, years of experience as a rehabilitation counselor educator, engaged in paid disability management activities)?

b) Are there differences in the perceived overall student preparedness across the components of the disability management domains?

Definition of Terms

Disability Management: Operationally defined, disability management is an "active process of minimizing the impact of an impairment (resulting from injury, illness or disease) on the individual's capacity to participate competitively in the work environment (Shrey et al., 1995, p. 5). Disability management includes prevention, early intervention and return to work, and individuals working in disability management areas must provide services to both worker and employer (Certification of Disability Management Specialists, 2008).

Certification of Disability Management Specialists Commission: The nationally accredited and independent organization that certifies disability management specialists that analyze, prevent and mitigate the human and economic impact of disability for employees and employers.

CORE: Council on Rehabilitation Education which accredits graduate programs which provide academic preparation for professional Rehabilitation Counselor Education (RCE).

Older Workers: The U.S. Bureau of Labor Statistics identifies older workers as those aged 65 and older.

Rehabilitation Counseling: Practitioners 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; (i) job analysis, job development, or job placement services; and (j) the provision of consultation about and access to rehabilitation technology (Scope of Practice for Rehabilitation Counseling, 2009).

Certified Disability Management Specialist: The certification in the field of disability management that is seen as the standard for measuring the level of knowledge, competence and professional experience needed to practice in this area. The area of disability management has a specific focus on workplace issues, emphasizing the role of the disability manager in returning ill and injured employees to the workplace as quickly as possible to promote healing, restore the individual's earning power, and contribute to the company's productivity (Certification of Disability Management Specialists, 2008).

Assumptions and Limitations

The principal assumption underlying this study pertained to the validity of rehabilitation counselor educators (university faculty and adjunct instructors) self reporting their perceived importance of disability management tasks for the field of rehabilitation counseling, perceived proficiency in teaching disability management tasks and overall student preparedness. Self report based survey research is used to define competencies that are not directly observed or that can be reflected in multiple forms of behavior (Boyatzis, 1980). Disability management is such a broad term educators may have different perspectives of what aspects of this process are more critical than others, which may also be related to the type of practice setting their experience comes from (public, not-for-profit, private). An educators' perceived proficiency to teach disability management may also be misaligned due to the marked changes in the field of disability management. Proficiency at one point in time does not equate to proficiency with today's ever changing labor market and global economy.

Participant response to overall student preparedness may have also been jaded if they were not current with the recent studies related to the identified disability management knowledge tasks, or do not have a lot of students interested in practicing in this area. While rehabilitation counseling programs may be aligned with the Council on Rehabilitation Educations requirements to include disability management in their program curriculum, the education being provided may not be aligned with what employers are seeking. Employers, insurers and other stakeholders are not only looking for disability management

professionals who can reduce the impact of illness, injury and disability but they also want "practitioners to be informed consumers of current and relevant research, including justifying the return on investment in what they do in terms of reducing direct and indirect costs, decreasing benefit consumption, and improving workplace productivity" (Rosenthal, et al., 2007, p. 83).

A limitation of this study was surveying only rehabilitation counseling educators, which was defined as faculty that have attained the rank of Assistant Professor, Associate Professor, Professor, adjunct professors or instructors who were currently involved in teaching or clinical supervision from accredited programs list from the National Council of Rehabilitation Education (NCRE). These survey results cannot be generalized to rehabilitation counseling educators who do not meet the above criteria.

An additional limitation was using the knowledge domains of disability management as identified through the Certification of Disability Management Specialists Commission (CDMSC) role and function study of 2004. While this was a follow up study to a previous 1999 role and function study it still provides newer research that educational programs may not have weaved into their curriculum yet. Another limitation was using the results of the CDMSC study which has its own inherent limitations including a low return rate (20%).

Another assumption was that the ease of electronic surveys would yield more successful response rates. While educators were more at ease with completing electronic surveys, web based studies often have a higher rate of drop out and repeated participation. Shannon, Johnson, Searcy and Lott (2002) reported that

surveys conducted on the World Wide Web (with a link to the site forwarded through an email) offer great advantages related to data analysis as responses can be easily downloaded into spreadsheets or statistical analysis software programs. Birnbaum (2005) also compared studies where data was obtained in web versus lab studies and found these methods usually yielded the same conclusions.

Chapter II

Literature Review

Disability Management

Disability management has been defined as a process of minimizing impacts of impairments, including injury, illness or disease, on a person's capacity to remain in a work environment competitively (Shrey, 1995). Others have defined disability management as a proactive approach to help injured or ill employees to return to safe and productive work activities as soon as medically possible with a primary focus of minimizing the impact of injuries or illnesses (Workplace Health, Safety and Compensation Commission, 2005). Habeck et al. (1991) go further to describe disability management as a process that is proactive, employer based, and designed to prevent the occurrence of injury and disability and includes early intervention to mitigate disability risks and coordinated services for cost effective restoration and return-to-work.

Disability management materialized during the 1980's when employers, insurers, policy makers and service providers recognized the negative impacts that health care costs, the aging workforce, and the increasing occurrence of disability in the workplace were having on the "bottom line" of business (Galvin, 1991).

Almost thirty years later these issues still face employers. Due to the increases in global competition they are more impactful on an employer's ability to remain competitive, or even remain in business as the direct and indirect costs

of disability average about 18% of a company's payroll (Scardellette, 2003). These issues also affect the ability of a person with a disability to obtain or sustain employment.

For this reason it is critical that professionals involved with disability management stay abreast of trends within the workplace, and within the workforce, to ensure that they are able to meet the demands of stakeholders. For the field of rehabilitation counseling, specifically those involved with the private for-profit sector of rehabilitation counseling, this means knowing and understanding the needs of industry and employers.

Rehabilitation counseling has been defined as "a profession that assists persons with disabilities in adapting to the environment, assists environments in accommodating the needs of the individual, and works toward full participation of persons with disabilities in all aspects of society, especially work" (Szymanski, 1985, p. 3). The private for-profit sector of rehabilitation counseling has historically served industrially injured workers and individuals receiving private long-term disability insurance payments, and the "increasing cost of medical care and workers' compensation insurance, gave rise to private (insurance) rehabilitation in the mid-1970's (Strensrud & Gilbride, 2004, p. 222).

Initially disability management focused on the return-to-work of an employee after an injury or disability was incurred, mainly within state workers' compensation systems. Private for-profit rehabilitation was best fit, out of the other rehabilitation counseling service provider settings (i.e. public and non-profit), for working in the area of disability management. Private sector

rehabilitation counseling is more versatile, quicker to initiate and more cost-effective (Shaw & Betters, 2004).

As Berkowitz & Berkowitz (1991) report "rehabilitation services were designed, not to make the worker better off, but to restore the worker, as closely as possible, to the position enjoyed prior to the injury" (p. 184). However as these initial return-to-work programs began to show positive return on investment, as well as financial savings and positive return to work outcomes for injured workers, disability management practices and programs grew in value (Habeck & Kirchner, 1999).

Employers and disability management service providers moved beyond initial interventions of reactive protocols (i.e. return-to-work after a work injury) to more proactive strategies which included safety/prevention, health/wellness programs, ergonomics, ecological assessments, and specialized case management strategies (Hursh, 1997; Rosenthal, Hursh, Lui, Zimmerman & Pruett, 2005).

Such expansion of services of disability management programs has made the preliminary service approach "migrate from the vocational rehabilitation model originally used within the workers' compensation system to a workplace-based approach that was inclusive of many disciplines, including organizational development, safety, risk management, and case management" (Rosenthal, et al., 2007, p. 77). Habeck et al., (1991) reiterate that "the negative human consequences of work injuries and subsequent unemployment compel rehabilitation professionals to learn how to assist employers in the adoption of

company practices that can prevent injury and maintain employment when disability occurs" (p. 213).

Components of successful DM programs

Companies with low claim rates (for workplace injuries) include safety and prevention interventions, procedures to prevent and manage disability, and an open managerial style and human resource orientation (Amick, Habeck, Hunt, Fossel, Chapin, Keller, & Katz, 2000). Disability management providers, such as rehabilitation counselors, must be aware of an organization's culture, in relation to disability management issues and their importance to that organization, if they are going to be effective at working within that organization.

Habeck & Hunt's (1999) review of the literature regarding successful disability management programs suggest essential components including:

1. Company-wide commitment to reduce disability costs and provide needed assistance to encourage return-to-work.

2. Analysis and modification of related benefits and policies to support disability management objectives.

3. Comprehensive assessment of corporate needs, experiences and responses to injury and illness occurrences.

4. Organization of the disability management initiative across all levels and locations with clearly assigned responsibilities and accountability among all necessary people and operating units.

5. Creation of an integrated, useable and effective information system to document, analyze, manage, and evaluate relevant data pertaining to incidence, employees, costs, services and impact.

6. Educational efforts directed toward managers, supervisors and line workers to create understanding and involvement in disability management efforts.

7. Active use of safety and prevention strategies/techniques to avoid disability occurrence.

8. Early intervention and ongoing monitoring for health risks and disability cases.

9. Positive contact with the injured/ill employee and the treating physician within 24 hours of onset.

10. Facilitating early return-to-work of disabled workers through an organized return-to-work process that provides modifications in assignments, hours and/or duties.

11. Systematic procedures for effective use of healthcare and rehabilitation services.

12. Writing an individual plan of service and return-to-work by the responsible case manager with the participating employee.

13. Using professionals with expertise to design accommodations that permit workers with disabilities to perform work in a satisfactory manner.

14. Collaboration with public and private agencies to provide necessary mental health and rehabilitation services.

15. Use of incentives in benefit design, cost accounting and performance evaluation to encourage participation of employees, supervisors and manager (p.24).

Effective disability management programs must incorporate stakeholders' involvement as well as make all stakeholders accountable (Dyck, 2000). Successful management of disability costs has been attributed to changing corporate culture, restructuring monetary incentives and implementing preventative programs, such as disability management, which involve cooperation of employees and managers (Tweed, 1994). Tweed (1994) also stated that the culture of a company, and whether management demonstrates it cares about employees, is the key factor influencing the potential for injury and lost time. The proactive nature of disability management programs is critical as the most successful timeframe for bringing employees back to work from an absence is 30 days (Dyck, 2000). Poor relations between management and employees can discourage employees from following safety practices at work, and even their returning to work after an injury (Tweed, 1994).

Disability management programs deliver a variety of benefits to multiple stakeholders involved in the process. Below are some of those benefits, for employers, employees, unions and healthcare industries as stated in "Workplace disability management: A guide to establishing a program in your workplace" (WHSCC, 2005, p.5). Employer benefits of disability management programs include:

1. Managing workplace costs.

2. Creating safer, more cooperative and more productive workplaces.

3. Reducing employee turnover and lost time.

4. Increasing employee awareness of costs associated with injuries and illness.

5. Reduce accident and workers' compensation costs.

6. Reduce hiring and/or training costs.

7. Retain experienced employees.

8. Improve employee relations and morale.

9. Boost overall productivity and company image.

10. Participate in the rehabilitation and return-to-work process.

11. Develop a return-to-work process that can be utilized for work and non-work injury or illness.

Employee benefits include:

1. Avoid long term absences from work.

2. Maintain income.

3. Retain productive employment and job security.

4. Maintain job skills.

5. Retain benefits and insurance eligibility by returning to work.

6. Retain pension and benefit packages.

7. Resume routine life activities sooner.

Union benefits include:

1. Preserve jobs, seniority, benefits, etc. for employees and union members.

2. Promote cooperative labor/management relations.

3. Facilitate participation in the return-to-work process.

Health care provider benefits include:

1. Assist in promoting the benefits of returning to all possible functional activities as soon as possible after an injury and/or illness.

2. Increase awareness and understanding of their patients' work activities.

3. Allow for increased opportunity for employment-related activities to form part of the patients' rehabilitation.

4. Increase their influence on the activities their patient undertakes at work.

5. Improves opportunity for their patients' recovery.

Benefits of disability management also include costs savings. Habeck et al., (1991) report that "despite the lack of data to fully substantiate the impact of disability prevention and management efforts, rising disability costs have created sufficient incentives to motivate many (especially large) employers to increase their capacity to effectively manage disability factors" (p. 213). Habeck & Hunt (1999) state that "virtually every major insurer and most self-insured employers boast some sort of disability management effort" (p. 19). Disability costs for company's can be cut by as much as 50% by better management of disability programs (Lucas, 1987). With global competition, economic uncertainty and an aging workforce all challenging employers today, disability management is an effective resource for business as well as employees with disabilities. "The

rehabilitation service delivery system is a natural partner with business and labor in the success of such cost-effective approaches in the reduction of human pain, suffering and loss of work potential in the American work force (Bruyère & Shrey, 1991, p. 240).

Disability management role and function research

Multiple studies have been conducted in relation to disability management. However, in order to best understand rehabilitation counseling's ability to successfully work in the field of disability management, research must be reviewed regarding role and function requirements. Professional competency, role and function, knowledge validation, and job analysis research are language used to clarify the practice of studying practitioners in a particular area and classify central functions and tasks, or knowledge and skills, related to that area of practice (Leahy, 1994).

There have been distinctions in the literature regarding the difference between employer based and private rehabilitation (Habeck & Munrowd, 1987). Private rehabilitation was seen as an external professional hired to provide services to injured workers, often in the area of disability management. Employer based rehabilitation was developed by organizations to promote and retain the productivity of employees and prevent job loss for those who were injured, disabled or ill. Since the majority of disability management programs were actually utilizing services of private rehabilitation, it was difficult to draw many distinctions (Habeck & Munrowd, 1987). In 1996 Habeck stated again that disability management could be distinguished from private-sector rehabilitation

practice. She delineated the two by stating disability management was differentiated by direct access to the workplace, intervention at the time of injury/illness, employer-based and proactive. Habeck (1996) reported private rehabilitation as providing services to injured workers after the fact, and when return-to-work was prevented by the disability. In reviewing the research on disability management, early studies began by looking at the knowledge and skills areas in private rehabilitation, which will be discussed in the next section.

Studies specific to role and functions of disability management providers arose from the definition of disability management practice by Habeck & Kirchner (1999) which identified disability management programs on two levels, Level I (Big DM) and Level II (little dm). Habeck & Kirchner (1999) describe Level I as more focused on the organization and workplace as a whole, with little direct service to individual clients, while Level II focus is more human-service oriented, involving services directly to individual clients.

From Habeck & Kirchner's (1999) delineating disability management on two levels, a study was conducted to identify functions and knowledge domains for the levels of disability management (Level I and Level II), as well as what educational requirements were viewed as best to administer programs at each level (Currier, Chan, Berven, Habeck & Taylor, 2001). This research was sponsored by the Certification of Disability Management Specialists Commission (CDMSC) which is the only nationally accredited and independent organization that certifies disability management specialists. Research in this area was necessary as "research to empirically define the standards and qualifications

requisite to effective practice, along with credentialing criteria, has been limited" in the area of disability management (Currier, et al., 2001, p. 134).

For this study two groups of experts in disability management were selected. The first was a project advisory committee consisting of seven individuals. These participants were selected as "participants for the advisory committee on the basis of expertise in disability management as indicated by exemplary direct service practice in disability management; contributions as facilitators and presenters in continuing education programs; service on certification commissions and in leadership positions within professional associations; and research and scholarship" (Currier et al., 2001, p. 134).

The second group, the expert panel, consisted of 44 individuals (64 were invited initially but 44 actually participated), which were selected by the advisory committee. Those participants completing a master's degree in rehabilitation counseling equaled 43.2% of the participants. The other most common areas of study cited were rehabilitation psychology, vocational rehabilitation and human rehabilitation. Other majors included organizational, development/behavior, risk management, occupational therapy, nursing, health care administration, psychology, economics, kinesiology/physiology, counseling and business administration (Currier, et al., 2001).

There were two phases to this study. The first included developing a questionnaire based on input from the advisory committee which, after revision, included 76 items listing 31 job functions and 45 knowledge items at each practice level which represented the major disability management practice

domains (Level I DM and Level II DM). Respondents were asked to rate according to degree of importance for job performance using a five-point Likert-type scale for each of the disability management practice levels (Currier, et al., 2001).

The second phase of the study included using the Delphi procedure to "achieve consensus of expert opinion on the importance of the functions and knowledge domains for both practice levels, Level I and Level II" (Currier, et al., 2001, p. 135). The Delphi technique is used to attain consensus among experts by asking respondents to compare their responses to the questionnaire items against the overall group median and then reconsider their response if they deem applicable (Currier, et al., 2001). The revised questionnaire from Part I was sent to the 64 participants who had agreed to be on the initial expert panel, of which 44 responded for a response rate of 68.8%.

The top five functions identified as being more important to Level I included: (a) conducting corporate analyses to determine the impact of disabilities on costs and performance; (b) developing a methodology to measure disability management outcomes relevant to the organization; (c) designing disability management policies, programs, coordinating structures, protocols, and return-to-work plans; (d) motivating the organization and partners with regard to disability management; and (e) establishing disability management goals related to corporate mission, strategies, and goals. The top five functions more important to Level II included: (a) performing case management functions; (b) performing return-to-work functions; (c) providing return-to-work coordination

services; (d) evaluating, purchasing, and coordinating assistive technologies for accommodations; and (e) conducting job analyses and job accommodation to facilitate prevention.

Included in this study were the functions that were common to both Level I and Level II practice. These included: (a) monitoring and evaluating the impact of disability management on treatment, return-to-work, and program outcomes; (b) training labor and management regarding best practices in disability management; (c) professional development to keep abreast of state-of-the-art disability management practices; (d) developing the capacity within the company to conduct early intervention for return-to-work; and (e) promoting and marketing the disability management program internally (Currier, et al., 2001, p. 138-139.)

Results demonstrated that the top five knowledge domains listed for Level I disability management practice included: (a) program evaluation and research; (b) integrated benefits systems and design; (c) cost containment procedures, strategies, and analysis; (d) integrated benefit systems; and (e) human resource management principles (Currier et al., 2001). Currier et al., (2001) list the top five knowledge domains for Level II disability management to include: (a) medical aspects of acute and chronic illness and disability; (b) vocational/career counseling; (c) work adjustment, work transition, and work hardening resources and strategies; (d) vocational/career assessment and evaluation; and (e) medical case management. Knowledge areas common to both Level I and Level II practice were: (a) rationale for disability management; (b) business practices and operations; (c) definition of components of disability management and disability

management models; (d) employment and disability-related legislation, compliance strategies, and program interventions; and (e) corporate lexicon.

Also included in the above study were the minimum educational requirements for administering programs at each level, as determined by the expert panel. Rehabilitation counseling was the most frequently given response as a major for both levels of practice, although other majors were indicated as well (i.e., human resource management, occupational health nursing, risk management and insurance, for example) (Currier et al., 2001). A master's degree was indicated for the minimum education level for each level, but it is important to note that for level II disability management, 45.5% felt a master's was the minimum, while 43.2% indicated a bachelor's degree (Currier et al., 2001).

Currier et al., (2001) report the above findings show there are a common set of functions and knowledge domains that cross Level I and Level II practice areas of disability management. As reflected in Habeck & Kirchner (1999) those practitioners practicing on Level I provide services more centered on the employing organization while Level II practitioners are more in line with traditional vocational rehabilitation and clinical services, i.e. individually based. Since there were function and knowledge domains that were common to both Level I and Level II practice areas, practitioners on either level need to function within the whole scope of the disability management arena including both the employer and the workplace (Currier, et al., 2001).

Those functions that were selected as being "most essential" emphasized internal analysis, planning, implementation, marketing, and evaluation signify that Level II practitioners have an important role to play within disability management, although they would require additional preparation in management and business administration (Currier, et al., 2001). Currier et al., (2001) report that "important additional content areas would include business concepts, organizational behavior, risk management, human resource management, insurance and benefit principles, accounting, business management, and information systems" (p. 142).

Even though rehabilitation counselors can be viable within Level I, or employer formulated disability management, further training to fulfill important functions at the organizational level would open an additional venue for rehabilitation counseling professionals (Currier, et al., 2001). What is not clear is how rehabilitation counselor educators perceive these roles and functions within disability management and if they feel prepared to teach students in these areas.

Another study sponsored by CDMSC was conducted by Chan, Taylor, Currier, Chan, Wood and Lui (2000) to establish job dimensions and knowledge domains of disability management practice specifically to determine the work behaviors of Certified Disability Management Specialists (CDMS), or Level II disability management professionals. Participants for this study included CDMS's as well as other professionals who practiced in the field of disability management. Respondents work backgrounds included rehabilitation counseling (31%), general nursing (19%), occupational health nursing (15%), rehabilitation

nursing (10%) and human resources (10%). Approximately 23% of the respondents worked for internal disability management programs, 28% worked for insurance based, 42% for external disability management vendors and 7% did not report their work setting (Chan et al., 2000).

The survey instrument created for this study was the Disability Management Direct Service Providers' Job Task and Knowledge Inventory, which was developed by the authors through reviewing disability management literature, and adopting items from previous studies, including the previous study mentioned by Currier et al., (2001). The study conducted by Chan et al., (2000) consisted of 53 items in the job dimension section and 71 items in the knowledge domain section. A five-point Likert-type scale was used and participants were asked to respond to each job task or knowledge statement in regards to its importance in their practice as a disability management professional.

The Chan et al., (2000) study further built upon the Currier et al., (2001) study in validating the job dimensions and knowledge domains relevant to Level II disability management practice. The study also found disability management professionals attributed different levels of importance for job functions and knowledge domains based on practice setting and professional background, i.e. rehabilitation counselors' rate vocational rehabilitation job functions higher than nurses, while nurses rate the medical case management function as more important.

Chan et al., (2000) state that "although fundamental training in rehabilitation is still very important for disability management practice, new

knowledge and skills appear to be required, even at the pre-service level of education" (p. 55). They go further to state that disability management will continue to be an area of potential growth opportunity for many rehabilitation disciplines (including rehabilitation counseling) and that findings from this study "can assist educators and trainers in the design and implementation of curricula and materials that address nationally validated knowledge and skill domains in disability management" and that "this information could benefit pre-service as well as continuing education programs to organize and prepare curricular training materials or clinical experiences" (Chan et al., 2000, p. 55).

A follow up role and function study was conducted on behalf of CDMSC in 2004 to determine the prevailing domains of disability management practice and to ascertain an empirical basis for a certification exam for disability management specialists which would be consistent with changing standards of practice in the field of disability management (Rosenthal, et al., 2007). Rosenthal et al., (2007) state that "in this rapidly developing field (disability management) with a broadening diversity of interventions and providers' programs, in-depth research is essential for standardization, proper credentialing, and emergence of evidence-based practices to guide further advances in the field" (p. 78).

For this study CDMSC gathered a panel of 13 experts in disability management from government, business, education, health care, insurance, and public and private practice throughout the United States. From there these experts utilized the previous CDMSC role and function study conducted by Currier et a., (2001) as a starting point for updating domains of practice and task

statements and for developing a questionnaire. The experts identified three corresponding knowledge domains. Domain I, disability case management, consists of a practitioner working one-on-one with ill/injured employees in returning them to productive work. Domain II, disability prevention and workplace intervention, consists of a more proactive approach in reducing workers' compensation claims and costs through early intervention and remediation. Domain III, the newest domain called "Program development, management and evaluation", consists of the design, implementation and evaluation of programs and utilizing expertise in broader absence management and health and productivity initiatives (Lui & Rosenthal, 2008, p. 10-11).

Both CDMS and non-certificants were surveyed. Rosenthal et al., (2007) reported that "given that a predominant theme generated by the subject matter experts was that disability management practice has changed considerably over the past several years, surveying nonparticipants who were practicing disability management was very important" (p. 79). Scales used in other role and function studies were reviewed by the expert panel. Three scales seemed the most central in evaluating the tasks associated with each of the three disability management knowledge domains including: importance, criticality and frequency (Rosenthal et al., 2007).

The response rate for this survey was 20% (304 out of 1500), of which 19% of CDMS responded and 22% of non-certificants responded. Approximately 87.4% of respondents worked full time in the field of disability management, consisting of nurse case managers (40.1%), rehabilitation counselors (19.4%)

and disability management consultants (8.8%). Respondents reported that the quantity of time spent doing specific work activities included: disability case management (39.55%), return-to-work coordinators (26.05%); managerial/consultive roles in disability management (18.31%) and vocational counseling, assessment, and job placement/job development (16.09%) (Rosenthal, et al., 2007).

Changes in how disability management is practiced have been uncovered in this study through the three domains identified by the experts and validated by the respondents (Rosenthal, et al., 2007). This study showed that individual practices (Level II) and organization practices (Level I) involving disability management are being blended, especially in the second disability management domain, disability prevention and workplace intervention. Rosenthal, et al., (2007) state that "although past disability management practice has involved a distinction in function between direct service-oriented function (Level II) and administration or managerial-oriented function (Level I), employers now place greater expectations on disability managers to demonstrate a broader range and more specialized practice that includes an understanding of such advanced concepts as absence management, presenteeism, integrated benefit practice, productivity enhancement, and health and wellness paradigms" (p. 82). Due to these additional knowledge domains in disability management through the addition of domain III, practitioners will be expected by employers to be able to use evidence based practices to demonstrate their accountability (Rosenthal et al., 2007).

While the above study may have had a below expected response rate, specifically of CDMS certificants, it still yields critical information, especially for rehabilitation counseling educators. Lui & Rosenthal (2008) argue that "educators must encourage more students to broaden their academic pursuits, such as with courses in human resource management, organizational development, and business management" and "field study to gain practical experience will also prove necessary for many students who will need to demonstrate a working knowledge of program design, implementation and evaluation in order to practice disability management" (p. 10). Disability management for employers, in a large part, has been attributed to cost savings. Employers will require evidence and research to validate disability management services. While rehabilitation counseling has a good foundation, it must go beyond current rehabilitation certification and licensure requirements if rehabilitation counseling will remain a piece of the disability management field (Lui & Rosenthal, 2008).

DM and Rehabilitation Counseling

Rehabilitation counselors in the private sector have been progressively practicing in disability management settings (Leahy et al., 2003). Leahy et al. (2003) also state that rehabilitation counseling, as a whole, has "witnessed significant changes in the delivery of rehabilitation counseling services in the United States in response to evolving federal legislative mandates, changes in

state workers' compensation laws, the generation of new knowledge, and changes in the larger business and economic communities" (p. 80).

Shrey et al. (1995) contend that with the recent trends in rehabilitation, the economy, and workplace show that rehabilitation counselors can play an integral role in the management of injury and disability in the workplace. Rehabilitation counselors can practice disability management in a variety of work settings. A counselor may work as: (a) an employee of a company which is providing disability management services for its employees; (b) part of an insurance company offering disability management services; (c) a counselor within a private-for-profit rehabilitation company offering disability management services; or (d) an owner of a rehabilitation company offering disability management services (Brodwin, 2001).

As shown above there are a variety of settings in which rehabilitation counselors can practice disability management. Due to this it is difficult to determine the actual number of rehabilitation counselors, yet alone all professionals practicing in this field. Chan et al., (2000) state there are "tens of thousands of practitioners that describe their work as DM, including professionals from many educational and experiential backgrounds" (p. 54). However, they also state that disability management will continue to grow for many rehabilitation disciplines, including rehabilitation counseling.

Bruyère and Shrey (1991) further acknowledge the role rehabilitation counseling has in the field of disability management as the "development, implementation, and evaluation of industry-based disability management services

requires extensive coordination among employers, labor organizations, attorneys and health care-allied health professionals in the community" and "counseling, case management, and assessment skills are important assets when facilitating disability resolution services among injured workers" (p. 238). Rehabilitation counseling holds these assets (counseling, case management, assessment) as core professional functions.

Habeck et al. (1991) reported that employers will be at different stages of disability management program implementation, and acceptance and their needs will vary based on industry and their workforce. It is vital that rehabilitation counselors consider each organization, and where they fall on the disability management continuum, in order to effectively assist organizations as a whole, as well as individual employees (Habeck et al., 1991). In order to do this, rehabilitation counselors must have an extensive knowledge, and understanding of disability management.

Rehabilitation counseling must also revisit some models of placement for people with disabilities. Moving from a "supply side" placement model (serving individuals with disabilities) to a "demand side" model (understanding the needs, perspectives, and concerns of employers) will ultimately lead to rehabilitation counselors successfully placing more people with disabilities into the labor force (Rosenthal & King, 2008). Rosenthal & King (2008) also state that "the demand-side approach is supported by best practices in disability management" and disability management "addresses employers' desires to minimize the cost

impact of employee absence and disability, while improving the health and productivity of employees" (p. 7).

Rehabilitation Counselor Education

Rehabilitation counseling has a long history of empirically defining its' profession (Emener & Rubin, 1980; Leahy, Shapson, & Wright, 1987; Leahy et al., 2003) and the foundation of a profession, such as rehabilitation counseling, is determined through classifying and defining precise knowledge and skills which are essential for successful service provision (Szymanski, et al., 1993). However due to the vibrant rehabilitation environment and expanding areas of research within rehabilitation counseling it has become increasingly challenging for rehabilitation educators to remain informed about the profession of rehabilitation counseling (Emener, Rasch & Spector, 1983).

While the accreditation standards for Council on Rehabilitation Education (CORE) "say very little about employer knowledge as an important skill for rehabilitation counselors to have", CORE standards "do acknowledge the need for rehabilitation counseling students to have an understanding about the workplace, including business and human resources concepts and terminology; workplace culture and environment; and employer practices that affect the employment or return to work of people with disabilities" (Rosenthal & King, 2008, p. 8).

Lui & Rosenthal (2008) disagree in that "the training and curricula associated with a CORE accredited program may not be adequate at this time to

enable graduates from such programs (rehabilitation and/or vocational counseling) to enter the labor market with the capacity to provide the complex array of services associated with domain III of disability management" (p. 12).

Zanskas & Leahy (2007) further reiterate by stating "although employment in managed care and disability management settings appears to incorporate aspects of the knowledge and skill base acquired through traditional rehabilitation counselor education programs, the literature review suggests these emerging settings require unique skill sets not previously emphasized or addressed in the traditional graduate curriculum" (p. 208).

The Aging Workforce

Disability management programs, along with the partnership of rehabilitation counseling, will become invaluable tools to employers as the workforce ages. Shrey et al. (1995) reported that before the year 2010 there will be 74 million people (26% of the U.S. population) age 55 or older, and 39 million (14%) over the age of 65. The median age will rise from 33 years old in 1990 to 39 years old in 2010, and this aging workforce will bring with it cumulative trauma conditions, age related diseases, and occupational diseases, many of which will become work-related compensable impairments (Shrey et al, 1995). These work-related compensable impairments will add to an already expensive cost for employers because payments for workers' compensation exceed payments for "state and federal unemployment insurance, food stamps, supplemental security income, veteran programs or housing programs" (Hester, Decelles & Keeper, 1989, p. 213-214).

By the year 2020, one in three Americans will be over the age of 50, and as the workforce ages these disability costs if not attended to will soar (Akabas, Gates, Galvin, 1992, p. 8). With the age of workers increasing, the incidence, severity, and duration of disability will increase as well (Vargo & Grzanowicz, 2002). To deal with these changes, employers will need to align administrative procedures, plan designs, and employer culture to support and retain older workers (Vargo et al., 2002, p. 24). Habeck et al. (1991) agree stating that "as demographic changes in the labor force threaten profitability, companies are compelled to maintain the health and productive employment of current skilled workers and to accommodate older workers with chronic impairments, in preference to seeking new hires, who may not be available or may not have the necessary skills" (p. 211).

Many employers once believed that older workers meant higher costs in terms of benefits, were absent more due to illness, were not productive and had more accidents (Corthell, Corthell & McAlees, 1991). Corthell et al., (1991) explained that, except for health insurance which is still being studied, the other factors listed were not true and that other employers have recognized insurance costs for older workers are less expensive as they typically have fewer dependents, don't need pregnancy insurance, and may have other health insurance.

Corthell et al. (1991) bring to light three areas regarding older workers which need to be considered by disability management and rehabilitation counseling. First, more attention will need to be given in designing jobs and

working conditions which are tailored to the unique capabilities, limitations, needs and preferences of older workers remaining employed. Second, and as mentioned earlier, employers are realizing the value older workers bring to the workplace in terms of their experience, knowledge, work habits and attitudes. Third, many retirees are returning to work to supplement social security income, even though the laws put heavy restrictions on their earnings (Corthell et al., 1991, p. 29).

This last point may be the most significant, as the major source of income for older Americans (35%) is Social Security (U.S. G.A.O, 2001). In addition, Habeck (1999) noted that one of the characteristics of some disability management programs was when return-to-work was not successful, individuals were assisted in applying for Social Security Disability Insurance (DI) benefits. Thus, if disability management programs were not successful, employees were shifted to public programs (Habeck, 1999).

Unfortunately, shifting individuals from one program to another is a great disservice, to both the individuals and the programs involved. Additionally, the Social Security system is facing many problems of its' own, which may lead to an increase of older individuals re-entering, or remaining, in the workforce.

In January 2001, the United States General Accounting Office released a report on the Social Security Administration Disability programs. It has reported that each month the Social Security Administration pays nearly $6 billion in cash benefits to people with disabilities who are beneficiaries of Disability Insurance (DI) and Supplemental Security Income (SSI). The size of the number of

recipients has grown over the past 10 years by 65%, to its current size of 7.5 million (U.S.G.A.O, 2001). The report states that this growth has contributed to the DI trust fund's projected insolvency in 2023, and a significant increase in expenditures for SSI benefits, which are paid out of general revenues. The above figures show that we can no longer view disability management, rehabilitation counseling, and public programs (i.e. SSI, DI) as independent of one another. In actuality, they are interdependent and will become even more so in the future.

For rehabilitation counseling to remain a viable profession it must move beyond focusing on disability management as solely a component for returning people with injuries or disabilities to competitive employment. Rehabilitation counseling must begin to embrace and understand the challenges employers are facing and incorporate those findings into practice through education. However this cannot be done until we first research how rehabilitation counselor educators' rate identified disability management knowledge domains on scales of importance, their own proficiency in teaching and student preparedness.

Chapter III

Methodology

The purpose of this quantitative study was to gather data to better understand which identified disability management knowledge tasks rehabilitation counseling educators perceived as important for the field of rehabilitation counseling, how they perceived their own proficiency to teach in these areas, as well how they perceived overall student preparedness. This quantitative research was obtained through a survey using rating scales with an online questionnaire which included descriptive and ex post facto design components. Descriptive statistics were computed for the rehabilitation counseling educators characteristics based upon the demographic portion of the online questionnaire (Leedy & Ormrod, 2005). A power analysis was conducted prior to the start of this study to determine the best sample size of participants needed to run selected analysis, which was determined to be 197 using a 5% margin of error, 95% confidence level and population size of 400. The findings from this study will help better understand educator perceptions of identified disability management knowledge tasks and assist in determining potential changes needed in rehabilitation counseling curriculum.

The research questions this study will address include: (a) rehabilitation counseling educators perceived importance of identified disability management tasks; (b) perceived proficiency to teach these tasks; and (c) perceived overall student preparedness.

Participants

The population of interest in this study was rehabilitation counseling educators. A national sample of participants was drawn using the listing of accredited member institutions, programs and certified individual members obtained through the National Council of Rehabilitation Education (NCRE) 2005-2006 directory. These names were then cross referenced with institutions websites to update staff changes and/or email addresses. Faculty participants were eligible if they obtained the rank of Assistant Professor, Associate Professor, Professor, adjunct instructor or instructor who was currently involved in teaching and/or clinical supervision. Based on the above a total of 697 names and email addresses were obtained for this study.

Instrumentation

For this study a modified version of the Certification of Disability Management Specialists Commission (CDMSC) Role and Function Analysis Survey for the Certified Disability Management Specialist (CDMS) constructed for the 2004 study to determine the prevailing domains of disability management practice was used (Rosenthal, et al., 2007).

The 2004 CDMSC Role and Function Analysis Survey was based on expert panel input. The 13 member panel of experts were from across the country in government, business, education, health care, insurance, and public and private practice with criteria for selection based on number of years of practice in DM or related fields, management experience in DM, and noteworthy contributions to the field (Rosenthal, et al., 2007). From there, in order to update

the domains of practice and task statements, the prior CDMSC role and function study (Currier et al., 2001) was used as a starting point.

The panel of experts identified three knowledge domains: (a) disability case management; (b) disability prevention and workplace intervention; and (c) program development, management and evaluation. Within domain I there are 10 associated tasks, domain II has 7 tasks and domain III has 9 tasks, for a total of 26 tasks associated with identified disability management knowledge domains. The population sampled included certified Disability Management Specialists, International Association of Rehabilitation Professionals, Certified Occupational Health Nurses, Certified Case Managers, Certified Professional Disability Managers, and individuals from the database of the Disability Managers Employers Coalition. A rating for each task statement included a five point Likert-type scale for Importance, Criticality, Difficulty, Acquisition and Frequency. These scales were selected as they are often used in practice analysis and other role and function validation studies (Rosenthal, et al., 2007).

For this study the 26 tasks related to the three disability management knowledge domains remained in tact while three, five point Likert-type scales were used. The scales used were importance, proficiency and preparedness, in order to address the research questions posed in this study.

The first question identified rehabilitation counselor educators perceived importance of the 26 identified disability management knowledge tasks for the field of rehabilitation counseling using the 5-point Likert scale. Participants were asked to rate the importance of each disability management task using the

following 5-point Likert-type scale: 1=not important; 2=somewhat important; 3=important; 4=very important; and 5=extremely important.

The second question asked the sample of rehabilitation counselor educators to rate their own perceived instructional proficiency to teach the 26 disability management tasks. A modified scale used by Ebener, Berven & Wright (1993) was used by Zanskas (2007) asking "participants to rate each specific area of competence according to their self-perceived ability to teach that competency" (p. 46). This study modified that scale and asked participants to rate their self-perceived proficiency to teach each specific disability management task by rating each of the 26 tasks in terms of "your own perceived instructional proficiency in teaching these tasks" using the following 5-point Likert-type scale: 1=not proficient; 2=somewhat proficient; 3=proficient; 4=very proficient; and 5=extremely proficient.

The third question asked the sample of educators' to rate perceived overall student preparedness in the 26 disability management tasks. Overall student preparedness was linked to educators' perceived ability of students to successfully carry out the 26 disability management tasks upon completion of a Master's degree in rehabilitation counseling. Participants were asked to rate overall student preparedness using the following 5-point Likert-type scale: 1=not prepared; 2=somewhat prepared; 3=prepared; 4=very prepared; and 5=extremely prepared.

Demographic Questionnaire

Participant attributes were acquired through the use of an 18 item demographic questionnaire. Information was gathered pertaining to four broad demographic categories of participants. These included: (a) identifying characteristics; (b) professional characteristics; (c) participant's graduate program disability management content characteristics; and (d) disability management experience.

Procedures

Since rehabilitation counselor educators represent a small population and the goal of this study was to generalize the results within the field of rehabilitation counselor education, participation in this web-based survey represented a non-probability, convenience method of sampling. Participants for this study were petitioned through individual emails sent to faculty and educators listed in the 2005-2006 NCRE member institution and program membership directory, which were verified against institutions websites for accuracy. Participants were sent details of the study along with an invitation to participate and a link to the web site containing the survey (Appendix B). In addition, a follow up invitation to participate, along with a link to the web based survey, was sent to participants two weeks after the initial invitation was sent (Appendix C). The Research Committee of the National Council on Rehabilitation Educators approved this study and gave consent for distribution to the rehabilitation counselor educators selected to participate.

Design

The intent of this web-based quantitative study was to use a modified version of the Certification of Disability Management Specialists Commission (CDMSC) role and function study of 2004, and an 18 question demographic questionnaire, to discover how rehabilitation counselor educators perceived the importance, their own proficiency to teach and student preparedness in 26 disability management tasks (Appendix A). A pilot study, using the modified CDMSC survey and demographic questionnaire was conducted with 4 individuals in the field of rehabilitation counseling education to ensure the survey tools were clear and understandable by survey participants.

The dependent variables for this investigation were: (a) importance of identified knowledge tasks in disability management for the field of rehabilitation counseling; (b) proficiency to teach disability management knowledge tasks, and (c) overall student preparedness in the disability knowledge tasks. The independent variables for this study were: (a) age; (b) gender; (c) degree; (d) years of experience as a rehabilitation counselor; (e) previous occupation, and (f) current RCE curriculum's emphasis on disability management knowledge and skill preparation.

This study was approved by Michigan State University's Institutional Review Board and classified within the Exempt 2 category (IRB# - x09-264). This study fell into the Exempt 2 status as it was a survey interview, education research and internet based research. Shannon et al., (2002) study of experienced survey researchers found that the use of electronic surveys, "were

most positive in terms of the reduction of costs (i.e., postage, phone charges) associated with electronic surveys, the use of electronic mail for pre-notification or follow-up purposes as a complement to other survey delivery methods, and the compatibility of data with existing software programs" and that "the lack of a tangible reward would not prevent individuals from responding and that they would respond to a web-based survey if all they had to do was click on the HTML address from an email message" (p.1).

Since this study did not have a sponsor there was no risk of conflict of interest. The participants selected for this study were not employees or students of this researcher, which reduced the threat of coerced participation. Participants studied were not compensated for their participation and were able to withdraw from this study at any point in time as this study was voluntary. No vulnerable populations were engaged in this study as this was a descriptive study focused on the opinions of rehabilitation counselor educators.

Informed consent was addressed through a written form included in the instructions accompanying the survey questionnaire (Appendix A). The consent forms were written in the second person, in order to remove any coercive tone that may have existed. The rehabilitation counselor educator participants were informed that by selecting to proceed with the survey they were giving their consent and had agreed to participate.

Data Collection

Upon obtaining the dissertation committee's approval the proposal was forwarded to the NCRE Research Committee and Michigan States Institutional Review Board seeking their approval. Upon approval, an email was sent to eligible educators identified from the NCRE 2005-2006 directory and verified through institutions web sites, with an invitation explaining the study and a link to the web-based survey site. A follow up email was sent to participants two weeks after the initial invitation, thanking those who had participated and requesting participation for those that did not.

This research design also attended to possible participant apprehensions concerning confidentiality. Survey Monkey was used as the web based automated survey instrument and even though demographic information was collected in order to allow this researcher the ability to generalize results, no personally identifying information was required. Individual survey results were maintained on Survey Monkey and demographic information obtained was viewed in aggregate and pulled from a population of rehabilitation counselor educators, further protecting the privacy of responses. The only potential direct contact participants in this study could have had with the researcher would be initiated by the participants themselves to address a question about the study or request a synopsis of the aggregate findings of this study.

Data Analysis

Descriptive statistics were calculated for participant characteristics based on the demographic segment of the questionnaire. Age was a continuous

variable. Group means, medians, and standard deviations were calculated and exhibited in tables for the continuous variables in the entire sample.

In order to further depict this population of rehabilitation counselor educators, frequencies and percentages were computed for the following categorical variables: (a) gender; (b) professional certification; (c) degree major; (d) years of experience as a rehabilitation counselor educator; (e) professional memberships held; (f) years of experience in paid disability management activities; (h) forms of disability management training received; (i) authored or co-authored articles regarding disability management; (j) grants or rfp's written related to disability management; (k) the availability of a course emphasizing disability management knowledge and skill preparation; (l) amount disability management is emphasized in the curriculum; (m) current faculty rank; (n) accredited by NCRE; (o) NCRE membership region; (p) number of credit hour requirements for programs Masters degree in Rehabilitation Counseling; and (q) who teaches disability management courses for their program.

Exploratory factor analysis was not used in this study as the subject to item ratio was too low. Research questions one, two and three addressed rehabilitation counselor educators' perception of the importance of disability management tasks for rehabilitation counseling practice, their self-perceived instructional proficiency for teaching these tasks and overall student preparedness. Descriptive statistics were computed for each disability management task item listed on the questionnaire, the three respective a priori disability management domains: (a) disability case management; (b) disability

prevention and workplace intervention, and (c) program development, management and evaluation, and total sample scores. Descriptive statistics were computed based on participant responses to the five point Likert-type scales of importance, proficiency and preparedness. 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 obtain the internal consistency and reliability of the items identified within the three respective a priori disability management domains.

Multiple analysis of variance (MANOVA) and analysis of variance (ANOVA) were used to compare the responses of defined subgroups identified in the research questions. These included questions 1.a., 2.b., and 3.b., which identified any differences in level of importance, perceived proficiency and student preparedness across the components of the three disability management domains. Additional subgroups included questions 1.b., 2.a., and 3.a., which identified differences relative to specific demographic characteristics of faculty (i.e. gender, years of experience as a rehabilitation counselor educator and number of years in paid disability management) in relation to perceived importance, proficiency and preparedness. To answer question 2.c., what is the relationship between educators' perceptions of the importance and their pedagogical proficiency to teach disability management tasks, Pearson's product moment correlation was used to determine any correlation between these two variables. Post hoc Bonferroni adjustments were conducted following significant findings through MANOVA analysis.

Chapter IV

Results

Response Rate

Of the original 697 email invitations requesting participation in this study, 101 (14%) were returned as invalid or undeliverable email addresses, 16 (2%) declined to participate, as they were not involved in the field of rehabilitation counseling and didn't feel able to respond, and an additional 16 (2%) opted out of the survey (no reason given).

A second email invitation to participate was sent to the remaining 564 participants, which 89 responded (overall 16% response rate). Of the 89 responses 15 (17%) did not complete any questions past the "Complete Questionnaire" selection. A total of 3 (3%) did not answer enough questions throughout the survey to be determined of use by this researcher and 4 (4%) did not answer any of the questions in Domain III of the survey (program development, management & evaluation). Of the 564 participants a total of 67 (12%) survey responses were deemed usable.

Overall, survey response rates have been on the decline (Groves & Couper, 1998). Although many researchers comment positively about the response rate and speed of email surveys (compared to traditional mail surveys), most online/electronic surveys have not met the response rate set by traditional mail techniques (Schaefer & Dillman, 1998). One reason for low response rate can be attributed to the importance of the subject of the study itself, as seen by participants. Sheehan & McMillan (1999) found that "issue salience had a

stronger impact on response rate than did any other issue or research-design decision including advance notice, follow-up contacts, or monetary incentives" (p. 47).

Due to the low response rate caution was taken in analyzing and interpreting the statistical results of this survey. The initial power analysis revealed a sample size of 197 was needed. Since the number of usable surveys was only 67, limited analysis could be conducted.

Characteristics of the Sample

The final sample of this study consisted of 67 faculty, instructors and adjuncts that were either members of NCRE, or were employed by NCRE member institutions or programs. Tables 1 through 4 displays participants' demographics as well as professional and programmatic characteristics. Age of participants ranged from 32-65, with a median age of 51.59 years. The sample consisted of 34 females (50.7%) and 32 males (47.8%). Regarding professional certifications (participants could report more than one), 57 (85.1%) reported being certified rehabilitation counselors (CRC), 17 (25.4%) indicated they were national certified counselors (NCC), 2 (3.0%) listed being certified case managers (CCM), 3 (4.5%) reported being certified disability management specialists (CDMS) and other 8 (11.9%) licensed professional counselor (LPC), 4 (6.0%) certified vocational evaluators (CVE) and 3 (4.5%) as licensed psychologists.

Participants reported their own degree major as: 29 (43.3%) rehabilitation counselor education, 13 (19.4%) rehabilitation psychology, 9 (13.4%) counselor

education, 2 (3.0%) rehabilitation doctorate and 15 (22.4%) listed other as an option. In regards to the number of years as a rehabilitation counselor educator, participants reported 1 year or less at 1.5% (n=1), 2-5 years at 21.5% (n=14), 6-10 years at 26.2% (n=17), 11-15 years at 13.8% (n=9), 16-20 years at 9.2% (n=6), 21-25 years at 6.2% (n=4), and 26 or more years as a rehabilitation counselor educator at 21.5% (n=14).

Multiple professional memberships were reported, but only those that had two or more participants reporting a membership were included in this data. Professional memberships included, Association for Counselor Education and Supervision (ACES) 4.5% (n=3), International Association of Rehabilitation Professionals (IARP) 11.9% (n=8), American Psychological Association (APA) 20.9% (n=14), National Rehabilitation Counseling Association (NRCA) 20.9% (n=14), American Rehabilitation Counseling Association (ARCA) 35.8% (n=24), National Rehabilitation Association (NRA) 35.8% (n=24), American Counseling Association (ACA) 44.8% (n=30) and the National Counsel of Rehabilitation Educators (NCRE) 55.2% (n=37).

Participants were also asked if they engaged in paid disability management activities. A total of 30 (44.8%) said yes, while 35 (52.2%) said no. Of those that stated yes, the number of years reported working in paid disability management activities were, 1-5 years at 16.4% (n=11), 20 or more years at 11.9% (n=8), 6-10 years and 11-15 years both at 4.5% (n=3), 16-20 years at 3.0% (n=2) and less than one year at 1.5% (n=1). The most reported type of formal disability management training detailed by participants was workshops at

62.7% (n=42) followed by coursework 41.8% (n=28), on-the-job training 38.8% (n=26), practicum/internship 31.3% (n=21) and not applicable 16.4% (n=11). Of those answering yes, 3% (n=1) selected participating in none of the disability management trainings, 6% (n=2) reported participating in one, 30% (n=9) reported two, 33% (n=10) reported three and 27% (n=8) reported participating in all four formal disability management trainings.

Additional questions were asked of participants regarding publications and grant writing or RFP's related to disability management. In response to authoring publications in disability management, participants that reported no were 65.7% (n=44) and yes 29.9% (n=20). In response to grant writing or RFP's related to disability management, 79.1% (n=53) of respondents stated no while 17.9% (n=12) stated yes.

Current rank of participants included assistant professor 31.3% (n=21), associate professor 23.9% (n=16), professor 26.9% (n=18), adjunct professor 11.9% (n=8), and professor emeritus, instructor and other (executive director) were 1.5% (n=1). Additional program questions were asked related to disability management in participants' institution. When asked how much disability management was emphasized in curriculum 38.8% (n=26) stated it was somewhat emphasized, 25.4% (n=17) reported not emphasized, 22.4% (n=15) emphasized, 6.0% (n=4) very emphasized, and 3.0% (n=2) stated extremely emphasized. Regarding how participants programs offered disability management curriculum, 74.6% (n=50) reported it was part of another course, 11.9% (n=8) was reported for both required course and an elective, 7.5% (n=5)

not applicable, and 3.0% (n=2) for required interdepartmental course and currently developing course. In relation to who teaches disability management courses, full time faculty RCE 73.1% (n=49), adjunct or PT faculty 26.9% (n=18), not applicable 11.9% (n=8), human resources/labor relations or organizational behavior faculty 3.0% (n=2), and full time interdisciplinary faculty 1.5% (n=1).

Respondents reported master's degree rehabilitation counselor education program credit hour requirements to complete the degree at: 48 credit hours 34.4% (n=23), 60 credit hours 31.3% (n=21), 48 or 60 credit hours 13.4% (n=9), 49-59 credit hours 13.4% (n=9), and other 6.0% (n=4). When asked if the respondents' college/university was a member of the National Council of Rehabilitation Educators (NCRE), 94% (n=63) stated yes while 1.5% (n=1) reported no. Finally, participants were asked to report the NCRE Region they belonged to. Region IV (19.4%, n=13), Region III (16.4% n=11), and Region V (13.4%, n=9) were the largest reported. It should be noted that Region X was accidentally left out as a response available for participants on the web survey.

Table 1 – Demographic Characteristics of the Sample

Variable	N	Valid %
Age		
30-35	2	3.1
36-40	9	14.1
41-45	7	10.9
46-50	9	14.1
51-55	12	18.8
56-60	13	20.3
61-65	12	18.8
Gender		
Male	32	47.8
Female	34	50.7
Professional Certifications*		
CRC	57	85.1
NCC	17	25.4
CCM	2	3.0
CDMS	3	4.5
Other, LPC	8	11.9
Other, CVE	4	6.0
Other, License Psychologist	3	4.5
Degree Major		
Counselor Education	9	13.4
Psy.D.	0	0
Rehabilitation Counselor Education	29	43.3
Rehabilitation Psychology	13	19.4
Rh.D.	2	3.0
Other	15	22.4
Years as a RCE		
1 year or less	1	1.5
2-5 years	14	21.5
6-10 years	17	26.2
11-15 years	9	13.8
16-20 years	6	9.2
21-25 years	4	6.2
26+ years	14	21.5

*Participants could report more than one.

Table 2 – Demographic Characteristics of the Sample

Variable	N	Valid %
Professional memberships* (n>2)		
ACES	3	4.5
IARP	8	11.9
APA	14	20.9
NRCA	14	20.9
ARCA	24	35.8
NRA	24	35.8
ACA	30	44.8
NCRE	37	55.2
Engaged in paid disability management activities		
Yes	30	44.8
No	35	52.2
Years in paid disability management activities		
Less than one	1	1.5
1-5 years	11	16.4
6-10 years	3	4.5
11-15 years	3	4.5
16-20	2	3.0
20+ years	8	11.9
Not applicable	39	58.2
Types of disability management formal training*		
Workshops	42	62.7
Practicum/Internship	21	31.3
Coursework	28	41.8
On-the-job training	26	38.8
Not applicable	11	16.4
Authored publications in disability management		
Yes	20	29.9
No	44	65.7
Grant writing or RFP's related to disability management		
Yes	12	17.9
No	53	79.1

*Participants could report more than one.
Note: N's do not sum to 67 due to missing data.

Table 3 – Demographic Characteristics of the Sample

Variable	N	Valid %
Current Rank		
Assistant Professor	21	31.3
Associate Professor	16	23.9
Professor	18	26.9
Professor Emeritus	1	1.5
Adjunct Professor	8	11.9
Instructor	1	1.5
Other, Executive Director	1	1.5
Disability management emphasized in curriculum		
Not emphasized	17	25.4
Somewhat emphasized	26	38.8
Emphasized	15	22.4
Very emphasized	4	6.0
Extremely emphasized	2	3.0
Program disability management curriculum offered*		
Required course	8	11.9
Required interdepartmental course	2	3.0
Elective	8	11.9
Part of other courses	50	74.6
Currently developing course	2	3.0
Not applicable	5	7.5
Disability management course instructor		
Full time faculty RCE	49	73.1
FT faculty interdisciplinary	1	1.5
Adjunct or PT faculty	18	26.9
FT faculty other department	0	0
HR/LR or OB faculty	2	3.0
Not applicable	8	11.9

*Participants could report more than one.
Note: N's do not sum to 67 due to missing data.

Table 4 – Demographic Characteristics of the Sample

Variable	N	Valid %
Required credit hours for Masters' degree		
48	23	34.3
60	21	31.3
48 or 60	9	13.4
Between 49-59	9	13.4
Other	4	6.0
College/university member of NCRE		
Yes	63	94.0
No	1	1.5
NCRE Region		
Region I	4	6.0
Region II	3	4.5
Region III	11	16.4
Region IV	13	19.4
Region V	9	13.4
Region VI	5	7.5
Region VII	1	1.5
Region VIII	3	4.5
Region IX	3	4.5

*Participants could report more than one.
Note: Researcher inadvertently left out NCRE Region X from the survey.

Disability Management Knowledge Tasks

To address research questions number one, and establish which disability management knowledge tasks rehabilitation counselor educators perceived as important for effective rehabilitation counseling practice, the mean and standard deviation for each item was calculated. Within each a priori domain, each item was ranked and ordered. A mean score and standard deviation was calculated for each of the three domains. To signify an item as important, based on group mean scores, an a priori criterion level of (≥3.00) was utilized, which is the mid-point of the Likert-type scale on the Certification of Disability Management Specialists Commission (CDMSC) Role and Function Analysis Survey for the Certified Disability Management Specialist (CDMS). Importance of these disability management knowledge tasks, for effective rehabilitation counseling practice, will be discussed using this measure. Additionally, four a priori criterion levels were developed for the aggregate means for each item to illustrate educators' perceived level of importance: very important (≥4.00), important (M=3.00-3.99), somewhat important (M=2.00-2.99), and not important (≤1.99). Domain and item means and standard deviations are shown in Tables 5 through 7.

Perceived Importance

The first domain, disability case management (Table 5), consists of 10 items associated with a practitioner working one-on-one with ill/injured employees in returning them to productive work. On the importance scale, participants rated all 10 items as important (M=3.00-3.99) to very important

(M=4.00-4.99), and met the criterion set (≥3.00), along with the overall mean score (M=4.05). Cronbach's alpha coefficient for the importance scale in domain I for the total sample was .860, which signifies very good internal consistency for the items in this scale. Pallant (2007) states that Cronbach's alpha values "above .7 are considered acceptable; however, values above .8 are preferable" (p. 98).

The second importance domain, disability prevention and workplace intervention (Table 6), consists of 7 items related to tasks associated with more proactive approaches in reducing workers' compensation claims and costs through early intervention and remediation. Participants rated all 7 items as important (≥3.00) with an overall mean score (M=3.52) for domain II. These scores show participants view these tasks as important for effective rehabilitation counseling practice. Cronbach's alpha coefficient for the importance scale in domain II for the total sample was .897, which signifies high internal consistency for the items in this scale for domain II.

The third importance domain, program development, management and evaluation (Table 7), consists of 9 items related to tasks associated with the design, implementation and evaluation of programs and utilizing expertise in broader absence management and health productivity initiatives. Participants rated 8 out of the 9 items as important (≥3.00). Item 7 (M=2.98) fell below the criterion set (≥3.00) for an important rating. The overall mean score (M=3.27) for domain III shows participants view these tasks as important for effective rehabilitation counseling practice. Cronbach's alpha coefficient for the importance

scale for domain III for the total sample was .923 which signifies high internal consistency for items in this scale for domain III.

In relation to research question number one part a), regarding whether the levels of importance differed across the three disability management domains, there were differences among the three domains. Educators rated domain importance as follows: domain I (M=4.05), domain II (M=3.52) and domain III (M=3.27). While all three domains were important (≥3.00) the first domain was seen by educators as "very important" while domain II and domain III were seen as important.

Table 5 – Importance Domain I:Disability Case Management

Means and Standard Deviations

	M	SD
Disability Case Management Item Means	4.05	.59
1. Perform comprehensive individual case analysis and benefits assessments using accepted practices in order to develop appropriate interventions.	4.12	.87
2. Review disability case management intervention protocol using standards of care in order to promote quality care, recovery, and cost effectiveness.	3.74	.88
3. Promote collaboration among stakeholders using communication strategies to optimize functional recovery.	4.19	.89
4. Perform worksite/job analyses using observation, interview, and records review in order to determine the requirements of the job.	3.97	.83
5. Develop individualized return-to-work plans consistent with standards of practices and procedures by collaborating with relevant stakeholders in order to facilitate employment.	4.24	.81
6. Implement interventions using appropriate counseling and behavior change techniques in order to optimize functioning and productivity.	4.35	.69
7. Coordinate benefits, services, and community Resources (e.g., orthotics, prosthetics, FCE, IME, durable medical, home care, and vocational rehabilitation) through strategic planning in order to facilitate optimal functioning.	4.02	.95
8. Monitor progress for achievement of targeted milestones through ongoing comparison with established best-practice guidelines in order to make recommendations, optimize functional recovery, and provide needed follow-up.	3.61	1.07

Table 5 (cont'd)

Means and Standard Deviations

	M	SD
9. Manage caseload using ethical strategies in order to enhance effectiveness and efficiency.	4.46	.725
10. Prepare case notes and reports using applicable forms and systems in order to document case activities in compliance with standard practices and regulations.	3.90	.86

Table 6 – Importance Domain II:Disability Prevention and Workplace Intervention

Means and Standard Deviations

	M	SD
Disability Prevention and Workplace Intervention	3.52	.81
1. Implement disability prevention practices (i.e. risk mitigation procedures such as job analysis, job accommodation, ergonomic evaluation, health and wellness initiatives, etc) through training, education, and collaboration in order to change organizational behavior and integrate prevention as an essential component of organizational culture.	3.64	1.10
2. Develop a comprehensive transitional work program through consultation with all relevant stakeholders in order to facilitate optimal productivity and value in the workplace.	3.56	1.01
3. Develop an interactive process for job site modification, accommodation, or job task assignment incorporating appropriate resources (e.g., ergonomics and assistive technologies) in order to facilitate optimal functioning in the workplace.	3.98	.92
4. Support employment practices that align work abilities with essential job functions by serving as a resource for employees and management in order to prevent disabilities and optimize productivity.	3.82	1.05
5. Recommend strategies to identify ergonomic, safety, and risk factors using available resources (e.g., data and assessment tools) in order to mitigate exposure and improve employee health.	3.32	1.10
6: Recommend strategies that integrate benefit plan designs and related services (e.g., employee assistance programs, community resources, and medical services) by evaluating and coordinating delivery in order to promote prevention, optimal productivity, quality care, and cost containment.	3.41	.99

Table 6(cont'd)

Means and Standard Deviations

	M	SD
7. Recommend health and wellness interventions by targeting the specific needs of employees and the organization in order to increase organizational health and productivity while demonstrating measureable value.	3.12	1.06

Table 7 – Importance Domain III:Program Development, Management and Evaluation

Means and Standard Deviations

	M	SD
Program Development, Management and Evaluation Means	3.27	.83
1. Analyze workplace practices (e.g., benefit design; policies and procedures; regulatory and compliance requirements; employee demographics; and labor relations) using a needs assessment to establish baselines and design effective interventions.	3.22	1.09
2. Present the business rationale for a comprehensive disability management program using baseline data, best practices, evidence-based research, and benchmarks and incorporating cultural and environmental factors to secure stakeholder investment and commitment.	3.29	.99
3. Collaboratively develop and manage the disability management program by specifying essential procedures and training components consistent with pertinent regulations and identifying appropriate services and metrics in order to offer effective services for stakeholders.	3.21	.95
4. Champion individual and organizational behavioral change by assigning responsibility to stakeholders at all levels of the organization in order to achieve strategic outcomes.	3.29	1.04
5. Procure internal and external services using commonly accepted selection criteria to maximize consistency and desired program outcomes.	3.36	1.07
6. Manage service providers using stakeholder-defined performance standards in order to maximize the quality of services and the return on investments.	3.31	.93

Table 7 (cont'd)

Means and Standard Deviations

	M	SD
7. Facilitate the exchange of data and metrics by integrating information systems for disability management programs in order to achieve and report desired program outcomes.	2.98	1.08
8. Conduct ongoing formative and summative program evaluations using qualitative and quantitative methods to improve process and measure outcomes.	3.58	.97
9. Create disability management performance reports and other communication vehicles targeted to relevant stakeholders using variety of media in order to promote stakeholder awareness and collaboration.	3.09	1.01

Perceived Proficiency

To address research question number two, and establish how educators perceived their own instructional proficiency in teaching disability management tasks, the mean and standard deviation for each item was calculated. Within each a priori domain, each item was ranked and ordered. A mean score and standard deviation was calculated for each of the three domains. To signify an item as important, based on group mean scores, an a priori criterion level of (≥3.00) was utilized, which is the mid-point of the Likert-type scale on the Certification of Disability Management Specialists Commission (CDMSC) Role and Function Analysis Survey for the Certified Disability Management Specialist (CDMS). Educators' perceived proficiency in teaching these tasks will be discussed using this measure. Additionally, four a priori criterion levels were developed for the aggregate means for each item to illustrate educators' perceived proficiency to teach: very proficient (≥4.00), proficient (M=3.00-3.99), somewhat proficient (M=2.00-2.99), and not proficient (≤1.99). Domain and item means and standard deviations are shown in Tables 8 through 10.

The first proficiency domain, disability case management (Table 8), consists of 10 items related to tasks associated with a practitioner working one-on-one with ill/injured employees in returning them to productive work. Participants perceived themselves as proficient on all 10 items (≥3.00). The overall mean score (M=3.77) for domain I shows participants perceive themselves as proficient to teach these tasks. Cronbach's alpha coefficient for

the proficiency scale in domain I for the total sample was .849, which signifies very good internal consistency.

The second proficiency domain, disability prevention and workplace intervention (Table 9), consists of 7 items related to tasks associated with more proactive approaches in reducing workers' compensation claims and costs through early intervention and remediation. Participants rated themselves as proficient to teach (≥3.00) in 6 out of the 7 tasks. Task 5 (M=2.98) educator proficiency was rated as "somewhat proficient" to teach these tasks. The overall mean score (M=3.26) for domain II shows participants view themselves as proficient in teaching these tasks. Cronbach's alpha coefficient for this proficiency scale in domain II for the total sample was .889, which signifies high internal consistency for the items in this scale for domain II.

The third proficiency domain, program development, management and evaluation (Table 10), consists of 9 items related to tasks associated with the design, implementation and evaluation of programs and utilizing expertise in broader absence management and health productivity initiatives. Participants rated themselves proficient on 6 out of the 9 items (≥3.00). Item 1 (M=2.95), item 3 (M=2.65) and item 7 (M=2.60) were below the proficient rating cutoff (≥3.00). The overall mean score (M=3.03) for domain III shows participants view themselves as proficient to teach these tasks. Cronbach's alpha coefficient for the proficiency scale for domain III for the total sample was .923 which signifies high internal consistency for items in this scale for domain III.

In relation to research question number two part b), regarding whether the levels of perceived proficiency to teach differed across the three disability management domains, there were differences among the three domains. Educators rated their proficiency to teach as follows: domain I (M=3.77), domain II (M=3.26) and domain III (M=3.03). Educators rated themselves proficient to teach on all three domains (≥3.00) and rated their proficiency to teach in the same order as importance (domain I, domain II, domain III).

Table 8 – Proficiency Domain I:Disability Case Management

Means and Standard Deviations

	M	SD
Disability Case Management Item Means	3.77	.62
1. Perform comprehensive individual case analysis and benefits assessments using accepted practices in order to develop appropriate interventions.	3.47	1.08
2. Review disability case management intervention protocol using standards of care in order to promote quality care, recovery, and cost effectiveness.	3.12	1.09
3. Promote collaboration among stakeholders using communication strategies to optimize functional recovery.	4.16	.86
4. Perform worksite/job analyses using observation, interview, and records review in order to determine the requirements of the job.	3.93	.94
5. Develop individualized return-to-work plans consistent with standards of practices and procedures by collaborating with relevant stakeholders in order to facilitate employment.	3.77	.96
6. Implement interventions using appropriate counseling and behavior change techniques in order to optimize functioning and productivity.	4.24	.73
7. Coordinate benefits, services, and community Resources (e.g., orthotics, prosthetics, FCE, IME, durable medical, home care, and vocational rehabilitation) through strategic planning in order to facilitate optimal functioning.	3.65	.95
8. Monitor progress for achievement of targeted milestones through ongoing comparison with established best-practice guidelines in order to make recommendations, optimize functional recovery, and provide needed follow-up.	3.52	.99

Table 8(cont'd)

Means and Standard Deviations

	M	SD
9. Manage caseload using ethical strategies in order to enhance effectiveness and efficiency.	4.30	.87
10. Prepare case notes and reports using applicable forms and systems in order to document case activities in compliance with standard practices and regulations.	4.01	.93

Table 9– Proficiency Domain II:Disability Prevention and Workplace Intervention

Means and Standard Deviations

	M	SD
Disability Prevention and Workplace Intervention	3.26	.84
1. Implement disability prevention practices (i.e. risk mitigation procedures such as job analysis, job accommodation, ergonomic evaluation, health and wellness initiatives, etc) through training, education, and collaboration in order to change organizational behavior and integrate prevention as an essential component of organizational culture.	3.29	1.08
2. Develop a comprehensive transitional work program through consultation with all relevant stakeholders in order to facilitate optimal productivity and value in the workplace.	3.26	1.06
3. Develop an interactive process for job site modification, accommodation, or job task assignment incorporating appropriate resources (e.g., ergonomics and assistive technologies) in order to facilitate optimal functioning in the workplace.	3.72	1.02
4. Support employment practices that align work abilities with essential job functions by serving as a resource for employees and management in order to prevent disabilities and optimize productivity.	3.72	.94
5. Recommend strategies to identify ergonomic, safety, and risk factors using available resources (e.g., data and assessment tools) in order to mitigate exposure and improve employee health.	2.98	1.23
6: Recommend strategies that integrate benefit plan designs and related services (e.g., employee assistance programs, community resources, and medical services) by evaluating and coordinating delivery in order to promote prevention, optimal productivity, quality care, and cost containment.	3.02	1.14

Table 9 (cont'd)

Means and Standard Deviations

	M	SD
7. Recommend health and wellness interventions by targeting the specific needs of employees and the organization in order to increase organizational health and productivity while demonstrating measureable value.	3.00	1.07

Table 10: Proficiency Domain III:Program Development, Management and Evaluation

Means and Standard Deviations

	M	SD
Program Development, Management and Evaluation Means	3.03	.90
1. Analyze workplace practices (e.g., benefit design; policies and procedures; regulatory and compliance requirements; employee demographics; and labor relations) using a needs assessment to establish baselines and design effective interventions.	2.95	1.17
2. Present the business rationale for a comprehensive disability management program using baseline data, best practices, evidence-based research, and benchmarks and incorporating cultural and environmental factors to secure stakeholder investment and commitment.	3.02	1.14
3. Collaboratively develop and manage the disability management program by specifying essential procedures and training components consistent with pertinent regulations and identifying appropriate services and metrics in order to offer effective services for stakeholders.	2.65	1.08
4. Champion individual and organizational behavioral change by assigning responsibility to stakeholders at all levels of the organization in order to achieve strategic outcomes.	3.23	1.19
5. Procure internal and external services using commonly accepted selection criteria to maximize consistency and desired program outcomes.	3.16	1.13
6. Manage service providers using stakeholder-defined performance standards in order to maximize the quality of services and the return on investments.	3.03	1.03

Table 10 (cont'd)

Means and Standard Deviations

	M	SD
7. Facilitate the exchange of data and metrics by integrating information systems for disability management programs in order to achieve and report desired program outcomes.	2.60	1.30
8. Conduct ongoing formative and summative program evaluations using qualitative and quantitative methods to improve process and measure outcomes.	3.77	1.06
9. Create disability management performance reports and other communication vehicles targeted to relevant stakeholders using variety of media in order to promote stakeholder awareness and collaboration.	3.11	1.16

Student Preparedness

To address research question number three, and establish how educators perceived overall student preparedness in these disability management tasks upon completion of a Master's level rehabilitation counseling program, the mean and standard deviation for each item was calculated. Within each a priori domain, each item was ranked and ordered. A mean score and standard deviation was calculated for each of the three domains. To signify an item as prepared, based on group mean scores, an a priori criterion level of (≥3.00) was utilized, which is the mid-point of the Likert-type scale on the Certification of Disability Management Specialists Commission (CDMSC) Role and Function Analysis Survey for the Certified Disability Management Specialist (CDMS). Student preparedness, will be discussed using this measure. Additionally, four a priori criterion levels were developed for the aggregate means for each item to illustrate student preparedness: very prepared (≥4.00), prepared (M=3.00-3.99), somewhat prepared (M=2.00-2.99), and not prepared (≤1.99). Domain and item means and standard deviations are shown in Tables 11 through 13.

The first preparedness domain, disability case management (Table 11), consists of 10 items related to tasks associated with a practitioner working one-on-one with ill/injured employees in returning them to productive work. Participants perceived students as prepared on 6 of the 10 items (≥3.00). Student preparedness was rated as somewhat prepared (M=2.00-2.99) on item 1 (M=2.70), task 2 (M=2.42), item 7 (M=2.86) and task 8 (M=2.89). The overall mean score (M=2.90) for domain I shows participants perceive students as

somewhat prepared in these tasks. Cronbach's alpha coefficient for this preparedness scale in domain I for the total sample was .864, which signifies very good internal consistency for the items in the scale for domain I.

The second preparedness domain, disability prevention and workplace intervention (Table 9), consists of 7 items related to tasks associated with more proactive approaches in reducing workers' compensation claims and costs through early intervention and remediation. Participants rated student as prepared (≥3.00) on 0 out of the 7 tasks. Educators' rated students as somewhat prepared (M=2.00-2.99) on all of these tasks. The overall mean score (M=2.25) for domain II shows participants view students as somewhat prepared in these tasks. Cronbach's alpha coefficient for this preparedness scale in domain II for the total sample was .898, which signifies high internal consistency for the items in this scale for domain II.

The third preparedness domain, program development, management and evaluation (Table 13), consists of 9 items related to tasks associated with the design, implementation and evaluation of programs and utilizing expertise in broader absence management and health productivity initiatives. Participants did not rate students as prepared (≥3.00) on any of these 9 items. Participants rated students as somewhat prepared (M=2.00-2.99) on tasks 5 (M=2.27), task 6 (M=2.19) and task 8 (M=2.14). The other tasks students were rated as not prepared (M=1.00-1.99) including task 1 (M=1.94), task 2 (M=1.73), task 3 (M=1.74) and task 4 (M=1.97). The overall mean score (M=1.88) for domain III shows participants view students as not prepared (M=1.00-1.99) for these tasks.

Cronbach's alpha coefficient for this preparedness scale for domain III for the total sample was .903 which signifies high internal consistency for items in this scale for domain III.

In relation to research question number three part b) regarding whether the levels of student preparedness differed across the three disability management domains, there were differences among the three domains. Educators rated student preparedness as follows: domain I (M=2.90), domain II (M=2.25) and domain III (1.88). Again, educators rated student preparedness in the same order as importance, and educator proficiency (domain I, domain II, domain III).

Table 11 – Preparedness Domain I:Disability Case Management

Means and Standard Deviations

	M	SD
Disability Case Management Item Means	2.90	.52
1. Perform comprehensive individual case analysis and benefits assessments using accepted practices in order to develop appropriate interventions.	2.70	.94
2. Review disability case management intervention protocol using standards of care in order to promote quality care, recovery, and cost effectiveness.	2.42	.94
3. Promote collaboration among stakeholders using communication strategies to optimize functional recovery.	3.03	.94
4. Perform worksite/job analyses using observation, interview, and records review in order to determine the requirements of the job.	3.18	.84
5. Develop individualized return-to-work plans consistent with standards of practices and procedures by collaborating with relevant stakeholders in order to facilitate employment.	3.02	.91
6. Implement interventions using appropriate counseling and behavior change techniques in order to optimize functioning and productivity.	3.43	.79
7. Coordinate benefits, services, and community Resources (e.g., orthotics, prosthetics, FCE, IME, durable medical, home care, and vocational rehabilitation) through strategic planning in order to facilitate optimal functioning.	2.86	.97
8. Monitor progress for achievement of targeted milestones through ongoing comparison with established best-practice guidelines in order to make recommendations, optimize functional recovery, and provide needed follow-up.	2.89	.84

Table 11 (cont'd)

Means and Standard Deviations

	M	SD
9. Manage caseload using ethical strategies in order to enhance effectiveness and efficiency.	3.47	.98
10. Prepare case notes and reports using applicable forms and systems in order to document case activities in compliance with standard practices and regulations.	3.23	.93

Table 12- Preparedness Domain II:Disability Prevention and Workplace Intervention

Means and Standard Deviations

	M	SD
Disability Prevention and Workplace Intervention	2.25	.61
1. Implement disability prevention practices (i.e. risk mitigation procedures such as job analysis, job accommodation, ergonomic evaluation, health and wellness initiatives, etc) through training, education, and collaboration in order to change organizational behavior and integrate prevention as an essential component of organizational culture.	2.25	.94
2. Develop a comprehensive transitional work program through consultation with all relevant stakeholders in order to facilitate optimal productivity and value in the workplace.	2.43	1.00
3. Develop an interactive process for job site modification, accommodation, or job task assignment incorporating appropriate resources (e.g., ergonomics and assistive technologies) in order to facilitate optimal functioning in the workplace.	2.75	.87
4. Support employment practices that align work abilities with essential job functions by serving as a resource for employees and management in order to prevent disabilities and optimize productivity.	2.85	.94
5. Recommend strategies to identify ergonomic, safety, and risk factors using available resources (e.g., data and assessment tools) in order to mitigate exposure and improve employee health.	2.13	.98
6: Recommend strategies that integrate benefit plan designs and related services (e.g., employee assistance programs, community resources, and medical services) by evaluating and coordinating delivery in order to promote prevention, optimal productivity, quality care, and cost containment.	2.23	1.04

Table 12 (cont'd)

Means and Standard Deviations

	M	SD
7. Recommend health and wellness interventions by targeting the specific needs of employees and the organization in order to increase organizational health and productivity while demonstrating measureable value.	2.09	1.04

Table 13-Preparedness Domain III:Program Development, Management and Evaluation

Means and Standard Deviations

	M	SD
Program Development, Management and Evaluation Means	1.88	.67
1. Analyze workplace practices (e.g., benefit design; policies and procedures; regulatory and compliance requirements; employee demographics; and labor relations) using a needs assessment to establish baselines and design effective interventions.	1.94	.97
2. Present the business rationale for a comprehensive disability management program using baseline data, best practices, evidence-based research, and benchmarks and incorporating cultural and environmental factors to secure stakeholder investment and commitment.	1.73	.95
3. Collaboratively develop and manage the disability management program by specifying essential procedures and training components consistent with pertinent regulations and identifying appropriate services and metrics in order to offer effective services for stakeholders.	1.74	.90
4. Champion individual and organizational behavioral change by assigning responsibility to stakeholders at all levels of the organization in order to achieve strategic outcomes.	1.97	.99
5. Procure internal and external services using commonly accepted selection criteria to maximize consistency and desired program outcomes.	2.27	.92
6. Manage service providers using stakeholder-defined performance standards in order to maximize the quality of services and the return on investments.	2.19	1.07

Table 13- (cont'd)

Means and Standard Deviations

	M	SD
7. Facilitate the exchange of data and metrics by integrating information systems for disability management programs in order to achieve and report desired program outcomes.	1.81	1.01
8. Conduct ongoing formative and summative program evaluations using qualitative and quantitative methods to improve process and measure outcomes.	2.14	.84
9. Create disability management performance reports and other communication vehicles targeted to relevant stakeholders using variety of media in order to promote stakeholder awareness and collaboration.	1.98	1.00

Table 14 – Overall Scale Means for Combined 26 Items

Means and Standard Deviations

	M	SD
Importance	3.63	.67
Proficiency	3.38	.72
Preparedness	2.38	.52

Table 14 shows the overall means and standard deviations for the scales for the combined 26 items. Consistently ratings from educators listed importance (M=3.63), proficiency (M=3.38) and preparedness (M=2.38) in that order. Based on the Likert type scales used for this survey, importance and proficiency were between the 3.00 and 3.99 range resulting in educators rating the tasks as "important" and themselves as "proficient" in teaching the disability management tasks. Preparedness was rated between the 2.00 and 2.99 range, "somewhat prepared", for the 26 tasks.

Cronbach's index of internal consistency (α), or the probability of Type I error, was calculated for each scale overall (Table 15) and showed, importance (α =.956), proficiency (α =.954), and preparedness (α=.930). All three of these scales were ≥ .900 showing high internal consistency. Table 16 reports Cronbach's alpha for each scale by domain. Cronbach's alpha ranged from .849 for the proficiency scale, disability case management domain (domain I), to .923

for both the importance scale and proficiency scale for, program development, management and evaluation domain (domain III).

Corrected item-total correlation and the corresponding alpha if an item were deleted were evaluated. Data showed there was minimal yield in terms of improving interitem reliability if an item were deleted as there were no items less than .3 in corrected item-total correlation, and no item greater than the item in alpha, in item deleted category, which would have indicated the item was measuring something different from the scale as a whole (Pallant, 2007).

Table-15 Reliability Importance, Proficiency and Preparedness Scales

Scale	α
Importance	.956
Proficiency	.954
Preparedness	.930

Reliability Coefficients 3 items. N=26

Table-16 Reliability Importance, Proficiency and Preparedness Scales by Disability Management Domain

Scale	α
Importance	
Disability Case Management*	.860
Disability Prevention and Workplace Intervention**	.897
Program Development, Management and Evaluation***	.923
Proficiency	
Disability Case Management*	.849
Disability Prevention and Workplace Intervention**	.889
Program Development, Management and Evaluation***	.923
Preparedness	
Disability Case Management*	.864
Disability Prevention and Workplace Intervention**	.898
Program Development, Management and Evaluation***	.903

*N=10, **N=7, ***N=9

Demographic Differences in Importance, Proficiency and Preparedness

To address the research questions regarding whether demographic variables influence educator's perception of the importance of the three disability management domains, independent samples t-test were conducted. Demographic characteristics looked at below were educators: (a) gender; (b) whether they engaged in paid disability management activities; (c) if they authored or co-authored any articles related to disability management that were published in peer reviewed journals, book chapters and/or books; and (d) if they have written any grants or completed and requests for proposals related to disability management. The demographic characteristics were compared on each scale importance, proficiency and preparedness based on the three disability management domains; domain I: disability case management, domain II: disability prevention and workplace intervention, and domain III: program development, management and evaluation.

A series of multivariate analysis of variance (MANOVA) were conducted using the General Linear Model with Type IV sum of squares in SPSS. The three overall scales (importance, proficiency, and preparedness) across the three disability management domains were set as the dependent variables. Independent variables included emphasis of disability management in participant master's curriculum and the number of credit hours for completion of the degree. An alpha level of .05 was used for both the t-tests and MANOVA analysis.

Upon finding a significant multivariate F (Wilks lambda=.65, $F(9,107) = 2.33$, $p=.019$), a univariate ANOVA was calculated for each dependent variable. In

order to reduce Type I error a Bonferroni adjustment was made. As recommended by Tabachnick & Fidell (2007) the alpha was divided by the number of dependent variables investigated (alpha=.05/3 = .017) (p. 270).

Demographic Variables and Importance

To address research question 1 b), independent-sample t-tests were conducted. The independent t-test comparing gender and importance for domain I, shows no significant difference in scores for males (M=4.10, SD=.63) and females (M=4.00, SD=.54); t (60) = .69, p=.49 (two-tailed). For domain II there was no significant difference in scores for males (M=3.66, SD=.79) and females (M=3.48, SD=.83); t (61) = .86, p=.39 (two-tailed). Domain III showed significant differences in scores for males (M=3.48, SD=.83) and females (M=3.08, SD=.75); t (60) = 1.99, p= .05 (two-tailed).

The independent t-test comparing whether educators engaged in paid disability management activities and importance of domain I, shows no significant difference in scores for those answering yes (M=4.16, SD=.52) and no (M=3.96, SD=.63); t (59) = 1.33, p= .19 (two-tailed). For domain II there was no significant difference in scores for those answering yes (M=3.71, SD=.73) and no (M=3.39, SD=.85); t (60) = 1.62, p=.11 (two-tailed). For domain III there was significant difference in scores for those answering yes (M=3.59, SD=.74) and no (M=3.00, SD=.78); t (60) = 3.03, p=.004 (two-tailed).

The independent t-test comparing whether educators authored or co-authored (and published) articles regarding disability management and perceived importance for domain I, show no significant difference in scores for those

answering yes (M=4.11, SD=.57) and no (M=4.00, SD=.60); t (58) = .62, p=.54 (two-tailed). For domain II there was significant difference in scores for those answering yes (M=3.89, SD=.67) and no (M=3.41, SD=.85); t (59) = 2.23, p=.030 (two-tailed). Domain III also showed significant difference in scores for those answering yes (M=3.67, SD=.74) and no (M=3.09, SD=.80); t (58) = 2.65, p= .010 (two-tailed).

The independent t-test comparing whether educators had written any grants or requests for proposals related to disability management and perceived importance for domain I, show significant difference in scores for those answering yes (M=4.41, SD=.39) and no (M=3.95, SD=.59); t (59) = 2.53, p=.014 (two-tailed). Domain II shows significant difference in scores for those answering yes (M=4.03, SD=.65) and no (M=3.47, SD=.82); t (60) = 2.10, p= .04 (two-tailed). Domain III also shows significant difference in scores for those answering yes (M=3.90, SD=.83) and no (M=3.15, SD=.76); t (59) = 2.81, p=.007 (two-tailed).

A series of four, one-way analysis of variance (ANOVA) were run to determine whether educators perception of the importance of identified disability management tasks, along the three disability management domains, differed due to how much disability management was emphasized in educators overall masters level rehabilitation counseling curriculum. For the tests of significance, the alpha of .017 was established using the Bonferroni adjustment. As reflected in Tables 17 through 20 none of the four ANOVAs showed the effect of the dependent variables were significant.

Table 17 – One Way Analysis of Variance for Disability Management Emphasis and Overall Importance

Source	SS	df	MS	F	Sig
Between	1.266	4	.317	.669	.616
Within	23.179	49	.473		
Total	24.445	53			

Table 18 – One Way Analysis of Variance for Disability Management Emphasis and Domain I Importance

Source	SS	df	MS	F	Sig
Between	.600	4	.150	.436	.782
Within	18.946	55	.344		
Total	19.546	59			

Table 19 – One Way Analysis of Variance for Disability Management Emphasis and Domain II Importance

Source	SS	df	MS	F	Sig
Between	2.074	4	.519	.766	.552
Within	37.920	56	.677		
Total	39.995	60			

Table 20 – One Way Analysis of Variance for Disability Management Emphasis and Domain III Importance

Source	SS	df	MS	F	Sig
Between	2.509	4	.627	.937	.449
Within	36.811	55	.669		
Total	39.320	59			

Demographic Variables and Proficiency

To address research question 2 a), independent-sample t-tests were conducted. The independent t-test comparing gender and proficiency for domain I, shows no significant difference in scores for males (M=3.86, SD=.65) and females (M=3.73, SD=.60); t (60) = .81, p= .42 (two-tailed). For domain II there was no significant difference in scores for males (M=3.37, SD=.89) and females (M=3.16, SD=.81); t (60) = .98, p= .33 (two-tailed). There was also no significant difference in scores in domain III for males (M=3.21, SD=.87) and females (M=2.93, SD=.92); t (60) = 1.20, p=.23 (two-tailed).

The independent t-test comparing whether educators engaged in paid disability management activities and proficiency in all three domains. Domain I shows significant difference in scores for those answering yes (M=4.01, SD=.62) and no (M=3.61, SD=.58); t (59) = 2.57, p=.013 (two-tailed). In domain II there were significant difference in scores for those answering yes (M=3.56, SD=.80) and no (M=2.98, SD=.81); t (59) = 2.80, p=.007 (two-tailed). There was also

significant difference in scores in domain III for those answering yes (M=3.40, SD=.87) and no (M=2.79, SD=.84); t (60) = 2.81, p=.007 (two-tailed).

The independent t-test comparing whether educators authored or co-authored (and published) articles regarding disability management and proficiency in domain I show no significant difference in scores for those answering yes (M=3.97, SD=.67) and no (M=3.70, SD=.60); t (58) = 1.49, p=.14 (two-tailed). For domain II there was no significant difference in scores for those answering yes (M=3.54, SD=.86) and no (M=3.12, SD=.82); t (58) = 1.83, p=.07 (two-tailed). There were also no significant difference in scores in domain III for those who answered yes (M=3.39, SD=.88) and no (M=2.93, SD=.90); t (58) = 1.84, p=.07 (two-tailed).

The independent t-test comparing whether educators had written any grants or requests for proposals related to disability management and proficiency in domain I show significant difference in scores for those answering yes (M=4.3, SD=.50) and no (M=3.66, SD=.59); t (59) = 3.47, p=.001 (two-tailed). Domain II shows significant difference in scores for those answering yes (M=3.90, SD=.84) and no (M=3.14, SD=.81); t (59) = 2.70, p=.009 (two-tailed). Domain III also shows significant difference in scores for those answering yes (M=3.96, SD=.89) and no (M=2.90, SD=.81); t (59) = 3.72, p=000 (two-tailed).

A series of four, one-way analysis of variance (ANOVA) was run to determine whether educators perceived proficiency in teaching identified disability management tasks, along the three disability management domains, differed due to how much disability management was emphasized in educators overall

masters level rehabilitation counseling curriculum. For the tests of significance an alpha of .017 was set. As reflected in Tables 21 through 24 none of the four ANOVAs showed that effect of the dependent variables were significant.

Table 21 – One Way Analysis of Variance for Disability Management Emphasis and Overall Proficiency

Source	SS	df	MS	F	Sig
Between	2.815	4	.704	1.345	.267
Within	25.125	48	.523		
Total	27.940	52			

Table 22 – One Way Analysis of Variance for Disability Management Emphasis and Domain I Proficiency

Source	SS	df	MS	F	Sig
Between	1.774	4	.443	1.148	.344
Within	21.235	55	.386		
Total	23.009	59			

Table 23 – One Way Analysis of Variance for Disability Management Emphasis and Domain II Proficiency

Source	SS	df	MS	F	Sig
Between	3.045	4	.761	1.037	.396
Within	40.371	55	.734		
Total	43.416	59			

Table 24 – One Way Analysis of Variance for Disability Management Emphasis and Domain III Proficiency

Source	SS	df	MS	F	Sig
Between	6.161	4	1.540	1.958	.114
Within	43.270	55	.787		
Total	49.431	59			

Demographic Variables and Preparedness

To address research question 3 a), independent-sample t-tests were conducted. The independent t-test comparing gender and preparedness for domain I, shows a significant difference in scores for males (M=3.19, SD=.65) and females (M=2.80, SD=.52); t (60) = 2.64, p=.01 (two-tailed). For domain II there was no significant difference in scores for males (M=2.51, SD=.73) and females (M=2.24, SD=.77); t (.59) = 1.41, p=.17 (two-tailed). Domain III also

showed a significant difference in scores for males (M=2.15, SD=.69) and females (M=1.78, SD=.70); t (58) = 2.08, p=.04 (two-tailed).

The independent t-test comparing whether educators engaged in paid disability management activities and student preparedness for domain I shows no significant difference in scores for those answering yes (M=2.98, SD=.66) and no (M=3.02, SD=.59); t (59) = -.31, p=.76 (two-tailed). For domain II there was no significant difference in scores for those answering yes (M=2.44, SD=.86) and no (M=2.32, SD=.67); t (58) = .62, p=.54 (two-tailed). For domain III there was no significant difference in scores for those answering yes (M=1.88, SD=.71) and no (M=2.00, SD=.73); t (58) = -.66, p=.51 (two-tailed).

The independent t-test comparing whether educators authored or co-authored (and published) articles regarding disability management and perceived student preparedness for domain I show no significant difference in scores for those answering yes (M=2.93, SD=.70) and no (M=2.99, SD=.59); t (58) = -.36, p=.72 (two-tailed). Domain II showed no significant difference for those answering yes (M=2.48, SD=1.00) and no (M=2.29, SD=.65); t (57) = .86, p=.39 (two-tailed). Domain III shows no significant difference in scores for those answering yes (M=1.94, SD=.80) and no (M=1.94, SD=.70); t (56) = .02, p=.99 (two-tailed).

The independent t-test comparing whether educators had written any grants or requests for proposals related to disability management and preparedness for domain I show no significant difference in scores for those answering yes (M=3.05, SD=.67) and no (M=2.97, SD=.61); t (59) = .43, p=.67 (two-tailed). For domain II there was no significant difference in scores for those answering yes

(M=2.36, SD=.83) and no (M=2.35, SD=.76); t (58) = .01, p=.99 (two-tailed). Domain III showed no significant difference in scores for those answering yes (M=1.93, SD=.92) and no (M=1.95, SD=.69); t (57) = -.09, p=.93 (two-tailed).

A series of four, one-way analysis of variance (ANOVA) was run to determine whether educators perception of student preparedness in identified disability management tasks, along the three disability management domains, differed due to how much disability management was emphasized in educators overall masters level rehabilitation counseling curriculum. For the tests of significance an alpha of .017 was established. As reflected in Tables 25 through 28 all four ANOVAs showed that the effect of the dependent variables were significant.

Table 25 – One Way Analysis of Variance for Disability Management Emphasis and Overall Preparedness

Source	SS	df	MS	F	Sig
Between	4.525	3	1.508	7.279	.000
Within	9.946	48	.207		
Total	14.472	51			

Table 26 – One Way Analysis of Variance for Disability Management Emphasis and Domain I Preparedness

Source	SS	df	MS	F	Sig
Between	6.677	4	1.669	5.786	.001
Within	15.866	55	.288		
Total	22.543	59			

Table 27 – One Way Analysis of Variance for Disability Management Emphasis and Domain II Preparedness

Source	SS	df	MS	F	Sig
Between	11.253	4	2.813	6.615	.000
Within	22.965	54	.425		
Total	34.219	58			

Table 28 – One Way Analysis of Variance for Disability Management Emphasis and Domain III Preparedness

Source	SS	df	MS	F	Sig
Between	13.426	3	4.475	14.510	.000
Within	16.654	54	.308		
Total	30.080	57			

Relationship Between Perceptions of Importance and Proficiency

To answer research question 2 c) regarding the relationship between educators' perceptions of the importance and their perceived instructional proficiency to teach disability management tasks, a Pearson's product moment correlation was calculated for the data overall and by domain (Tables 29-32). Educators' perception of the importance of disability management tasks (by domain) was used as the constant and educators perceived proficiency in teaching these tasks was used as the dependent variable.

Table 29 shows the correlation between the educators' perceptions of overall importance and their own proficiency in teaching these tasks, was high and positively correlated between the two variables, $r = .578$, $n= 56$, $p < .01$ (Cohen, 1988). Table 30 shows the correlation between the educators' perceptions of domain I importance and their own proficiency in teaching, was high and positively correlated, $r= .641$, $n=63$, $p< .01$. There was also a high and positive correlation between educators' perceptions of domain II importance and their own proficiency in teaching these tasks, $r= .508$, $n=63$, $p< .01$ (Table 31). Table 32 shows again a high and positive correlation between educators' perceptions of domain III importance and their proficiency in teaching, $r=.607$, $n=63$, $p< .01$).

Table 29 – Correlation Overall Importance and Proficiency

		Overall Importance	Overall Proficiency
Overall Importance	Pearson Correlation	1	.578*
	Sig. (2-tailed)		.000
	N	57	.56
Overall Proficiency	Pearson Correlation	.578*	1
	Sig. (2-tailed)	.000	
	N	56	56

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

Table 30 – Correlation Domain I Importance and Proficiency

		Domain I Importance	Domain I Proficiency
Domain I Importance	Pearson Correlation	1	.641*
	Sig. (2-tailed)		.000
	N	63	63
Domain I Proficiency	Pearson Correlation	.641*	1
	Sig. (2-tailed)	.000	
	N	63	63

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

Table 31 – Correlation Domain II Importance and Proficiency

		Domain II Importance	Domain II Proficiency
Domain II Importance	Pearson Correlation	1	.508*
	Sig. (2-tailed)		.000
	N	64	63
Domain II Proficiency	Pearson Correlation	.508*	1
	Sig. (2-tailed)	.000	
	N	63	63

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

Table 32 – Correlation Domain III Importance and Proficiency

		Domain III Importance	Domain III Proficiency
Domain III Importance	Pearson Correlation	1	.607*
	Sig. (2-tailed)		.000
	N	63	63
Domain III Proficiency	Pearson Correlation	.607*	1
	Sig. (2-tailed)	.000	
	N	63	63

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

Chapter V

Discussion

The purpose of this study was to determine which disability management tasks, associated with three specific domains, rehabilitation counselor educators perceived as important for rehabilitation counseling practice, their perceived level of proficiency in teaching these tasks, and overall student preparedness in these tasks upon completion of a Master's level rehabilitation counseling program. The three disability management domains were disability case management (domain I), disability prevention and workplace intervention (domain II), and program development, management and evaluation (domain III). This study also focused on whether educators' perceptions of importance, proficiency and preparedness differed according to demographic characteristics and whether there was a relationship between educators' perceptions of the importance and their own perceived proficiency to teach tasks within these domains.

In order to address the research questions mentioned above, a quantitative study was conducted utilizing a modified version of the Certification of Disability Management Specialists Commission (CDMSC) Role and Function Analysis Survey for the Certified Disability Management Specialist (CDMS) constructed for a 2004 study, as well as an 18 item demographic survey. An a priori criterion of (≥3.0) was established for the importance, proficiency and preparedness of disability management task, or domains of tasks, from this survey.

An evaluation of the item mean scores shows 25 of the 26 importance items met or exceeded the criterion set for importance. The one item that did not meet the a priori criterion for importance was from domain III. A review of the item mean scores shows 22 of the 26 proficiency items met or exceeded the criterion set for proficiency. One item from domain II did not meet the minimum set, and 3 items from domain III did not meet the minimum criterion for proficiency. Evaluating the item mean scores for the a priori criterion for preparedness reveals only 6 of the 26 items met the criterion set for preparedness. Reviewing by domain for preparedness shows that 4 items from domain I, and all of the items from domain II (7 items) and domain III (9 items) did not meet the minimum criterion set for preparedness. For domain III, 3 of the 9 items were rated between 2.00-2.99 (somewhat prepared) and 6 of the 9 were rated at 1.00-1.99 (not prepared). The item mean scores for the three domains consisting of importance, proficiency and preparedness are reflected in Table 33.

Table 33 – Importance, Proficiency, and Preparedness Item Means by Domain

Domain	Importance	Proficiency	Preparedness
Domain I	4.05 (SD=.58)	3.77 (SD=.62)	2.90 (SD=.61)
Domain II	3.52 (SD=.81)	3.26 (SD=.84)	2.25 (SD=.76)
Domain III	3.27 (SD=.80)	3.03 (SD=.90)	1.88 (SD=.71)

On average rehabilitation counselor educators reported they felt the tasks within the three disability management domains were important or very important. Educators' reported being proficient at teaching tasks within the three disability management domains, with the exception of domain III where 3 of the 4 items did not meet minimum criterion. Regarding student preparedness, a majority of the disability management tasks did not meet the minimum criterion set, including all of the tasks in domain II and domain III. A high and positive correlation was also revealed in this study, implying a relationship between rehabilitation counselor educators' perception of the importance of disability management tasks and their self-reported instructional proficiency in teaching these tasks (overall and across the three domains).

Perceived Importance

Rehabilitation counselor educators perceived 25 of the 26 disability management tasks as important (≥3.00) and 7 tasks as very important (4.00-4.99). The only task not to meet the minimum criterion was from domain III, and included: facilitating the exchange of data and metrics by integrating information systems for disability management programs in order to achieve and report desired program outcomes (M=2.98).

The six tasks rated by educators as very important were all from domain I. Rated highest by educators were: managing caseload using ethical strategies to enhance effectiveness and efficiency (M=4.46), implementing interventions using appropriate counseling and behavior change techniques in order to optimize

functioning and productivity (M=4.35), develop individualized return-to-work plans consistent with standards of practices and procedures by collaborating with relevant stakeholders in order to facilitate employment (M=4.24), promoting collaboration among stakeholders using communication strategies to optimize functional recovery (M=4.19), perform comprehensive individual case analysis and benefits assessments using accepted practices in order to develop appropriate interventions (M=4.12) and coordinate benefits services and community resources through strategic planning in order to facilitate optimal functioning (M=4.02).

Educators' rated domain I as the most important, as shown by overall item mean, with all items rated as very important captured in this domain as well. Since domain I, disability case management, primarily consists of tasks associated with individual practice, it makes sense that rehabilitation counselor educators would place more importance on this domain and associated disability management tasks. Domain I focuses on the practitioner working one-on-one with injured and ill employees to return them to productivity in the workplace (Lui & Rosenthal, 2008). Leahy (2004) further explains this focus of rehabilitation counselors on individuals by stating, "regardless of variations in their employment setting and client population, most rehabilitation counselors (a) assess needs, (b) establish a working alliance with the individual to develop goals and individualized plans to meet identified needs, and (c) provide or arrange for therapeutic services and interventions (e.g., psychological, medical, social,

behavioral), including job placement and follow-up services" (p. 143). These same goals are reflected in the disability management tasks of domain I.

Comparing importance item mean scores by domain, educators rated domain I as most important (M=4.05), followed by domain II (M=3.52) and finally domain III (M=3.27). Domain I is the most important to educators when compared to the other domains. This is consistent with the outcome of the 2004 Certification of Disability Management Specialists Commission (CDMSC) Role and Function Analysis Survey for the Certified Disability Management Specialist (CDMS) study conducted by Rosenthal, et. al., (2007) which this current study is based on. In the Rosenthal et al., (2004) study, domain I was seen as the most important by survey respondents, consisting of 304 disability management specialists, as shown by M=4.55 (SD=.67). It should be noted that the importance scale was the only one shared by both this survey and the 2004 CDMS survey.

Educators' rated all disability management tasks associated with domain II (disability prevention and workplace intervention) as important. The top three rated tasks in domain II by importance were: develop an interactive process for job site modification, accommodation, or job task assignment incorporating appropriate resources in order to facilitate optimal functioning in the workplace (M=3.98), support employment practices that align work abilities with essential job functions by serving as a resource for employees and management in order to prevent disabilities and optimize productivity (M=3.82), and implement disability prevention practices through training, education and collaboration in

order to change organizational behavior and integrate prevention as an essential component of organizational culture (M=3.64).

Comparing item means scores by domain II for importance, shows that educators in this study rated domain II as second most important (M=3.52, SD=.81) as did respondents in the Rosenthal, et al., (2007) study (M=3.89, SD=.99). Domain II consists of more proactive approaches in reducing workers' compensation claims and costs through early intervention and remediation. Rosenthal et al, (2007) explain that previous surveys involving disability management, (e.g., Chan, Currier, Taylor, Wood, & Lui, 1999: Chan et al., 2001) describe disability management being practiced on two levels, Level I (organizationally) and Level II (individually). What has been shown through by the Rosenthal et al., (2007) study is that the two previous disability management levels are now being "blended", predominantly in domain II. Lui & Rosenthal (2008) further explain the changing of the disability management field in relation to the previous Level I and Level II associated with disability management. They explain that domain I is now most associated with what was previously expressed as Level II, domain III is most associated with Level I, and domain II is a blending of the two.

Within domain III (program development, management and evaluation), eight of the nine tasks were ranked as important to educators'. The three highest ranked tasks in domain III included: conduct ongoing formative and summative program evaluations using qualitative and quantitative methods to improve process and measure outcomes (M=3.58), procure internal and external services

using commonly accepted selection criteria to maximize consistency and desired program outcomes (M=3.31), and manage service providers using stakeholder-defined performance standards in order to maximize the quality of services and the return on investments (M=3.31).

Comparing item means scores by domain III for importance, shows that educators in this study rated domain III as third most important (M=3.27, SD=.83) as did respondents in the Rosenthal, et al., (2007) study (M=3.35, SD=1.22). Domain III consists of the design, implementation and evaluation of programs and utilizing expertise in broader absence management and health and productivity initiatives.

In relation to demographic characteristics and importance, no significant differences were found in relation to whether educators perception of the importance of identified disability management tasks, along the three domains, differed due to how much disability management was emphasized in educators overall master's level rehabilitation counseling curriculum, or the number of credit hours required for completion of a master's degree in their program. There were significant differences in other demographic characteristics of educators and their perceived importance of disability management tasks along the three domains when independent t-tests were conducted.

In relation to gender and importance of domain III there was significant differences in scores for males and females. It is unclear why there is this difference in relation to gender and importance of domain III. There was no demographic difference in relation to gender and importance for the Rosenthal et

al., (2007) study, thus the researchers felt confident in being able to generalize the survey results. This researcher feels these results can still be generalized in this current study.

Another significant difference in scores occurred in domain III as well with regards to whether educators engaged in paid disability management activities and importance of that domain. There was a significant difference in domain III between those that had participated and those that had not. For those engaging in paid disability management activities it is more likely that they have experience involved with tasks in domain III, program development, management and evaluation. Although domain III is a more recent addition to the field of disability management it has increasingly become part of disability management in reaction to employer demands (Lui & Rosenthal, 2008).

Significant differences in scores were also found in relation to perceived importance and whether educators authored or co-authored (and published) articles regarding disability management. There were significant difference in scores for domain II and domain III for those that had authored articles and those that had not. There was also significant difference in scores for perceived importance for those educators that had written grants or requests for proposals related to disability management on all three domains, versus those that had not. It is not surprising that those educators that authored or co-authored articles and those that have written grants or requests for proposals related to disability management find tasks associated with disability management more important. Educators' involved with writing or applying for grants/RFP's are more in tune to

the literature and changing field of disability management and thus have a better understanding of how specific tasks relate and are important to the field.

Educators' acknowledging 25 of the 26 disability management tasks, across all three domains, as important is significant for the field of rehabilitation counseling, specifically for those students interested in moving into that area of practice. Rosenthal et al., (2007) state that "employers now place greater expectations on disability managers to demonstrate a broader range and more specialized practice that includes an understanding of such advanced concepts as absence management, presenteeism, integrated benefit practice, productivity enhancement, and health and wellness paradigms" (p. 82). However, importance is the first step. Carrying the importance of tasks into the educational realm and preparing students for practice is also required.

Perceived Proficiency

Rehabilitation counselor educators perceived themselves as proficient (≥3.00) in teaching 22 of the 26 disability management tasks and very proficient (4.00-4.99) in 4 tasks, all of which were located in domain I (disability case management). The four items to not meet the minimum criterion set for proficiency were from domain II and domain III. Domain II included: recommend strategies to identify ergonomic, safety, and risk factors using available resources in order to mitigate exposure and improve employee health (M=2.98). Tasks from domain III that did not meet the minimum criterion included: analyze workplace practices using a needs assessment to establish baselines and design

effective interventions (M=2.95), collaboratively develop and manage the disability management program by specifying essential procedures and training components consistent with pertinent regulations and identifying appropriate services and metrics in order to offer effective services for stakeholders (M=2.65) and facilitate the exchange of data and metrics by integrating information systems for disability management programs in order to achieve and report desired program outcomes (M=2.60).

The four tasks educators rated themselves as very proficient to teach (4.00-4.99) were all from domain I and included: manage caseload using ethical strategies in order to enhance effectiveness and efficiency (M=4.30), implement interventions using appropriate counseling and behavior change techniques in order to optimize functioning and productivity (M=4.24), promote collaboration among stakeholders using communication strategies to optimize functional recovery (M=4.16) and prepare case notes and reports using applicable forms and systems in order to document case activities in compliance with standard practices and regulations (M=4.01).

As with importance, educators rated domain I as the area where they feel most proficient to teach, as shown by the overall item mean (M=3.77). There was also a high and positive correlation shown between educators perceived importance of domain I and their proficiency to teach tasks associated with this domain ($r=.641$, $n=63$, $p<.01$). As stated earlier domain I tasks consist of those most associated with individual practice and reflect knowledge and skills most

associated with rehabilitation counseling, so it makes sense that educators would feel most proficient in teaching in these areas.

Domain II (disability prevention and workplace intervention) showed educators reporting themselves as proficient in teaching 6 of the 7 tasks. The three tasks educators felt most proficient to teach included: develop and interactive process for job site modification, accommodation, or job task assignment incorporating appropriate resources in order to facilitate optimal functioning in the workplace (M=3.72), support employment practices that align work abilities with essential job functions by serving as a resource for employees and management in order to prevent disabilities and optimize productivity (M=3.72) and implement disability prevention practices through training, education and collaboration in order to change organizational behavior and integrate prevention as an essential component of organizational culture (M=3.29).

As with importance, educators rated domain II as the second highest area where they feel most proficient to teach (M=3.26). There was also a high and positive correlation between educators perceived importance and their proficiency to teach in domain II ($r=.508$. $n=63$, $p<.01$). The same holds true for domain III which was rated third in educators perceived proficiency to teach (M=3.03). Again, a high and positive correlation was found between importance and proficiency to teach in domain III ($r=.607$, $n=63$, $p<.01$).

Within domain III, educators rated themselves as proficient to teach on 6 of the 9 tasks. The three tasks not to meet the minimum criterion set included:

facilitate the exchange of data and metrics by integrating information systems for disability management programs in order to achieve and report desired program outcomes (M=2.60), collaboratively develop and manage the disability management program by specifying essential procedures and training components consistent with pertinent regulations and identifying appropriate services and metrics in order to offer effective services for stakeholders (M=2.65) and analyze workplace practices using a needs assessment to establish baselines and design effective interventions (M=2.95).

The three highest rated tasks in domain III regarding proficiency to teach included: conduct ongoing formative and summative program evaluations using qualitative and quantitative methods to improve process and measure outcomes (M=3.77), champion individual and organizational behavior change by assigning responsibility to stakeholders at all levels of the organization in order to achieve strategic outcomes (M=3.23), and procure internal and external services using commonly accepted selection criteria to maximize consistency and desired program outcomes (M=3.16).

Regarding demographic characteristics of educators and their perceived proficiency to teach disability management tasks within the three domains, no significant differences were found in relation to gender, how much disability management was emphasized in educators overall master's level rehabilitation counseling curriculum, the number of credit hours required for completion of a masters' degree in their program, or whether educators authored or co-authored (and published) articles regarding disability management.

Significant differences in other demographic characteristics of educators and their perceived proficiency to teach in the three domains was found when independent t-tests were run. For all three domains, significant differences in scores for proficiency were found for educators who reported being engaged in paid disability management activities versus those who were not. There was also significant difference in scores, along all three domains, for those educators that had written grants or requests for proposals related to disability management and their perceived proficiency to teach disability management tasks. Again, it is not surprising that educators feel more proficient in teaching tasks associated with a disability management domain when they report being engaged in paid disability management activities as well as writing grants and RFP's. What is interesting is that authoring or co-authoring articles regarding disability management did not have a significant effect on an educators' perceived proficiency to teach disability management tasks.

Educators rated a high majority of the 26 tasks associated with the three disability management tasks as important (25 out of 26) as well as being proficient to teach (22 out of 26). It is interesting to note such a high level of perceived proficiency of educators, specifically in domain III (reported proficiency in 6 of 9 tasks), when Lui & Rosenthal (2008) state that the "major challenge posed by domain III is that it is an area in which disability case managers often have the least amount of experience, exposure and training" (p. 11). Perhaps we need to explore further whether the same can be said for rehabilitation counselor educators. It has been suggested that educators identify course material they

teach to be more valuable and important than course content they do not teach (McGlothlin & Davis, 2004). As reflected in the next set of data (student preparedness) it cannot be assumed that because tasks are rated as important and educators feel proficient to teach those tasks, that we can state that is enough to prepare students in those areas.

Perceived Preparedness

Rehabilitation counselor educators rated student as prepared (≥3.00) in only 6 of the 26 disability management tasks, all of which were found in domain I. The six tasks to meet the minimum criterion set were: manage caseload using ethical strategies in order to enhance effectiveness and efficiency (M=3.47), implement interventions using appropriate counseling and behavior change techniques in order to optimize functioning and productivity (M=3.43), prepare case notes and reports using applicable forms and systems in order to document case activities in compliance with standard practices and regulations (M=3.23), perform worksite/job analyses using observation, interview, and records review in order to determine the requirements of the job (M=3.18), promote collaboration among stakeholders using communication strategies to optimize functional recovery (M=3.03) and develop individualized return-to-work plans consistent with standards of practices and procedures by collaborating with relevant stakeholders in order to facilitate employment (M=3.02). Student preparedness in the other 4 tasks in domain I fell within the somewhat prepared category (2.00-2.99).

Educators rated student preparedness in the 7 tasks of domain II as being somewhat prepared (2.00-2.99) and only 3 of the 9 tasks in domain III. The other 6 tasks of domain III rated student preparedness as not prepared (1.00-1.99). Across the three domains students were rated as prepared (≥3.00) on 6 of the 26 tasks (23%), somewhat prepared (2.00-2.99) on 14 of the 26 tasks (54%) and not prepared (1.00-1.99) on 6 of the 26 tasks (23%). Students were not seen as meeting the minimum criterion of prepared (≥3.00) on 20 of the 26 items, or 77% of the time.

Comparing item mean scores by domain, educators rated student preparedness as: domain I (M=2.90), domain II (2.25), and domain III (1.88). This order remains consistent with the importance and proficiency mean scores by domain. However none of the overall mean scores by domain for student preparedness meet the minimum criterion (≥3.00). Domain I and II reflect student preparedness as somewhat prepared (2.00-2.99) while in domain III students are rated as not prepared (1.00-1.88).

When asked how much disability management was emphasized in the curriculum, participants responded: not emphasized (25.4%), somewhat emphasized (38.8%), emphasized (22.4%), very emphasized (6%) and extremely emphasized (3%). Regarding how participants programs offered disability management curriculum responses included: as part of another course (74.6%), both required course and an elective (11.9%), not applicable (7.5%), and required interdepartmental course and currently developing a course (3.0%). If 64.2% of the responses reflect that disability management is somewhat or not

emphasized in the curriculum, it is not surprising then that educators do not feel students are prepared in disability management tasks upon completion of a master's level rehabilitation counseling program. Also if only 14.9% stated participant programs offered disability management as some form of a required course, we can't expect students to be fully prepared when 74.6% report disability management emphasis comes as part of another course.

This challenge is not unique only to teaching disability management within a rehabilitation counseling master's program. Due to CORE standards there is a limited amount of course work that can be covered during the master's degree program. Since "rehabilitation counseling program curricula are generally organized according to accreditation guidelines and core requirements", other avenues of educating students in the field of disability management must be addressed and researched (Zanskas & Leahy, 2007, p. 212).

Educators demographic characteristics and perceived student preparedness in the disability management tasks and related domains, there was no significant difference found in relation to educators engaging in paid disability management activities, whether educators authored or co-authored (and published) articles regarding disability management, whether educators had written any grants or requests for proposals related to disability management, or the number of credit hours required for completion of a master's degree in their program.

Significant differences in demographic characteristics and student preparedness were found in relation to males (M=3.19) and females (M=2.80) for

domain I and males (M=2.15) and females (M=1.78) in domain III. As stated earlier it is difficult to determine these demographic differences in relation to educators perceived student preparedness.

Another significant effect was found in relation to whether educators perception of student preparedness in the disability management tasks, along the three domains, differed due to how much disability management was emphasized in educators overall master's level rehabilitation counseling curriculum. The ANOVA's for this test were all significant showing a significant effect on overall preparedness, and preparedness in domain I, domain II and domain III. The more disability management was emphasized the more prepared educators felt students were in the disability management tasks (and domains) upon completion of a Master's degree.

While students lack of preparedness in tasks associated with domain III may not seem as significant, since this is a relatively new domain identified through research, lack of preparedness in the first two domains is somewhat surprising. Tasks associated with domain I and domain II, as explained earlier in this study, have been studied since the early 1980's and can be correlated to current CORE standards, which should be already incorporated in rehabilitation counseling curriculum. The lack of student preparedness across all three domains perhaps brings to light further issues in rehabilitation counselor education that needs to be addressed.

Limitations

An obvious limitation of this study is the 12% overall response rate. The response rate did not provide enough of a sample to carry out exploratory factor analysis. Every attempt was made to get the most recent and up-to-date email addresses for educators by using the 2005-2006 National Council on Rehabilitation Education Membership Directory, which was the most recent at the time this study occurred. Membership Institutions were looked up on the web, comparing educators listed in the NCRE directory to educators listed on the institutions website. Email addresses were confirmed and updated, when necessary, as well as new educators added who were not included in the NCRE directory. Based on the above confirmation of email addresses via institutional websites, it is surprising that 101 (14%) of the email addresses still came back as undeliverable.

The sample of educators is a sample of convenience. Even though participants for this study were expanded beyond ten-year track faculty, to include adjunct and instructors, the sample was still small. It is also feasible that the low response rate was due in part to educators not being interested in disability management and chose not to participate because of the nature of the survey subject matter.

Another possible limitation was the timing of the survey distribution. Even though the survey was sent to educators in April, hoping to catch educators before they left for the summer, it is possible that this was still a bad time for

educators to respond as they may have been busy with end of the semester classes and projects.

Self-reported methodology is also a potential limitation in this survey as it is assumed educators will have the required skills, knowledge and background to accurately answer the survey questions.

As explained previously through research conducted by Sheehan & McMillan (1999) issues of subject saliency and response rate have a high correlation. Perhaps the low response rate, combined with the reported low perceived preparedness of students (across all three domains) speaks to the lack of disability management's coverage in rehabilitation counselor education. Refusal by educators to participate in this study may reflect further on the lack of disability management incorporation into rehabilitation counselor education but also educators not wanting to report their own proficiency (or lack thereof) in disability management as well.

Implications

Implications for the Profession

The results of this study were the first to attempt to describe the perceived importance, proficiency and student preparedness in empirically identified disability management tasks, within specific domains. Rosenthal et al., (2007) state in the original CDMSC survey, from which this survey is modified from, "using an approach that incorporates subject expert agreement and practitioner-based validation is the process of role and function identification, a more

scientific and, one would hope, accurate approach to understanding current DM practice is obtained" and that "for the CDMSC, the process increases the likelihood that the certification exam accurately reflects current practice in the field" (p. 82). Utilizing a survey based on role and function for ensuring accurate certification exams and surveying educators, who will be preparing future takers of that exam, uncovers shortcomings in the educational process.

One of the challenges of the disability management field has been getting employers to see rehabilitation counseling as the most appropriate profession to help manage workplace disability (Rosenthal, 1999). Using this study as a platform to address the high educator perception of students not being prepared in disability management tasks and related domains, will move disability management education into the spotlight of rehabilitation education and better prepare students thus making them more marketable, and recruited, by employers.

An additional implication for practice is the identification of a third disability management domain, "program development, management and evaluation". As reported by Lui & Rosenthal (2008), domain III has "increasingly become part of disability management in response to employer demands" (p. 10). Rehabilitation counselors will need to have a thorough understanding, and skills in domain III if they are going to be successful in disability management.

Implications for Rehabilitation Education

Results from this study, specifically the reported lack of preparedness of students in the identified disability management tasks and domains, should act as a wake-up call to rehabilitation counselor educators, institutions and certification bodies. Back in 1999, Rosenthal and Olshesky stated that "the emerging importance of disability management within vocational rehabilitation and rehabilitation counseling has been recognized for over a decade" (p. 31). We can now say two decades, however little has been done to prepare students in the area of disability management.

From as far back as 1990, there have been recommendations that rehabilitation counselor education curricula expand to include disability management (Kilbury, Benshoff, & Riggar). In 1999 CORE accredited program curricula were urged by Rosenthal and Olshesky to consider addition courses that would infuse disability management material into current courses as well as offer internship sites in disability management. While some of the 26 disability management tasks from this study can be found in the CORE standards, specifically in section C.4 Employment and Career Development, based on educators' response to student preparedness in this current study, it doesn't seem to be enough.

Also with the identification of the new domain III, rehabilitation counselor education is going to have to respond and attempt to infuse this additional knowledge and training into their programs. Chan et al., (2003) recognize that many of the "emerging knowledge areas (e.g., disability management) may not

even be emphasized in many current rehabilitation counselor education curricula (p. 83). With the identification of this new domain there will be even more knowledge/skills that will need to be instilled into rehabilitation counselor education programs. Lui & Rosenthal (2008) state that the "training and curricula associated with CORE accredited programs may not be adequate at this time to enable graduates from such programs to enter the labor market with the capacity to provide the complex array of services associated with domain III of disability management" (p. 12). Counselors in private rehabilitation settings have already reported needing further training in job accommodations/ergonomics, disability management, workers' compensation laws, benefit programs, and internet resources (Chan et al., 2003).

Zanskas and Leahy (2007) offer recommendations to incorporate private sector training needs (including disability management) into current curricula for master's level rehabilitation counseling students. Their recommendations for rehabilitation counselor educators include: (a) using collaborative learning; (b) using problem and case based learning methods; and (4) develop private practice settings as practicum or internship sites. While these methods may not solve all of the issues in preparing students for the field of disability management, it is a start.

Implications for Research

This study is the first to empirically attempt to quantify the perceived importance, educator proficiency and student preparedness in disability management. Hopefully this will start a new line of research regarding the new

face of disability management and the education of rehabilitation counselors. Research must be conducted to determine the most effective way of infusing disability management into the current curricula as well as how to respond quickly to the changing profession of disability management.

Additional research is also required specifically to domain III. This domain requires a demand for evidence-based practice and disability management practitioners will need to be "informed consumers of current and relevant research, including justifying the return on investment in what they do in terms of reducing direct and indirect costs, decreasing benefits consumption, and improving workplace productivity (Rosenthal et al., 2007). Continual research will need to be conducted to ensure that students are prepared in providing these additional services to employers.

Continued research should also be conducted regarding employers views of rehabilitation counseling as providers of disability management services. Perhaps with increased educational focus of disability management specific tasks in the rehabilitation counselor education programs, employers will identify more with rehabilitation counselors as candidates to provide these services.

Conclusions

The purpose of this quantitative study was to determine how rehabilitation counselor educators perceived identified disability management tasks in relation to importance to the field of rehabilitation counseling, their own proficiency to teach as well as student preparedness. This study also looked at whether

importance, proficiency and preparedness differed across the three disability management domains according to participant demographics.

Educators reported that 25 of the 26 tasks associated with disability management (across three domains) were important to the field of rehabilitation counseling. They also reported being proficient in teaching 22 of these 26 tasks. A high positive correlation was found between educators' perception of importance of a task and their perceived proficiency to teach that task. Participants did perceive students as not prepared on all but 6 of the 26 tasks. The six tasks educators felt students were prepared in all fell within domain I of this study.

Comparison of demographic variables shows some differences across variable and domain. For importance their were some significant findings regarding perceived importance and gender for domain III as well as gender and perceived preparedness for domain I and domain II (in all cases of significant findings males had a higher mean for importance and preparedness). Whether educators participated in paid disability management activities reflected higher scores for perceived importance for domain III as well as perceived proficiency across domains I, II and III. Authoring or co-authoring articles related to disability management also related to higher perceived importance for domain II and III. Educators that had reported writing grants or RFP's pertaining to disability management also had higher scores for perceived importance of domain I, II and III as well as perceived proficiency for domain II and III. How much disability management was emphasized in educators' rehabilitation counselor curriculum,

for their respective institutions, also had a higher score related to perceived student preparedness for domain I, II and III.

The aging of the workforce will bring the field of disability management to the forefront by keeping individuals employed, as well as keeping employers competitive. As employees age, the likelihood of disability increases and due to economic conditions facing many individuals, remaining in the workplace will become a necessity. Employers will also be seeking ways to keep disability costs down, as healthcare costs and costs associated with disability programs continue to rise (i.e., workers' compensation, short-term and long-term disability insurance). Disability management programs can address both of these issues.

While this is the first step in determining educators' perception of importance, proficiency and student preparedness in disability management for the field of rehabilitation counseling, it is clear from some of these results that this subject is one that will need to be studied further. Specifically with the aging of the workforce, and potential increase for the field of rehabilitation counseling to participate in this unprecedented phenomenon, leaders in rehabilitation counselor education must not wait by for other professions to fill the gaps we are not filling. This will include recognizing the importance of disability management, not only for our students but for people with disabilities as well as employers and our nation as a whole. Educators, and the profession, must act swiftly by incorporating disability management into both the curriculum as well as the profession of rehabilitation counseling.

Appendix A: Certification of Disability Management Specialists Commission Role and Function Analysis Survey

PLEASE READ THE ENTIRE PAGE CAREFULLY.

Please read the instructions and informed consent statement. If you decide to participate, you can then proceed to completing the questionnaire.

Directions and Informed Consent

I am a Ph.D. student in rehabilitation counselor education at Michigan State University. I am in the process of completing my dissertation under the supervision and guidance of Dr. Michael Leahy. The purpose of this research is to obtain your perceptions of the importance, proficiency and student preparedness in identified disability management domains (through 26 specific tasks). I hope you will decide to participate.

Participation will require 15-20 minutes of your time in order to read and complete the questionnaires. If you decide to participate, you will be asked some questions related to your education, experience and disability management expertise. If you decide not to participate, or stop after you begin, there will not be any consequence.

Although no information can be guaranteed completely safe, we have attempted to keep all information confidential by having you provide responses via this website provided by Survey Monkey. No identifying information is requested in the questionnaires. If you decide to withdraw from this study before your survey is completed, you can simply discontinue and there will not be any identifying information connecting you to your responses, other than your responding email address linked to your survey, which will be hidden from the researchers and used for the sole purpose of sending email reminders to you to complete the survey from Survey Monkey directly. During the survey, you will have the chance to save your responses after each selection when you press the next button. You can discontinue the survey and return to it at another time where you left off. Since no identifying information is included in your responses it will not be possible to withdraw or delete your responses after they are submitted, as we would not be able to distinguish your responses from those of other participants.

The information in this study will be used for the secondary researcher's dissertation requirement. Only the researchers will have access to the database. All individual responses will be kept confidential. Only group data will be included in reports from the project, not individual data.

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

Wendy Coduti: coduti@msu.edu

Michael Leahy, Ph.D., CRC: leahym@msu.edu

Office of Rehabilitation & Disability Studies
Michigan State University
462 Erickson Hall
East Lansing, MI 48824

Please print a copy of this page for your records.

Click the "Complete Questionnaire" button below*

*By selecting/clicking this button, you acknowledge that you have agreed to participate in this study, that you are at least 18 years of age, and have read the information presented on this page. You understand that your responses will be anonymous and are being provided for the purpose of research at Michigan State University. Participation is voluntary and you can withdraw or refuse to answer any particular question without penalty, by simply skipping that particular question. Your privacy will be protected to the maximum extent allowable by law.

Thank you.

Certification of Disability Management Specialists Commission
Role and Function Analysis Survey

Please complete the survey below regarding tasks identified with the three disability management domains listed. There are three Likert-type scales for each of the 26 tasks:

Importance	Proficiency	Preparedness
1=not important	1=not proficient	1=not prepared
2=somewhat important	2=somewhat proficient	2=somewhat prepared
3=important	3=proficient	3=prepared
4=very important	4=very proficient	4=very prepared
5=extremely important	5=extremely proficient	5=extremely prepared

Importance: Importance of this skill for effective rehabilitation counseling practice

Proficiency: Educators own perceived instructional proficiency in teaching these tasks

Preparedness: Overall student preparedness in these tasks upon completion of a Master's level rehabilitation counseling program

Domain I: Disability Case Management

Tasks associated with this domain consist of a practitioner working one-on-one with ill/injured employees in returning them to productive work.

Domain I: Disability Case Management	Importance	Proficiency	Preparedness
Task 1: Perform comprehensive individual case analysis and benefits assessments using accepted practices in order to develop appropriate interventions.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 2: Review disability case management intervention protocol using standards of care in order to promote quality care, recovery, and cost effectiveness.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 3: Promote collaboration among stakeholders using communication strategies to optimize functional recovery.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 4: Perform worksite/job analyses using observation, interview, and records review in order to determine the requirements of the job.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 5: Develop individualized return-to-work plans consistent with standards of practices and procedures by collaborating with relevant stakeholders in order to facilitate employment.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 6: Implement interventions using appropriate counseling and behavior change techniques in order to optimize functioning and productivity.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Task 7: Coordinate benefits, services, and community resources (e.g., orthotics, prosthetics, FCE, IME, durable medical, home care, and vocational rehabilitation) through strategic planning in order to facilitate optimal functioning.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 8: Monitor progress for achievement of targeted milestones through ongoing comparison with established best-practice guidelines in order to make recommendations, optimize functional recovery, and provide needed follow-up.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 9: Manage caseload using ethical strategies in order to enhance effectiveness and efficiency.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 10: Prepare case notes and reports using applicable forms and systems in order to document case activities in compliance with standard practices and regulations.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Domain II: Disability Prevention and Workplace Intervention

Consists of more proactive approaches in reducing workers' compensation claims and costs through early intervention and remediation.

Domain II: Disability Prevention and Workplace Intervention	Importance	Proficiency	Preparedness
Task 1: Implement disability prevention practices (risk mitigation procedures such as job analysis, job accommodation, ergonomic evaluation, health and wellness initiatives, etc) through training, education, and collaboration in order to change organizational behavior and integrate prevention as an essential component of organizational culture.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 2: Develop a comprehensive transitional work program through consultation with all relevant stakeholders in order to facilitate optimal productivity and value in the workplace.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 3: Develop an interactive process for job site modification, accommodation, or job task assignment incorporating appropriate resources (ergonomics and assistive technologies) in order to facilitate optimal functioning in the workplace.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 4: Support employment practices that align work abilities with essential job functions by serving as a resource for employees and management in order to prevent disabilities and optimize productivity.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Task 5: Recommend strategies to identify ergonomic, safety, and risk factors using available resources (data and assessment tools) in order to mitigate exposure and improve employee health.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 6: Recommend strategies that integrate benefit plan designs and related services (employee assistance programs, community resources, and medical services) by evaluating and coordinating delivery in order to promote prevention, optimal productivity, quality care, and cost containment.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 7: Recommend health and wellness interventions by targeting the specific needs of employees and the organization in order to increase organizational health and productivity while demonstrating measureable value.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Domain III: Program Development, Management and Evaluation

Consists of the design, implementation and evaluation of programs and utilizing expertise in broader absence management and health and productivity initiatives.

Domain III: Program Development, Management, and Evaluation	Importance	Proficiency	Preparedness
Task 1: Analyze workplace practices (benefit design; policies/procedures; regulatory and compliance requirements; employee demographics; labor relations) using a needs assessment to establish baselines & design effective interventions.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 2: Present the business rationale for comprehensive Disability management program using baseline data, best practices, evidence-based research, & benchmarks incorporating cultural & environmental factors to secure stakeholder investment & commitment.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 3: Collaboratively develop & manage the disability management program by specifying essential procedures & training components consistent with pertinent regulations & identifying appropriate services & metrics in order to offer effective services for stakeholders.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 4: Champion individual & organizational behavioral change by assigning responsibility to stakeholders at all levels of organization to achieve strategic outcomes.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Task 5: Procure internal & external services using commonly accepted selection criteria to maximize consistency & desired program outcomes.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 6: Manage service providers using stakeholder-defined performance standards in order to maximize the quality of services & the return on investments.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 7: Facilitate the exchange of data & metrics by integrating information systems for disability management programs in order to achieve & report desired program outcomes.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 8: Conduct ongoing formative & summative program evaluations using qualitative & quantitative methods to improve process & measure outcomes.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Task 9: Create disability management performance reports & other communication vehicles targeted to relevant stakeholders using variety of media in order to promote stakeholder awareness & collaboration.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

DEMOGRAPHIC QUESTIONNAIRE

1. Please enter your current age:_____

2. Please select one to indicate your gender:
   _____Male
   _____Female

3. Please select current professional certifications (select all that apply):
   _____CRC
   _____NCC
   _____CCM
   _____CDMS
   _____Other (Please identify)

4. Please select your degree major:
   _____Counselor Education
   _____Psy.D.
   _____Rehabilitation Counselor Education
   _____Rehabilitation Psychology
   _____Rh.D.
   _____Other (Please identify)

5. Please enter the number of years you have been employed as a Rehabilitation Counselor Educator:
   _____Years

6. Please identify the professional memberships you currently hold (please list all that apply):
   _____

   _____

7. Have you engaged in paid disability management activities?
   _____Yes
   _____No

8. If yes, how many years:
   _____less than one
   _____1-5 years
   _____6-10 years
   _____11-15 years
   _____16-20 years
   _____20+ years
   _____not applicable

9. Please identify the following forms of disability management training you have participated in (indicate all that apply)?
   _____Workshops
   _____Practicum/Internship Experience
   _____Specific Coursework
   _____On-The-Job Training
   _____Not Applicable

10. Have you authored or co-authored any articles regarding disability management that have been published in peer reviewed journals, book chapters, or books during the past?
   _____Yes
   _____ No

11. Have you written any grants or completed requests for proposals related to disability management?
   _____Yes
   _____No

12. Please select your current rank:
   _____Assistant Professor
   _____Associate Professor
   _____Professor
   _____Professor Emeritus
   _____Adjunct Professor
   _____Instructor
   _____Other (please describe)

13. Considering the overall Master's level Rehabilitation Counseling curriculum at your institution please select how much disability management is emphasized:
   _____Not emphasized
   _____Somewhat emphasized
   _____Emphasized
   _____Very emphasized
   _____Extremely emphasized

14. How does your current Rehabilitation Counseling Education (RCE) curriculum offer students disability management knowledge and skill preparation (please select all that apply)?
   _____A required course as part of the RCE curriculum
   _____A required course as part of an interdepartmental curriculum
   _____An elective course
   _____Disability management knowledge is included as part of other courses
   _____Currently developing a course

_____Not applicable

15. Courses with disability management in your rehabilitation counselor education program are taught by (please select 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 another department
    _____Faculty from the areas of labor relations, human resources or organizational behavior
    _____Not applicable

16. Please select the number of semester credit hours your institution requires to complete the requirements for a master's degree in Rehabilitation Counseling:
    _____48
    _____60
    _____48 or 60 credit hour option
    _____Between 49 and 59
    _____Other (please identify)

17. Is the college/university you are teaching in accredited through the National Council of Rehabilitation Education (NCRE)?
    _____Yes
    _____No

18. Please select 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

Appendix B: Survey Transmittal Letter

Subject Line: Dissertation Disability Management Survey

Dear Educator:

I am a Ph.D. student in rehabilitation counselor education at Michigan State University. I am in the process of completing my dissertation under the supervision and guidance of Dr. Michael Leahy.

I need your help and expertise as an educator to further understand disability management as it pertains to the field of rehabilitation counseling. The purpose of this survey is to gather your perceptions of the importance, proficiency and student preparedness in identified disability management knowledge domains. I know your time is valuable and participation will require only 15-20 minutes. I hope you agree to participate.

Here is the link to the survey:
(survey link here)
This link is uniquely tied to this survey and your email address, please do not forward this message.

Please note: If you do not wish to receive further emails from us, please select the link below and you will be automatically removed from our mailing list for this survey.
(removal link here).

Thank you very much for your time and willingness to share your expertise to further benefit the field of rehabilitation counseling.

"This research project has obtained permission to gain access to the NCRE membership for purposes of furthering the mission of the association".

Sincerely,

Wendy Coduti, ABD

Appendix C: Follow Up Survey Transmittal Letter

Subject Line: Reminder: Dissertation Disability Management Survey

Dear Educator:

Recently you were sent an email requesting your participation in my dissertation survey pertaining to your perceptions of the importance, proficiency and student preparedness in identified disability management knowledge domains. Thank you to those that have completed the survey. For those that haven't completed, or haven't yet started the survey, your participation would be greatly appreciated. I understand your time is valuable but I hope you will participate in this survey, which should only take 15-20 minutes of your time. This survey will close on April 30th at 5:00 pm.

Here is the link to the survey:
(survey link)
This link is uniquely tied to this survey and your email address, please do not forward this message.

Please note: If you do not wish to receive further emails from us, please select the link below and you will be automatically removed from our mailing list for this survey.
(removal link).

Thank you very much for your time and willingness to share your expertise to further benefit the field of rehabilitation counseling.

"This research project has obtained permission to gain access to the NCRE membership for purposes of furthering the mission of the association".

Sincerely,

Wendy Coduti, ABD

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