

Promoting Self-Determination in People with Disabilities within Vocational Rehabilitation

by

Jane Wallis Turnbull-Humphries

A dissertation submitted to the Graduate Faculty of
Auburn University
in partial fulfillment of the
requirements for the Degree of
Doctor of Philosophy

Auburn, Alabama
December 8, 2012

Keywords: self-determination, vocational rehabilitation, job coaches, individuals with disabilities

Copyright 2012 by Jane Wallis Turnbull-Humphries

Approved by

Karen S. Rabren, Chair, Professor of Special Education, Rehabilitation and Counseling
Jamie Carney, Professor of Special Education, Rehabilitation and Counseling
Ronald C. Eaves, Professor Emeritus of Special Education, Rehabilitation and Counseling
Randall McDaniel, Wayne T. Smith Distinguished Professor Emeritus of Special Education,
Rehabilitation and Counseling

Abstract

A growing body of evidence suggests that the development of self-determination in persons with disabilities has a positive impact on adult outcomes such as employment. The primary mission of rehabilitation services is to help consumers obtain and maintain employment; therefore, in order to investigate the current status of self-determination practices in this field, this study examined vocational rehabilitation (VR) counselors' and job coaches' expressed support and importance of self-determination.

There has been little research on VR counselors' and job coaches' knowledge of self-determination and the practices they use to support self-determination in the consumers they serve. In order to expand the research in this area, a non-experimental survey design was conducted. The *Self-Determination within Vocational Rehabilitation Survey (SDVRS)*, a modified version of a survey by Cho (2010), was used that is further described in the instrumentation section. Some of the items are similar to the 2010 study; however, additional questions were added and modified for the population of VR counselors and job coaches, rather than special education or general education teachers.

Six hundred VR counselors and 156 job coaches were emailed a link to the SDVRS. Participants of this study included 163 VR counselors and 40 job coaches from the Alabama, Georgia, and Mississippi Department of Rehabilitation Services. There were a total of 63 participants from Alabama, 104 participants from Georgia, and 36 participants from Mississippi.

Results suggest that there were no significant differences among VR counselors' and job coaches' ratings of the importance or time devoted to self-determination. Results also suggest that there were no significant differences in the ratings of the importance and time rehabilitation professionals who work with consumers of transition age and non-transition age allocate to supporting self-determination. Although moderate, there was a significant relationship between the combined ratings of time and importance of self-determination, $r = .589$, $p < .001$. This result suggests that participants who value self-determination also devote time in supporting it with the consumers they serve. This research, along with other research in the area of self-determination, will help further its development within the field of VR.

Acknowledgements

This dissertation is dedicated to my long awaited much loved newborn daughter, Jane Elliott Humphries, and my wonderful husband, Carey Alan Humphries, who I met during my master's program and who has unconditionally encouraged me throughout this long academic journey. This dissertation is also dedicated to my: mother (Jane C. Rock "Collie"), father (J. Robert Turnbull, Jr.), and stepmother (Susan T. Turnbull); siblings (Elliott Turnbull, Neally and Parker Lewis); nephews and nieces (Will and Mollie Lewis; Parker, Miller, and Bella Kate Humphries); godchildren (Charlie Bond, Emmie Gellatly, and Annie Payne); and many extended family members (Bonds, Blantons, Cloyds, Crums, Davises, Humphries, Smiths, Turnbolls, etc.) and friends who have always been my biggest supporters. Especially to my strong and self-determined mother whose husband Julian Rock (my stepfather) sadly recently passed away.

I would like to thank Dr. Karen Rabren, my chair, who saw the potential in me that I could not see in myself. I also would like to thank Dr. Carney who has been on both my master's and my doctoral committees and has encouraged me throughout both programs. Additionally, I thank Dr. Eaves, Dr. McDaniel, and Dr. Witte for their support and feedback in completing this research. I also express my appreciation to Dr. Hyun-Jeong Cho and Dr. Michael L. Wehmeyer for their research and information that led to the development of this dissertation.

Additionally, I thank all three participating states (AL, GA, MS) and the administrators and staff who assisted me during the approval process and in distributing emails to rehabilitation

professionals. Specifically, Dr. Cary Boswell, Linda Hames, Shereka Hampton, and Jim Harris, III of the Alabama Department of Rehabilitation Services; Christine Fleming of the Georgia Vocational Rehabilitation Agency; and Joyce White of the Mississippi Department of Rehabilitation Services. I thank Altamese Stroud-Hill and George Littleton for their assistance in editing and formatting. I also thank Diane Glanzer, George Hall, and the ATLI staff for their support as well as Sherry Boothe and Nancy Evans (SERC staff) for their many years of assistance and encouragement throughout both graduate programs.

Last, I would like to thank my many wonderful family and friends (fortunately too many to list) for their encouragement, patience, and understanding throughout this entire process. I would like to especially thank Dr. Ruthanna Blake Spiers, who I befriended in our counseling master's program, for being one of my main sources of support throughout both academic programs.

Table of Contents

Abstract.....	ii
Acknowledgments.....	iv
List of Tables	xi
Chapter I. Introduction.....	1
Statement of the Problem.....	5
Purpose of the Study	5
Research Questions	5
Significance of the Study	8
Definition of Terms.....	8
Summary	10
Chapter II. Review of the Literature	11
Overview of Self-Determination.....	11
Defining Self-Determination	12
Characteristics of Self-Determination.....	14
Self-Realizing	14
Psychological Empowerment.....	15
Autonomy	15
Self-Regulation	16

History of Self-Determination	17
Theory of Self-Determination from the Psychological Perspective	17
Hard versus Soft Determinism.....	17
Personality Psychology.....	18
Self-Determination Theory	18
Disability Rights and Self-Advocacy Movements.....	19
Development of Self-Determination in Special Education and Vocational Rehabilitation	22
Special Education.....	22
Transition Movement.....	23
Vocational Rehabilitation	25
Importance of Self-Determination within Vocational Rehabilitation.....	26
Federal Mandates	26
Special Education Legislation.....	26
Vocational Rehabilitation Legislation	28
The Rehabilitation Act.....	29
Americans with Disabilities Act	30
Self-Determination Research	31
Meta-Analysis	31
Special Education Descriptive Research	35
Post-School Outcomes	35
Self-Directed IEPs	37
Special Education Intervention Research	39

Vocational Rehabilitation Descriptive Research	42
Consumer Choice.....	42
Congruence of IPE Goals and Outcomes.....	44
Knowledge of Self-Determination.....	45
Vocational Rehabilitation Intervention Research	47
Job Matching.....	47
Consumer-Driven Services	50
The Increase in Demand for Consumer-Driven Services	56
Increasing Consumer-Driven Services	56
Consumer-Driven Services: An Ethical Standard.....	58
Consumer Recommendations	59
Issues of Self-Determination Practice in Vocational Rehabilitation	60
Evidence-Based Practice.....	60
Suggestion of Implementation	61
Cultural Values and Self-Determination.....	65
Sustainability.....	67
Conclusion	68
Chapter III. Methods.....	70
Participants.....	70
Descriptive Results	72
Instrumentation	77
Procedures.....	80
Analysis.....	82

Summary	84
Chapter IV. Results	85
Research Questions	85
Research Question 1	86
Research Question 2	87
Research Question 3	89
Research Question 4	90
Research Question 5	92
Summary	93
Chapter V. Discussion	94
Discussion of Findings.....	94
Descriptive Data.....	95
Research Questions 1 and 2	96
Research Question 3	97
Research Questions 4 and 5	97
Limitations and Recommendations.....	98
Sample Bias	98
Time of Year	99
Lack of Universal Definitions and Processes	100
Future Survey Development Recommendations	101
Implications.....	102
Conclusion	103
References.....	104

Appendix A	Institutional Review Board Approval Letter.....	123
Appendix B	Initial and Reminder Emails	125
Appendix C	Information Letter	128
Appendix D	Self-determination within Vocational Rehabilitation Survey (SDVRS)	131
Appendix E	Privacy Policy	158
Appendix F	Letters Seeking Permission.....	159
Appendix G	Letter of Authorization/Cooperation.....	163
Appendix H	Wehmeyer and Field (2007) Essential Components of Self-Determination.....	167

List of Tables

Table 1	Summary of the Two Areas Examined: Importance and Support	7
Table 2	Comparison of Self-determination Definitions.....	13
Table 3	Self-Determination Directly/Indirectly in Disability Legislation	28
Table 4	A Review of Self-determination Intervention Studies.....	34
Table 5	Research to Support Self-determination in Vocational Rehabilitation Consumers	54
Table 6	Common Threats to Internal and External Validity within Self-determination Research.....	55
Table 7	Model Programs that Integrate Self-Determination and Career Development.....	63
Table 8	Frequencies and Percentages for Job Titles	72
Table 9	Frequencies and Percentages for State of Employment Comparing Job Title.....	73
Table 10	Frequencies and Percentages for Caseload.....	74
Table 11	Frequencies and Percentages for Age of Consumers.....	74
Table 12	Frequencies and Percentages for Months of Experience	75
Table 13	Frequencies and Percentages for Source of Learning the Term Self-Determination ..	77
Table 14	Analysis of the Research Questions.....	83
Table 15	Means and <i>SD</i> for Importance Ratings of Self-determination.....	87
Table 16	ANOVA Results for Importance Ratings of Self-determination.....	87
Table 17	Means and <i>SD</i> for the Ratings of Time Allocated to Self-determination	88
Table 18	ANOVA Results for Ratings of Time Allocated to Self-determination	89
Table 19	Correlations of Combined Self-determination Constructs of Importance and Time...	90
Table 20	Means and <i>SD</i> for Importance Ratings to Self-determination	91

Table 21	ANOVA Results for Importance Ratings of Self-determination	91
Table 22	Means and <i>SD</i> for Time Ratings of Self-determination.....	92
Table 23	ANOVA Results for Time Ratings of Self-determination.....	93

CHAPTER I. INTRODUCTION

During the past several decades, self-determination has become a focus for professionals working with individuals with disabilities. Self-determination is commonly defined within the disability fields as, "...the attitudes and abilities required to act as the primary causal agent in one's life and to make choices regarding one's actions free from undue external influence or interference" (Wehmeyer, 1992, p. 305). Support for self-determination emerged from the Disability Rights Movement where considering the choices of individuals with disabilities became not only the right thing to do but, as research suggests, results in better outcomes (Field, Martin, Miller, Ward, & Wehmeyer, 1998; Hagen-Foley, Rosenthal, & Thomas, 2005; Wehmeyer, 2003).

A majority of research in the area of self-determination of individuals with disabilities has been conducted within the field of special education (Wehmeyer, 2003). Special education is an entitlement program that provides individualized services to students with disabilities that meet their unique educational goals. Self-determination developed as a best practice within the field of special education. The field of vocational rehabilitation (VR) has also recognized the importance of promoting self-determination in the consumers they serve. Vocational rehabilitation is an eligibility program that provides individuals with disabilities services to train for, obtain, and maintain employment.

Special education and VR overlap, especially during the transition years, ages 16 to 21. During this time period, professionals from both fields can contribute to students' development

of self-determination. Although self-determination research is recently being facilitated with VR consumers, there are related practices that have long been established that support its development. Some of these practices include shifting from sheltered workshops to supported employment, promoting deinstitutionalization, developing consumer-driven services, and advancing rehabilitation counselor standards and the rehabilitation process to include Individualized Plans for Employment (IPE).

Supported employment includes training individuals with disabilities for employment by placing them in actual worksites with assistance. This assistance is provided by the employer and VR employees sometimes referred to as a job coaches. This is a welcomed change from the traditional isolative sheltered workshops which prevented individuals with disabilities from obtaining employment with the possibility of promotion, otherwise known as competitive employment. Supported employment also provides individuals with disabilities more opportunity to socialize, gain higher wages, and experience an overall better quality of life.

Another positive change for VR consumers included deinstitutionalization, which is the placement of individuals with disabilities in the community as opposed to isolating them in institutions. Deinstitutionalization, along with consumer-driven services, or services lead by the individuals with disabilities themselves, continues to support the development of self-determination.

The practice of providing choice, which is a component of self-determination, has been a common theme throughout VR research (Beveridge & Fabian, 2007; Farley, Bolton, & Parkerson, 1992; Hagen-Foley, et al., 2005; Hartnett, Collins & Tremblay, 2002; Kilsby & Beyer, 2002; Martin, Woods, Sylvester, & Gardner, 2005). Consumers who are able to choose their own future employment placements, career goals, and necessary supports have better VR

outcomes such as successful employment closures and consumer satisfaction with their services (Hagen-Foley et al., 2005).

Specifically, VR research in the area of self-determination has focused on: choice-making during the development of the Individualized Plan for Employment (IPE) (Beveridge & Fabian, 2007); job coach training on self-determination and providing consumers opportunities to express their preferences during job matching (Kilsby & Beyer, 2002); examining the differences in consumers' and their caregivers' job matching preferences (Martin et al., 2005); and assessing programs that support the increase in consumers' choice-making skills (Farley et al., 1992; Hartnett et al., 2002). These findings support consumer-driven services and give credence to the development of self-determination in consumers during the VR process.

Although research focusing on the development of self-determination within VR consumers is increasing, there continues to be a need for further investigation in order for these practices to be realized. One area of study that could provide the foundation for determining the need for research in this area is to examine professionals' knowledge and implementation of self-determination.

Thoma and Sax (2003) surveyed students' majoring in rehabilitation counseling to assess their knowledge and support of self-determination. Four areas associated with self-determination were explored: knowledge of self-determination; where they learned to facilitate self-determination; what strategies they heard about and/or used to facilitate self-determination; and the importance of the core competencies of self-determination in their own lives. Results from this study suggest that rehabilitation counseling students with at least one year of experience working with people with disabilities were aware of self-determination and found it to be important for people with disabilities as well as in their own personal lives.

The survey used in Thoma and Sax's study was a modified version of a national survey of teachers by Wehmeyer, Agran and Hughes (2000) and a survey of special education teachers by Thoma, Nathanson, Baker and Tamura (2002). There are multiple studies examining different populations of professionals' promotion of self-determination using a modified version of the Wehmeyer et al. (2000) survey (Carter, Lane, Pierson, & Stang, 2008; Cho, 2010; Stang, Carter, Lane, & Pierson, 2009; Thoma & Sax, 2003).

Cho's (2010) dissertation, under the direction of Wehmeyer (Chair) and colleagues (Kingston, Palmer, Carter, & Horn), provides a current survey with reliability measures that assess professionals' knowledge and implementation of self-determination. This study examined 407 elementary special education and general education teachers' perceptions of importance, practices, and knowledge of self-determination. Cho found that both special education and general education teachers find self-determination to be important, and teach similar strategies. They also report problem-solving and choice making as components of self-determination most frequently taught. Other results of this study, found that the type of components taught were dependent upon the students' disability category. Also, the three main barriers to teaching the essential components of self-determination were "Other Areas Student Needs Instruction, 57.0%"; "Don't Have Sufficient Time, 38.5%"; and "No Sufficient Training or Information, 30.1%" (Cho, 2010, p. 103).

Thoma and Sax's (2003) research identifies the need for further investigation of self-determination within VR consumers, and Cho's dissertation provides a reliable survey in order to execute this task. Assessing knowledge of self-determination and implementation of self-determination practices by rehabilitation professionals, specifically VR counselors and job

coaches, will help to provide a starting point for further development of these practices within the VR field.

Statement of the Problem

It has been shown that an increase in self-determination practices within the VR process leads to better employment and adult outcomes (Kilsby & Beyer, 2002; Martin, Mithaug, Oliphint, Husch, & Frazier, 2002; Martin, et al., 2005; Wehmeyer, 2003). Vocational rehabilitation continues to change to meet the unique needs of the consumer; however, with more research in the area of self-determination a better understanding of how to implement these practices can be realized. Self-determination research within VR is still in its early stages of development; therefore, investigating where the field stands in its importance and time devoted to self-determination is useful in constructing future intervention research.

Purpose of the Study

Vocational rehabilitation counselors' and job coaches' perceptions of importance and time allocated to supporting self-determination were examined in this study. More specifically, this study expands the research on the value VR counselors and job coaches place on self-determination and the practices these service providers use to support its development with the consumers they serve.

Research Questions

The following research questions were used.

1. Are there differences in the ratings of importance that VR counselors and job coaches assign to supporting self-determination?

Null Hypothesis: There will be no significant differences in the ratings of importance that VR counselors and job coaches assign to supporting self-determination as measured by an analysis of variance.

2. Are there differences in the time that VR counselors and job coaches allocate to supporting self-determination?

Null Hypothesis: There will be no significant differences in the time that VR counselors and job coaches allocate to supporting self-determination as measured by an analysis of variance.

3. Are VR counselors' and job coaches' perceptions of the importance of self-determination reflected in the time they devote to supporting self-determination?

Null Hypothesis: There will be no relationship between VR counselors' and job coaches' perceptions of the importance of self-determination as reflected in the time they devote to supporting self-determination as measured by a correlation analysis.

4. Are there differences in the ratings of importance that rehabilitation professionals who work with consumers of transition age and non-transition age assign to supporting self-determination?

Null Hypothesis: There will be no significant differences in the ratings of importance that rehabilitation professionals who work with consumers of transition age and non-transition age assign to supporting self-determination as measured by an analysis of variance.

5. Are there differences in the time that rehabilitation professionals who work with consumers of transition age and non-transition age allocate to supporting self-determination?

Null Hypothesis: There will be no significant differences in the time that rehabilitation professionals who work with consumers of transition age and non-transition age allocate to supporting self-determination as measured by an analysis of variance.

Table 1 provides a brief summary of the two main areas of this study (support and importance) and how they are being addressed within the research questions and survey items. Details of the survey items and how they relate to the two main areas are further explained in the instrumentation section. The *Self-Determination within Vocational Rehabilitation Survey* (SDVRS) is included in Appendix D.

Table 1

Summary of the Two Areas Examined: Importance and Support

Abbreviated Research Question	Area Examined	# Items
1. Differences in the ratings of importance between VR counselors and job coaches	Importance	21
2. Differences in the ratings of time allocated between VR counselors and job coaches	Support	21
3. Importance reflected in the time devoted to supporting self-determination	Importance and Support	42
4. Differences in the ratings of importance between transition and non-transition caseloads	Importance	21
5. Differences in the ratings of time allocated between transition and non-transition caseloads	Support	21

Significance of the Study

Self-determination has been proven beneficial for consumers and can be supported during the VR process (Field et al., 1998; Wehmeyer, 2003). Self-determination is directly and indirectly addressed through disability legislation and research (Wehmeyer, 2003). The challenge of incorporating this concept into the services for VR consumers is implementing self-determination into practice and continuing research to develop evidenced-based programs.

Self-determination according to Ward (1988) “requires not only that people with disabilities develop inner resources, but that society support and respond” (p. 2). Professionals working with people with disabilities must understand the importance of self-determination in order for this practice to be supported. This research, along with future research in the area of self-determination, will help assess the current practice of promoting self-determination within the VR process.

Definition of Terms

Choice-Making Skills includes “...the expression of a preference between two or more options” (Wehmeyer & Field, 2007, p. 32).

Decision-Making Skills is “...coming to a judgment about which solution is best at a given time” (Wehmeyer & Field, 2007, p. 33).

Goal-Setting and Attainment Skills is “...identifying and defining a goal clearly, developing a series of objectives to achieve the goal, and specifying the actions necessary to achieve the desired outcome” (Wehmeyer & Field, 2007, p. 32).

Job Coach “... is an employment specialist who accompanies a student with a disability to the worksite and guides them in understanding the requirements and tasks involved in a job” (Rabren & Curtis, 2007, p. 64).

Problem-Solving Skills is "... identifying and defining the problem, listing possible solutions, identifying the impact of each solution, making a judgment about a preferred solution, and evaluating the efficacy of the judgment" (Wehmeyer & Field, 2007, p. 33).

Rehabilitation Counseling is defined by Parker and Szymanski as, "...a comprehensive sequence of services mutually planned by the consumer and rehabilitation counselor to maximize employability, independence, integration, and participation of people with disabilities in the workplace and community" (1998, p. 2)

Self-Advocacy and Leadership is "...advocating on one's own behalf, knowing how to advocate and what to advocate for, and having effective assertiveness and communication" (Wehmeyer & Field, 2007, p. 34).

Self-Awareness and Self-Knowledge is "...possessing a reasonably accurate understanding of one's strengths, abilities, unique learning and support needs, and limitations" (Wehmeyer & Field, 2007, p. 35).

Self-determination includes "the attitudes and abilities required to act as the primary causal agent in one's life and to make choices regarding one's actions free from undue external influence or interference" (Wehmeyer, 1992, p. 305).

Self-Management and Self-Regulation Skills "... involves the process of setting goals, developing action plans to achieve those goals, supporting the action plans, evaluating the outcomes of the action and changing action plans if the goal was not achieved (Wehmeyer & Field, 2007, p. 34).

Transition is defined as a "coordinated set of activities for a student, designed within an outcome-oriented process, which promotes movement from school to post-school activities, including post-secondary education, vocational training, integrated employment (including

supported employment), continuing and adult education, adult services, independent living, or community participation. The coordinated set of activities must be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation.” [IDEA, PL 101-476, 20 U.S.C. Chapter 33, Section 1401(a)(19)]

Summary

This chapter introduced the concept of self-determination, stated the purpose of this study, and included research questions, problem statement, significance, and definition of terms. Chapter II provides a literature review that details the history of self-determination as it relates to individuals with disabilities and its development through legislation, research, and practices within the disability fields. The remaining chapters will discuss the methods, results, and recommendations arising from this study.

CHAPTER II. REVIEW OF THE LITERATURE

Overview of Self-Determination

The importance of self-determination has long been recognized in the field of vocational rehabilitation (VR); however, fostering its development continues to be a challenge (Wehmeyer, 2003, 2004). This discrepancy between what is valued and what is practiced can be attributed, in part, to the complexity of the construct of self-determination and the lack of evidence-based practices for promoting self-determination within the VR process.

To begin, different definitions of self-determination providing clarity of this complex concept and a functional framework of self-determination will be presented. The development of self-determination will be traced through the field of psychology, the Disability Rights Movement, and the fields of special education and VR. The different influences of consumers and professionals of these various fields have contributed to the continued development of the meaning and the application of self-determination, particularly as it pertains to persons with disabilities, will be presented.

Although self-determination is recognized as being important within special education and vocational rehabilitation, improving methods to facilitate its development in persons with disabilities persist. Section three explores Wehmeyer's (2003) rationale for supporting self-determination in vocational rehabilitation to include federal mandates, research, and consumer demand. Finally, the literature review presents issues related to self-determination in the VR process. These issues include a need for evidence-based practices, respect for cultural values,

and sustainability. Recognizing and developing strategies to address barriers to implementing self-determination in the VR process will help establish its use as a best practice.

Defining Self-Determination

Self-determination has been defined in many different ways. It is often misconstrued as being synonymous with the following words: self-esteem, self-concept, self-advocacy, and empowerment (O'Brien, Revell, & West, 2003; Sands & Wehmeyer, 1996; Wehmeyer, 2004; Wehmeyer, Bersani, & Gagne, 2000). Each of these terms has been linked to human development and personal growth. Although self-determination is related to these terms, it remains a complex and unique concept that includes people with disabilities having the opportunities and abilities to make their own choices. For the purposes of this dissertation, Wehmeyer's (1992) comprehensive definition of self-determination will be used: "...the attitudes and abilities required to act as the primary causal agent in one's life and to make choices regarding one's actions free from undue external influence or interference" (p. 305).

In order to provide further clarification, other components of self-determination are explained (see Table 2). Self-determination means having the ability, opportunity, and the right to choose. Choice is a common variable throughout self-determination research. Schloss, Alper, and Jayne (1993), along with Serna and Lau-Smith (1995), used the term 'choice' in their definition of self-determination. Serna and Lau-Smith also stated that consumers must be able to make choices and have the ability to set goals. Some researchers use the term 'goal' to define self-determination (Field et al., 1998; Trainor, 2008; Ward, 1998). People's ability to set goals and make choices is important; however, without the right and opportunity to do so, self-determination cannot be fully realized.

Halloran (1993) and Wehmeyer (2004) both address the importance of disability rights within their definitions. Halloran points out the importance of gaining knowledge of one's rights. Wehmeyer further addresses both the rights and abilities a person needs to become self-determined.

Table 2

Comparison of Self-determination Definitions

Reference	Definitions
Schloss, Alper, & Jayne, 1993, p. 215	The ability of a person to consider options and make appropriate choices regarding residential life, work, and leisure time.
Serna & Lau-Smith, 1995, p. 144	Self-determination refers to an individual's awareness of personal strengths and weaknesses, the ability to set goals and make choices, to be assertive at appropriate times, and to interact with others in a socially competent manner.
Ward, 1988, p. 2	Self-determination refers to both to the attitudes which lead people to define goals for themselves and to their ability to take the initiative to achieve those goals.
Field, Martin, Miller, Ward, & Wehmeyer, 1998, p.2	A combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior.
Trainor, 2008, p. 153	The sum of the attitudes and behaviors that lead one to autonomously set goals, take action toward those goals, and self-assess progress.
Halloran, 1993, p. 215	Self-determination means (a) running risks, (b) challenging rules, (c) acquiring resources, (d) knowing basic human rights, (e) taking responsibility for one's life, and (f) asking for help because it is wanted or needed.
Wehmeyer, 2004, p. 23	Put most simply, the self-determination construct refers to both the right and capacity of individuals to exert control over and direct their lives.
Wehmeyer, 1992, p. 305	The attitudes and abilities required to act as the primary causal agent in one's life and to make choices regarding one's actions free from undue external influence or interference.

Wehmeyer (1992) addresses terms such as ‘choice’, ‘setting goals’, and ‘human rights’ into one comprehensive definition as noted before (see Table 2). He (1996) extends his definition by providing a self-determination framework, which is comprised of four characteristics: self realization, psychological empowerment, autonomous, and self-regulation.

Characteristics of Self-Determination

Wehmeyer (1996) defines essential characteristics that contribute to self-determination. The four characteristics of self-determination consist of two attitudes and two behaviors. The attitudes are self-realization and psychological empowerment. The two behaviors are autonomous and self-regulation (Sands & Wehmeyer, 1996; Ward, 1988; Wehmeyer, 1992; Wehmeyer & Field, 2007). Understanding these four components provides a deeper grasp of the complex construct of self-determination.

These four characteristics of self-determination created by Wehmeyer (1996) were validated by Wehmeyer, Kelchner, and Richards (1996) from interviews of more than 400 adults with mental retardation [*sic*] and developmental disabilities using self-reporting of each of the components (self-realizing, empowerment, self-regulation and autonomy). The sample was divided into two groups (those who presented themselves as self-determined and those who did not). Significant differences between the two groups were found in all four components. Autonomy and self-regulation were found to be the main predictors of self-determination within this study (Wehmeyer et al., 1996).

Self-Realizing

Being aware of one’s strengths and limitations is a necessary skill to be a successful adult. For example, presenting strengths and recognizing limitations during the interview process can influence success of obtaining employment. Wehmeyer (1996) defines self-realizing

as when people, "...use a comprehensive, and reasonably accurate, knowledge of themselves and their strengths and limitations to act in such a manner as to capitalize on this knowledge" (p. 26).

Making the most of this knowledge is also beneficial when seeking support. For example, the more self-realized a person with a disability is, the better prepared that person is in asking for resources and accommodations from a VR counselor and/or employer. Being self-aware of one's strengths and limitations is important; yet, having the motivation to speak up and use this information is also essential.

Psychological Empowerment

Along with self-realization, empowerment is an attitude component of self-determination. Wehmeyer (1996) emphasized that people are not products of their behaviors, but combinations of cognitions and behaviors. Empowerment is a perception of control over one's motivation, self-efficacy and actions (Zimmerman, 1990). Empowerment can be supported within the VR process by providing opportunities for consumers to practice controlling their lives (Hein, Lustig, & Uruk, 2005).

Empowerment, according to Kosciulek (2004), is not something one does to or for consumers, but is done to encourage them to become their own best resource. Even when a person is empowered, without an environment that fosters self-determination they may lack autonomy. Autonomy refers to independently acting on one's behalf. Autonomy and self-regulation make up the two behavior characteristics of self-determination.

Autonomy

Autonomy is acting independently upon one's own choices and interests (Wehmeyer, 1996). Advocates for people with disabilities must recognize that some people with disabilities live in environments that do not support freedom of choice. For example, Raymond Gagne, a

person with cerebral palsy, shares his story and discusses how being self-determined has taken him from being institutionalized to being an advocate for disability rights (Wehmeyer, et al., 2000).

When institutionalized, Gagne was not able to act autonomously or make his own choices.

Every morning we would wake up at 6:00 am. An attendant would help me put on the clothes he had laid out the night before. I didn't have any say about what I wore. What they put on, I wore. Sometimes they wouldn't put underwear on me. (p. 108)

Gagne's experience further emphasizes the need for VR counselors to educate caregivers about the importance of letting people with disabilities make their own decisions. For true autonomy, the professional provides information and encouragement but the consumer makes the choice (Granse, Kinebanian, & Josephsson, 2006).

Autonomy is further demonstrated through self-management, and recreational and social/vocational activities (Sigafoos, Feinstein, Damond, & Reis, 1988; Wehmeyer, 1996). Choosing one's own activities is an important step to becoming self-determined; however, one must also learn how to regulate these choices.

Self-Regulation

Being the causal agent in one's own life is the best way to sum up self-regulation (Wehmeyer, 1996). Learning to self-regulate, or set goals for oneself, is a skill that is developed over time. Self-regulation can be encouraged by VR counselors by educating consumers about life skills such as time management, employment related skills, money management, and social skills.

Vocational rehabilitation counselors, for example, need to teach consumers about time management (i.e. showing up to work on time, not being late to staff meetings, and not leaving work early). Self-regulated behavior means making appropriate decisions for one's environment and situation, and at the same time being flexible enough to reevaluate those decisions when necessary (Whitman, 1990). Even when one realizes his or her own strengths and limitations, is empowered, and has the ability to act autonomously, there is still a need to self-regulate.

Self-determination, although complex, is central to the VR profession (Wehmeyer, 2003). To explain further, the next three sections will give a more comprehensive view of self-determination through a review of history, rationale for self-determination, and issues related to practices in VR to support self-determination.

History of Self-Determination

Theory of Self-Determination from the Psychological Perspective

Hard versus soft determinism. Self-determination has an extensive history beginning with determinism, a philosophical doctrine that dates back to 1683 (Wehmeyer, 2004). Determinism includes hard determinists, who believe that there are causes for every behavior or action; as opposed to soft determinists, who believe that behaviors or actions are caused, but also believe in free will. Determinism versus free will has been debated throughout history. Philosophers over time became divided in their views of determinism, which influenced the development of self-determination.

Locke's (1690) philosophical view of determinism was founded on the belief that humans had free will. He was therefore considered a soft determinist. Later, the debate of behaviorism versus cognitive behaviorism and nature versus nurture overlapped into a

progression of self-determination (Wehmeyer, 2004). Self-determination emerged from the personality psychology discipline in the late 1930s (2004).

Personality psychology. Angyal (1941) and other personality psychology experts focused on the importance of autonomy. Autonomy, again, is the ability and right to make choices for oneself; whereas, self-regulation is the behavior of regulating these choices. These experts stated that personality consists of “autonomous-determinism or (self-determinism) and heteronomous-determinism or (other-determined)” (Wehmeyer, 2004, p. 346). Angyal, a soft determinist, believed that nature and nurture both contributed to personality.

Self-determination theory. Ryan and Deci (2000) developed the Self-Determination Theory (SDT) that focuses on a person’s development of motivation. They also explore what supports foster the development and retention of one’s motivation. Self-Determination Theory is further explained by two sub-constructs of motivation: intrinsic and extrinsic.

Intrinsic motivation is something one is born with, and it is closely related to self-regulation (Ryan & Deci, 2000). This sub-construct is considered a person’s natural drive to learn new things, become successful, and assimilate. Intrinsic motivation can be a predictor of success, but must be nurtured and supported over time.

Extrinsic motivation involves external motivation, such as earning money. Extrinsic motivation can develop into intrinsic motivation over time (Ryan & Deci, 2000). For example, a VR consumer may extrinsically be motivated at first to take a job based on salary. This same consumer may intrinsically become motivated over time through positive co-worker relationships.

Three basic components of the Self-Determination Theory necessary for a person’s growth and development include autonomy, competence, and relatedness (Deci & Ryan, 2002;

Sikma, 2009). Ryan and Deci (2000) defined self-determination as not only having the opportunity and skill to make one's own choices, but also describe this construct as a need. Although Self-Determination Theory has a direct impact on the development of self-determination within VR, there are differences specifically in relation to personal control.

Wehmeyer (2004) identifies a missing element of Deci and Ryan's psychological theory of self-determination. Wehmeyer states that although having personal control is important, it is just as crucial to relinquish control at times. For example, when a person is in need of surgery, it is necessary to give control over to a medical team. Wehmeyer developed a self-determination framework including empowerment and autonomy as key elements; however, he also included the elements of self-realization and self-regulation. This framework is a more comprehensive depiction of self-determination and has been utilized in most disability literature (Wehmeyer, 1996; Wehmeyer & Field, 2007).

The earlier debates of soft versus hard determinism and nature versus nurture created interest in the construct of self-determination by theorists in related fields such as psychology, special education, and VR. However, the Disability Rights Movement gave this concept a *voice*. Consumers and their advocates from the Disability Rights Movement continue to be an integral part of the development and sustainability of self-determination.

Disability Rights and Self-Advocacy Movements

The Disability Rights Movement increased legislation that supported the equality of people with disabilities (Wehmeyer, 2004). This movement brought people with disabilities and their advocates together in order to create a more powerful community of change. Another result of the Disability Rights Movement was the development of the Self-Advocacy Movement that supports the equality of people with disabilities.

The Self-Advocacy Movement began with the principle of normalization. The normalization principle was the belief that it is important to create an equal environment as close to mainstream society as possible for people with disabilities (Nirje, 1972; Wolfensberger & Tullman, 1982). Wolfensberger promoted the importance of society valuing people with disabilities as true members of the community in order for deinstitutionalization and integration to become successful. The normalization principle supported the development of self-advocacy groups in Oregon in the early 1970s (Lehr & Taylor, 1986; Ward, 1996).

Self-advocacy groups were instrumental in deinstitutionalization and in the creation of People First chapters (Longhurst, 1994; Ward, 1996). People First chapters are groups of self-advocates all over the country that share resources and support for equality of people with disabilities (1996). Although self-advocacy and self-determination both developed from the normalization principle and are closely related, they are not the same.

Self-determination has been described as synonymous with or a sub-theory of self-advocacy; however, some researchers define self-advocacy as a sub-theory of self-determination (Algozzine, Browder, Karvonen, Test, & Wood, 2001; Field et al., 1998; Test, Fowler, Wood, Brewer, & Eddy, 2005; Wehmeyer & Berkobien, 1991; Williams & Schoultz, 1982). Specifically, self-advocacy in relation to Wehmeyer's framework of self-determination is "...a visible manifestation of self-regulation and to a lesser extent, autonomy" (Wehmeyer & Berkobien, 1991, p. 4). In order for one to be self-determined one must develop self-advocacy skills.

The Disability Rights and Self-Advocacy Movements led professionals to advocate with people with disabilities for equality (Wehmeyer, 2004). For example, the field of social work adopted the concept of self-determination as a main focus and continued the forward movement

of its growth in related fields (Wehmeyer, 2004). In fact, the field of social work advocated for the right of choice and autonomy for consumers throughout most of the twentieth century (Biestek & Gehrig, 1978; McDermott, 1975; Wehmeyer, 2004).

A modern view of self-determination was developing, and as a result, a new definition emerged. The Oxford English Dictionary (1989) defines self-determination as “the action of a people in deciding its own form of government” (p. 919). This modern view of self-determination became an integral part of the Disability Rights Movement. For example, Robert Williams, a person with a disability, stated:

But, without being afforded the right and opportunity to make choices in our lives, we will never obtain full, first class American citizenship. So we do not have to be told what self-determination means. We already know that it is just another word for freedom. We already know that self-determination is just another word for describing a life filled with rising expectations, dignity, responsibility, and opportunity. That it is just another word for having the chance to live the American Dream. (Williams, 1989, p. 16)

Although self-determination has become more widely known and accepted, there are issues that persist, even today, in regard to a need for a universal definition.

Throughout the Disability Rights Movement, issues developed with the definitions of self-determination becoming synonymous with related terms such as autonomy and empowerment (Wolfensberger, 2002). Wehmeyer (1996) also addressed the confusion of overlapping terms through his development of a self-determination framework that included autonomy and empowerment as important characteristics of self-determination.

Wehmeyer (2004) and Wolfensberger (2002) both discuss the need to more clearly define self-determination. Wehmeyer further elaborates that a common definition is important for

professionals to make this a part of their daily practice. Self-determination is central to the equality of people with disabilities, and although this construct has advanced over the years, there continues to be a need for further development in implementation.

Self-determination emerged from the early philosophers, psychologists, and social workers. Self-determination then became the driving force of the Disability Rights and Self-Advocacy Movements. The progression of self-determination has supported an increase in disability rights legislation and developed into a best practice in serving people with disabilities. This leads naturally to the development of self-determination practices within the fields of special education and VR.

Development of Self-determination in Special Education and Vocational Rehabilitation

Special education. The Disability Rights Movement brought about changes in disability legislation, policy, and research. These changes contributed to self-determination becoming a best practice in the field of special education (Wehmeyer, 1996, 2003; Wehmeyer & Field, 2007). The most common self-determination intervention in special education has been a curriculum that teaches students how to lead their own Individualized Education Program (IEP) meetings. Although this dissertation focuses on self-determination in the VR process, it is important to discuss its progress within special education because teaching self-determination skills at an early age is ideal for the development of positive adult outcomes (Doll, Sands, Wehmeyer, & Palmer, 1996; Test et al., 2005).

Although it is best to learn self-determination skills at an early age, it is also important to continue nurturing these skills throughout adolescence and adulthood (Field et al., 1998; Wehmeyer, 1993). Nurturing these skills during the transition years of adolescence to adulthood has been a main focus of self-determination research and discussion in the special education

field. This transition of youth with disabilities to young adulthood can be considered a common denominator between VR and special education because it addresses post-school outcomes including the outcome of employment. The research in the area of transition has supported evidence-based practices of self-determination in the field of special education and is paving the way for this similar development in VR (Wehmeyer, 2003).

The definition of transition has progressed much like self-determination. According to Halpern (1994), transition “refers to the change in status from behaving primarily as a student to assuming adult roles in the community” (p. 117). Students with disabilities of transition age (16–21) range from high school students to young adults. As a result of discouraging post-school outcomes of students with disabilities, a Transition Movement emerged and by 1984 became a federal initiative (Halpern, 1993).

Transition movement. The Transition Movement developed due to the disparity of post-school outcomes of young adults with disabilities as compared to those without disabilities (Halpern, 1993). Originally, the purpose of the Transition Movement was to improve the post-school outcomes of students with disabilities in the area of employment and later extended to other adult outcomes, such as independent living. Research by Wehmeyer and Schwartz (1997) and Wehmeyer and Palmer (2003) demonstrate a positive correlation between self-determination and post-school outcomes. The Transition Movement helped to bring together two important resources (special education and vocational rehabilitation) for a smoother transition to adulthood for students with disabilities.

Two important models emerged during the Transition Movement. The first was the Bridges Model created by the Office of Special Education and Rehabilitative Services (OSERS; Will, 1984). This model consisted of three bridges or services that include: transition without

services (generic services available to everyone); transition with time-limited services (specialized, short-term services for people with disabilities); and transition with ongoing services (supported employment). Although this model helped set the stage for transition as a federal initiative, it was narrow in focus because the only outcome considered was employment (Halpern, 1993).

Halpern (1985) responded to Will's (1984) model by identifying community adjustment as an appropriate post-school outcome. Community adjustment in this model includes employment as well as residential environment, employment, and social and interpersonal networks. However, Halpern's model was similar to Will's model in that there were three pathways to community adjustment that were generic services, time limited special services, and ongoing services.

These and other transition models provided a framework for the development of transition programs. The purpose of these programs was to assist students during the "period of floundering that occurs for at least the first several years after leaving school as adolescents attempt to assume a variety of adult roles in their communities" (Halpern 1992, p. 203). Developing self-determination skills is the key to success during this floundering period of life (Halloran, 1993; Wehman, 1993; Wehmeyer & Schwartz, 1997).

Self-determination was not directly identified within Will's or Halpern's transition models; however, Sitlington and Clark (2006) included self-determination as one of the nine knowledge and skill domains for transition assessment in their Comprehensive Transition Education Model. These authors further explain that self-determination is "...a developmental skill that one hopes will gain in power over time in life, it is important to view it as a teachable skill" (p. 27).

Ideally, self-determination skills are to be taught within the home and school in early childhood and continue throughout life (Sitlington & Clark, 2006). Remembering that self-determination is a teachable skill has important implications for both special education and VR counselors. More specifically, the development of self-determination in the early school years can provide a foundation for continuing this construct development within the VR setting. For example, a new VR consumer with an already developed self-determination skill set would be more likely have a successful experience, closure, and maintain employment.

As previously stated, self-determination has had a rich history in several fields. It was first considered as a motivational construct in the field of psychology and then became a significant part of the Disability Rights Movement (Wehmeyer 2004). Later, self-determination became the philosophy of social work and best practices in special education. Self-determination is not a new concept to the VR profession; however, application to practice is needed before it is fully realized within the field (Wehmeyer, 2003).

Transition can be considered a common denominator between VR and special education because it addresses post-school outcomes. This is a time when adolescents are developing their independence, making it an appropriate time for them to develop and practice self-determination skills. The research in the area of transition has supported evidenced-based practices of self-determination in the field of special education and is paving the way for this similar development in VR (Wehmeyer, 2003).

Vocational rehabilitation. Although VR has a shorter history of self-determination research, as compared with special education, there has been a focus on related concepts that support the use of practices to facilitate self-determination in VR and the consumers they serve. Some of these include shifting from sheltered workshops to supported employment, promoting

deinstitutionalization, developing consumer-driven services, advancing rehabilitation counselor standards and the rehabilitation process to include individualized plans for employment (IPE). More specifically, the development of rehabilitation counseling standards has continued to be supportive of self-determination (CORE Standards, 2008).

Self-determination is addressed by the Council of Rehabilitation Education (CORE) standards. These CORE standards must be upheld by rehabilitation counseling education programs in order to be accredited. As noted by CORE, a rehabilitation counselor must be able to, “apply the principles of disability-related legislation including the rights of persons with disabilities to independence, inclusion, choice and self-determination, access, and respect for individual differences” (CORE Standards, C.1.7, 2008, p. 3). This is but one example of how self-determination is supported by VR.

Wehmeyer’s (2003) rationale for supporting self-determination in VR include: federal mandates, research, and consumer demand. These areas are addressed in the following section. Of these three, federal mandates have been an important part of the increase in consumer-driven services and have fostered self-determination within people with disabilities.

Importance of Self-Determination within Vocational Rehabilitation

Federal Mandates

Self-determination is supported throughout special education and VR legislation. The word ‘self-determination’ may not be directly stated in certain legislative language; however, it is implied indirectly through words such as ‘preferences’, ‘interest’, and ‘choice’.

Special education legislation. The Education for All Handicapped Children Act (EAHCA; 1975), PL 94-142, mandated that all students ages 3–18 receive Free and Appropriate Public Education (FAPE). FAPE ensures that all students with disabilities receive specifically

designed instruction to meet their individual needs (Flexer, Baer, Luft, & Simmons, 2008).

Focusing on the student as an individual is a precursor to the development of self-determination.

Changes in EAHCA continued equality efforts for students with disabilities. For example, the EAHCA (1980) Amendments included services that extended to 21 years of age, thereby becoming the first piece of legislation to address the transition years. Later in 1990, EAHCA was renamed the Individuals with Disabilities Education Act (IDEA), reflecting the adoption of Person First Language. IDEA (1990) provided a formal definition of transition and mandated that these services be provided for youth with disabilities (Sitlington & Clark, 2006). Such increase of services to students in transition has had a major impact of the development of self-determination through both legislative impact and research development.

Although self-determination is not directly stated within IDEA, it is linked to words such as preference, interest, and independence (see Table 3). This special education legislation, along with others, has important implications for students in transition, because some are also served by VR. The federal mandates for transition in special education mirror and provide support for VR and vice versa.

Table 3

Self-Determination Directly/Indirectly in Disability Legislation

Legislation	Sample of the Legislative Language
Rehabilitation Act Amendment, 1992 PL 102-569	“Disability is a natural part of the human experience and in no way diminishes the right of individuals to (A) live independently;(B) enjoy self-determination; (C) make choices; (D) contribute to society; (E) pursue meaningful careers; and (F) enjoy full inclusion and integration in the economic, political, social, cultural, and educational mainstream of American society” (29 U.S.C. 701(a)(3).
Rehabilitation Act Amendment, 1992 PL 102-569	“Individuals with disabilities must be active participants in their own rehabilitation programs, including making meaningful and informed choices about the selection of their vocational goals and objective and the VR services they receive” (29 U.S.C. 701(a)(3)(C).
Individuals with Disabilities Education Act Amendment, 1997 PL 105-17	“To ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living.” (20 U.S.C. 1400(d)(1)(A).
Individuals with Disabilities Education Improvement Act, 2004 PL 108-446	“...based on the individual child's needs, taking into account the child's strengths, preferences, and interests...” (20 U.S.C. 1400(c)(34)(B).
Americans with Disabilities Act, 1990 PL 101-336	“The Nation’s proper goals regarding individuals with disabilities are to assure equality of opportunity, full participation, independent living, and economic self-sufficiency for such individuals” (42 U.S.C. 1201(a)(8).

Vocational rehabilitation legislation. Two federal mandates have influenced equality of employment of people with disabilities. These two are the Rehabilitation Act and the Americans with Disabilities Act. These two acts require nondiscriminatory practices in hiring,

employing, and retaining employment. Of these two, the Rehabilitation Act was the first to mandate equal opportunity of employment for people with disabilities.

The rehabilitation act. The Rehabilitation Act (1973) is considered “...one of the most significant events of the twentieth century...” (Martin, 2001, p. 100). Section 504 of this Act provides rights for people with disabilities and equality of opportunity. Some of the elements of this landmark legislation include: (a) increasing consumer involvement; (b) focusing on persons with severe disabilities; (c) creating the National Institute on Disability and Rehabilitation Research (NIDRR); (d) emphasizing program evaluation; and (e) advancing the civil rights of people with disabilities.

The Rehabilitation Act protects the rights of persons with disabilities and supports the development of opportunities. This federal mandate along with others helps to provide opportunities for individuals with disabilities which is essential in demonstrating self-determination skills (Izzo & Lamb, 2003). The four components of the Rehabilitation Act protect the rights and opportunities of people with disabilities in the workforce. These four components are (501) Nondiscriminatory Federal Hiring; (502) Accessibility creation of the Architectural and Transportation Barriers Compliance Board; (503) Affirmative Action; and (504) Prohibition of discrimination against persons with disabilities in terms of programmatic and physical accessibility in schools and institutions of higher education, hospitals, and others that receive federal funding. The Rehabilitation Act continued to evolve and each amendment increased the promotion of self-determination of consumers.

The Rehabilitation Act Amendments of 1978 brought about important elements that relate to self-determination such as independent living and the National Council on the Handicapped (NCH). Self-determination was developing through the increase in independence

and opportunity of people with disabilities during this period. For example, the 1986 Rehabilitation Amendments increased supported employment and competitive employment placements (Brooks-Lane, Hucheson, & Revell, 2007).

Self-determination was listed specifically in the Rehabilitation Act Amendments of 1992 as a disability right and later in the 1998 Amendments as the basis of the individualized plan for employment (IPE) process (see Table 3). The Rehabilitation Amendments of 1998, “emphasized choice and self-determination as the driving force in the development of the individualized plan for employment (IPE)...” (Brooks-Lane et al., 2007, p. 22). The Rehabilitation Act has had an immense impact on the increase of consumer-driven services and development of self-determined individuals with disabilities; however, not until the Americans with Disabilities Act (ADA) were these rights extended to the private sector.

Americans with disabilities act. ADA was based on Section 504 of The Rehabilitation Act. The 1990 Americans with Disabilities Act (ADA) mandates the equity of goods and services being provided by educators, employers, businesses, and government agencies for people with disabilities. A major difference between the two is that the ADA extends equality of employment to the private sector. The Americans with Disabilities Act (ADA), includes five titles: Employment, Public Service, Public Accommodations, Telecommunications, and Miscellaneous, which prohibits retaliation. The Rehabilitation Act and ADA increase consumer-driven services and provide a focus on self-determination.

In 2008, President George W. Bush signed into law the ADA Amendments Act of 2008 (ADAAA). This Act, effective January 1, 2009, extended the protections of individuals with disabilities by providing a broader interpretation of major life activities. This increase in coverage continues the reverse of some previous court ruling that misinterpreted the original

intentions of the law and in turn continues efforts to promote individuals with disabilities rights. Table 3 provides a summary of the direct and indirect legislative language that relates to self-determination. These legislative mandates protect the rights of people with disabilities and foster self-determination by increasing federal funding and an increase in research.

Self-Determination Research

There is substantial self-determination research in special education involving students of transition age (14–21 years). Research involving self-determination and students in transition serve as a link between the two practices of special education and VR (Wehmeyer, 2003). This section of empirical support of self-determination in VR is divided into two main areas of practice: special education (studies conducted within the schools) and VR (studies conducted within VR agencies). These sections are further separated by descriptive and intervention studies in order to demonstrate a gap in the research.

Special education legislation and the increase of federal, state and local funding during the 1980s and 1990s resulted in an increase in research and curriculum development in the area of self-determination (Wehmeyer, Palmer, Soukup, Garner, & Lawrence, 2007). Specifically, there was an increase in research of post-school outcomes and involvement of self-directed IEPs of students with disabilities. Two meta-analyses have been conducted in the areas of self-determination and students with disabilities that synthesize the results of this research.

Meta-analysis. Wood, Fowler, Uphold, and Test (2005) conducted a review of 21 intervention studies of people with severe disabilities that related to self-determination. Of those who participated in these studies, 96% had severe intellectual disabilities. The quality of content and methods of these 21 studies were reviewed. Of the 21 studies, 20 were single-subject designs and gave enough information for replication. A majority of these single-subject-

designed studies used multiple baselines across participants or settings. Also, external validity was provided within 16 out of 20 single-subject-designed studies through replicating effects across settings or participants. In addition, external validity was established through five replications of previous studies.

Choice-making is a variable used in self-determination-related research. It is another way of describing a person's ability to choose his or her own preference. Choice making is related to self-determination through all four characteristics (self-realizing, empowerment, autonomy, self-regulation), making it the more frequent dependent variable used throughout the review of this meta-analysis. Systematic instruction was the most common form of intervention. Wood et al. (2005) stated that other components of self-determination beyond choice making need further investigation in future research.

One limitation of this meta-analysis was the exclusion of other applicable studies of self-determination in order to maintain homogeneity and generalizability of participants. Although an attempt was made to keep participants homogenous, there was variance across participants due to multiple disabilities. Another limitation involved the small number of participants ($n = 53$), further decreasing generalizability (Wood et al., 2005).

The researchers' implications for future research included expanding on certain components associated with self-determination such as decision-making, goal setting, attainment of self awareness, and self advocacy (Wood et al., 2005). They also suggest that "The next wave of research ... should merge efforts between self-determination research and functional communication training, functional behavioral assessment, and positive behavior support" (Wood et al., 2005, p. 144). They go on to state that it is essential to not only teach self-

determination skills, but to maintain these skills over time. The researchers concluded with a positive view of self-determination interventions and their promising outcomes.

Chambers et al. (2007) also conducted a meta-analysis that presents similar positive outcomes of self-determination intervention research. In their review of 10 intervention studies, eight were within schools, one during a summer camp, and one within a juvenile justice setting. Chambers and colleagues stated there are many other studies that investigate self-determination interventions; however, their analysis reviewed studies that included what they call “self-determination as a global construct” (p. 4). As seen in Table 4, self-determination as an intervention significantly improved across several types of groups of students.

Table 4

A Review of Self-determination Intervention Studies

Intervention	Results from Studies Assessing Efficacy
Steps to Self-Determination (Field & Hoffman, 1996)	Experimental group did not increase significantly compared to control group; however, incarcerated students with disabilities and incarcerated students with lower academic scores, scored lower on the self-determination knowledge scale (Hoffman & Field, 1995; Houchins, 2002).
Take Charge (Powers et al., 1996)	Treatment group consisted of 20 students with physical disabilities who showed improvement on all measures except for self-efficacy (Powers et al., 2001).
ChoiceMaker (Martin & Marshall, 1995) compared to McGill Action Planning System (MAPS) (Vandercook, York, & Forest, 1989)	Pre/post test of the five students with intellectual disabilities improved on both measures; however, there was a greater effect size for the ChoiceMaker lessons (Cross, Cooke, Wood, & Test, 1999).
Next S.T.E.P. (Halpern et al., 1997)	Participants included 71 high school students with learning disabilities. Results indicated that the treatment group improved significantly compared to control group (Zhang, 2001).

Continued efforts by researchers to compare and contrast these interventions are necessary for further implementation of self-determination practices. For example, the comparison of ChoiceMaker and MAPS as shown above provides information for special education teachers and administrators of what curricula they might purchase for their students. Chambers et al. (2007) stated that their review gives evidence of the success of self-determination interventions with students with disabilities. Another area of special education

research that provides further evidence of the importance of self-determination development of students with disabilities includes post-school outcome studies.

Special education descriptive research. Self-determination has an impact on post-school outcomes. Specifically, the more self-determined students with disabilities are, the better their outcomes will be (Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997). Also, prior to exiting high school, students who receive opportunities to practice their self-determination skills were found to be more involved in their transition planning of future educational or occupational goals. Planning impacts outcomes; therefore, both need to be addressed in services of students with disabilities (Wehmeyer et al., 2007).

Post-school outcomes. Post-school outcome studies have provided evidence of the need for self-determination skill development of students with disabilities during high school. Wehmeyer and Schwartz (1997) conducted a post-school outcome self-determination study of 80 students with learning disabilities and mental retardation [*sic*]. Students were surveyed during their last year of high school and one-year post high school. The surveys used in this study included The Arc's Self-Determination Scale (Wehmeyer & Kelchner, 1995) and a combination with modifications of The National Consumer Survey (Jaskulski, Metzler, & Zierman, 1990) and National Longitudinal Survey (Wagner, D'Amico, Marder, Newman, & Blakorby, 1992).

The results indicated that high self-determination scores correlated with better post-school outcomes. Specifically, students with higher self-determination scores were more likely to prefer to live outside of the home, have a savings or checking account, be employed for pay – 80% compared to those with lower self-determination scores – and earn more per hour ($M = \$4.26$ vs. $M = \$1.93$) (Wehmeyer & Schwartz, 1997). Similar results of self-determination correlating with positive post-school outcomes were found in a replication of this study

(Wehmeyer & Palmer, 2003). Positive adult outcomes from this study included employment, access to health care, financial independence, and independent living. This research differed from previous studies in that they surveyed students three years post high school. These two post-school outcome studies, along with other special education research, contributed to the development of self-determination as a best practice (Wehmeyer, 2003).

Wehmeyer et al. (2007) discuss self-determination as a best practice when working with students in transition. Their study assessed self-determination and how it related to 180 students with disabilities transition planning knowledge and skills. This study involved 25 different school districts in four different states. The Arc's Self-determination Scale (Wehmeyer, 1996; Wehmeyer & Kelchner, 1995), a 72-item instrument, was used for measuring self-determination. Measuring transition knowledge and skills was assessed by a 20-item questionnaire entitled Transition Planning Knowledge and Skills Questionnaire (TPKSQ). This instrument was developed from a form developed by Wehmeyer and Lawrence (1995), *Whose Future Is it Anyway?* (Wehmeyer et al., 2007).

A factor analysis of the TPKSQ examined the relationship between student transition planning knowledge and skills relative to self-determination (Wehmeyer et al., 2007). Three factors were interpreted as relating to knowledge of skills and included the IEP team working as a team, decision making, and goal setting. Regression and a multiple linear regression analysis were conducted. The summary of the results included 90% of the sample were present at their last IEP meeting; 63% indicated that they knew what their IEP goals or objectives were; and 61% were not only in attendance at their last IEP meeting but also stated that they knew what their IEP goals/objectives were. Multiple analyses yielded no significant differences between males and females.

In conclusion, Wehmeyer et al. (2007) stated, “Overall, it was apparent that global self-determination and, particularly, student self-regulation and self-realization were the most important contributors to student transition planning knowledge and skills, even more so than disability status...”(p. 43). Self-regulation again is one of the behavior components of self-determination that relates to management of one’s choices. A self-realizing attitude means being aware of strengths and limitations. This study further supports the development of self-determination in students with disabilities.

Self-directed IEPs. In a study conducted by Vacc et al. (1985) regarding students’ involvement during IEP meetings, it was found that only 2 were present out of the 56 student participants. Also during these meetings, special education teachers and parents were more actively involved during discussion compared to other team member participants. The IEP meeting, as its name suggests, should be individualized; therefore, the student should be a primary leader of his or her own meeting.

Many studies have shown the negative results of not preparing students for IEP meetings (Lehmann, Basset, & Sands, 1999; Lovitt, Cushing, & Stump, 1994; Morningstar, Turnbull, & Turnbull, 1995; Powers, Turner, Matuszewski, Wilson, & Loesch, 1999; Sweeney, 1997; Thoma, Rogan, & Baker, 2001). Studies also demonstrate that not preparing students for IEP meeting may cause harm, thus raising ethical concerns (Lehman et al., 1999; Powers et al., 1999). These studies show a need for further research in the area of self-determination and the IEP process (Martin et al., 2006b).

Although there is an increase in research and awareness, one of the largest challenges of implementation of self-determination is the gap between research and practice (Agran & Hughes, 2005). A way to bridge this gap is by further developing empirically based self-determination

programs and curricula. Conducting experimental intervention research is one way to provide guidance in developing evidenced-based programs.

Previous research focused on the student's attendance of IEP meetings; however, attending an IEP meeting does not mean students are necessarily active participants. In a study conducted by Martin et al. (2006b) students with disabilities attendance and participation during IEP meetings were assessed. The researchers' conducted a direct observation of IEP meetings that provided more evidence of the importance of students learning self-determination skills.

Observations of attendance and participation were conducted on a combination of IEP team members made up 627 participants that included a team of professionals within the school, family members, and the student (Martin et al., 2006b). A majority of the student participants had learning disabilities (78%), were Caucasian (84.4%), and were male (68%). These observations were conducted in a southwestern state and data were collected from schools, 87.2% of which were suburban.

Results indicated that students rarely started the meeting. Special education teachers began the IEP meetings 92% of the time (Martin et al., 2006b). Students only spoke during 2% of the intervals. Special educators spoke 51% of the time and family members 15% of the time. Presence at the meeting was another independent variable assessed during this study. A majority of the participants stated that a team member left the IEP meeting before it adjourned. This could demonstrate a lack of respect for the IEP process and further cause harm to students and their families.

Differences of the roles of IEP team members were examined and overall the differences were significant; Wilks' Lambda = .77, $F(15, 1435.9) = 9.5$, $p = .0001$, $n_2 = .083$). All three between-subject tests were significant. One of the most important findings of this study involves

the self report versus the observation results of student participation. For example, teachers and family members tended to over report student participation (40%) compared to actual participation (3%). This could present limitations in the earlier survey self report studies of teachers and family members involving self-determination and IEP participation. Other important implications of this study included students, low scores of transition survey items, participants leaving the meeting early, and students lacking knowledge of the IEP process as compared to other team members (Martin et al., 2006b).

Gaining access to IEP meetings and getting administrator permission poses a limitation in studies involving student participation. One of the limitations of Martin et al. (2006b) study included administrators only allowing one observer to be at meetings. Although calibration occurred outside of the meeting, the lack of direct observer agreement limited the findings of this study (Martin, et al., 2006b). There was also lack of generalizability due to this study being conducted in only one state. Despite these limitations, results of the Martin et al. (2006b) study presented further support for the importance of student-directed IEP meetings.

Descriptive research reviewed within special education provides support of self-determination as a best practice. Intervention studies provide a different type of support in creating evidence-based practice and statistical results that further impact policy and legislative change. The following is a review of some of the intervention research within special education that provides empirical support of self-determination, specifically self-directed IEP curriculum (Wehmeyer, 2003).

Special education intervention research. The implementation of self-directed IEPs was examined within an intervention study that consisted of a randomized sample of 130 high school students (Martin et al., 2006a). Observations were conducted during 130 IEP meetings in five

different school districts. In addition to using behavior observations, the Choice Maker Self-Determination Assessment (Martin & Marshall, 1997) was administered pre and post IEP meetings. A student and adult post meeting survey was developed by Martin and was completed by all team members. The treatment groups were taught the Self-Directed IEP method (Martin et al., 1997) which is a multimedia instruction curriculum that included "...a video depicting a student modeling the 11 steps of the self-directed IEP process, a detailed teacher manual with scripted lessons, and a 27-page student workbook." The control group did not receive this multimedia tool of instruction and teachers were asked to prepare the students as they had previously.

A comparison of the persons who started the IEP meetings was completed. Results indicated a significant difference in the treatment group starting and leading the IEP meetings more often than the control group. In the intervention group the special education teachers started the meeting 57% of the time as compared to 86% of the time in the control group. Also, chi square test results indicate significance of students in the intervention group leading the meeting 15% of the time as opposed to the students in the control group never leading the meetings (Martin et al., 2006a). Another important finding included no significant difference in length of the IEP meeting, which may counteract some school personnel concerns of the IEP meeting lasting longer if students lead them. These findings are promising; however, there were several limitations to this study.

Limitations included a lack of generalizability, due to most of the participants being Euro American. Martin et al. (2006a) also addressed the need for future studies to be longitudinal and to examine the teachers' perception which they state possibly influenced the study. Despite these limitations, the authors concluded that this pre/post test control and intervention design

with random assignment study demonstrated the effectiveness of the *Self-Directed IEPs* curriculum.

Other studies provide similar findings. For example, Allen, Smith, Test, Flowers, and Wood (2001) conducted a multiple baseline design across four instructional units that consisted of leading meeting, reporting interests, reporting skills, and reporting options. Participants included four students with moderate intellectual disabilities. The researchers used a modified version of the *Self-Directed IEP* lessons. Dependent variables included pre and post measures of mock IEP meetings from the *Self-Directed IEP* lessons and generalizability to the participants' actual IEP meeting. Measures were assessed through an adapted checklist from the Choice Maker curriculum.

Results of Allen et al. (2001) study demonstrated a positive significant difference in skills through pre and post test scores with a large effect size. Also, results indicated a significant increase in IEP meeting participation by the students after the modified lessons. One of the limitations of this study included the small sample size, and as the researchers' point out, the use of a modified version of the lessons.

Special education research continues to provide support for the need to assess student and consumer-driven services of people with disabilities. Previous descriptive studies have suggested that students with disabilities lack knowledge of the purpose and their role during IEP meetings and as a result do not actively participate (Martin, Marshall, & Sale, 2004). The field of special education has recognized that having students or consumers attend meetings that plan for their future is not enough. These young people should lead and provide their own goals and decisions in order to practice self-determination skills. Special education research has added to the increased awareness of the positive effects of consumer-driven practices within VR

(Wehmeyer, 2003). The following descriptive and intervention studies present support of self-determination within VR consumers.

Vocational rehabilitation descriptive research. The following terms and components related to self-determination within VR research will be addressed in the next two sections. They include consumer choice, individualized plan for employment (IPE), job matching, and consumer-driven services. Choice has been a common theme throughout VR research. Specifically, VR consumers having the ability and opportunity to choose their own career path is important to the development of self-determination.

Consumer choice. During the VR process, consumers should be able to choose their own future employment placements, career goals, and necessary supports (Brooke, Wehman, Inge, & Parent, 1995; Gilson, 1998). According to Wehman and Kregel (1998), “Choice is more than offering what is available; it involves working to develop what should be available” (p. 9).

Consumer choice within the VR process was examined by Hagen-Foley et al. (2005). In their study, they pointed out that there is a lack of research in the area of consumer choice in the VR process and outcomes, especially as it relates to consumer involvement within Community-Based Rehabilitation Programs (CRPs). They assessed CRP consumers and staff perceptions of consumer choice and planning. Also, the relationship between these perceptions, consumer outcomes, and consumer satisfaction was explored. The researchers hypothesized that there would be a significant relationship between the following: informed consumer choice, employment outcomes, and consumer satisfaction; and disability status, functional limitations, and informed consumers’ choice.

Participants at these CRPs within this study included people with more significant to severe disabilities: 31% intellectual disabilities; 25% mental health disabilities; 10% learning

disabilities; 4% substance abuse problems; and 2.7% traumatic brain injury (Hagen-Foley et al., 2005). CRP sites included 30 states and Puerto Rico from urban and rural locations. The selection of sites focused on successful CRP sites and consumers. Twenty consumers (ages 18–35) were identified by each site to participate based on their having a good chance of becoming employed. This was not a true experiment due to a nonrandomized sample of $n = 399$.

Informed consumer choice was measured by a 17-item scale. A 19-item scale measured service, job, and outcome satisfaction variables. These scales were based on a 3-point scale (yes, no, and unable to respond). The researchers used descriptive statistics to present results, such as percentages and frequencies (Hagen-Foley et al., 2005). The results were presented in three areas that included the relationships between consumer choices in CRPs; informed choice, disability, and functional limitations; and informed choice and outcomes.

The first area, consumer choices in CRPs, included the following subscale components: choice of services and goals, satisfaction with services, and satisfaction with outcomes. Of these components, consumers indicated greater satisfaction with outcomes as compared with services. Both groups of participants, staff and consumers, reported lowest levels of consumer choice in the areas of job tryouts and job selection. The second area involved the relationship between informed choice and disability and functional limitations. This resulted in consumers with higher functional limitations reporting less choice. People who reported no disability—for example, those identified as eligible for the study under Temporary Assistance for Needy Families (TANF)—reported a higher perception of choice. The last and final area addressed, informed choice and outcomes, showed that those with higher levels of perceived choice were significantly related to higher levels of satisfaction with services, outcome attained, and requested more services.

Limitations of this study included the demand placed on sites for data collection and lack of random sampling. Hagen-Foley et al. (2005) discussed how the economy contributes to the lack of jobs available which, in turn, reduces choices for job seekers. The researchers suggest that future studies should include a method for the consumers to assess whether the rehabilitation process was truly consumer-driven. Also, an assessment of rehabilitation providers and individuals must be included to determine if consumer-directed practices are being implemented. Despite the limitations of this study, the results indicated that consumers being actively involved within the rehabilitation process correlate with greater satisfaction and outcomes.

Congruence of IPE goals and outcomes. One way in which consumers can be involved in choice making is through the development of their Individualized Plan for Employment (IPE). Beveridge and Fabian (2007) reviewed a sample ($n = 171$) from a population consisting of 2,972 consumers from the Maryland State Department of Education's Division of Rehabilitation Services (DORS) database. Individualized Plan for Employment (IPE) goals were compared to determine congruence with employment outcomes. The DORS database provided the researchers with the following information: demographics, disability category, job at closure, and job satisfaction. The database did not provide the participants' most recent IPE goal; however this was obtained through contacting their VR counselors.

Categorical dependent variables were analyzed by logistic regression analysis to assess predictive relationship between sets of variables and the dependent variables. More congruence of IPE goals and job outcomes were found with those who were male and had more education. It was also found that people with intellectual disabilities were less satisfied with their job compared to people with physical or sensory disabilities. Last, higher congruence between IPE goals and job outcomes resulted in higher wages (Beveridge & Fabian, 2007).

Limitations of this study included receiving only completed satisfaction surveys from those with successful closures, limiting a review from one state's rehabilitation database, and including just one question on the instrument pertaining to job satisfaction (Beveridge & Fabian, 2007). The researchers also admit that it would have been helpful to review the actual IPE documents to assess if there were multiple changes to IPE goals. Reviewing unsuccessful closures to compare outcomes was another future research suggestion.

In the two descriptive studies discussed above, Beveridge and Fabian (2007) along with Hagen-Foley et al. (2005), both address the challenges and limitations that are common amongst research studies involving self-determination. For example, a lack of access to consumers and their documents limits research. If self-determination is further accepted and explained within VR, there can be a rationale made to gain access and conduct research.

One way to improve self-determination research and implementation is through increasing professional knowledge and understanding of this construct. As discussed in the special education research section, self-determination is accepted among professionals; however, implementing and assessing this concept remains a challenge.

Knowledge of self-determination. Thoma and Sax (2003) stated that although there were previous studies about the self-determination knowledge among special educators, there were none addressing VR counselors. They also acknowledged that even though there have been previous studies of teachers' knowledge of self-determination, sometimes this knowledge did not translate to how to implement related curricula in the classroom. The researchers persist that it continues to be important to investigate both areas: the practical application and theory development of self-determination.

In a survey, Thoma and Sax (2003) explored the following four areas associated with self-determination and rehabilitation counseling students': knowledge of self-determination; where they learned to facilitate self-determination; what strategies they heard about and/or used to facilitate self-determination; and the importance of the core competencies of self-determination in their own lives. Surveys were distributed randomly to VR counseling graduate classes in Nevada and California. Of the 68 surveys distributed, 40 were returned. The results suggest that VR counseling students with at least one year of experience working with people with disabilities were aware of self-determination and found it to be important for people with disabilities as well as in their own personal lives. These results, although informative, are not without limitations. For example, there was a lack of generalizability due to the sample only coming from two states as well as the issue of self report of graduate students.

Thoma and Sax (2003) conclude by discussing how VR professionals can facilitate the development of self-determination by the way we listen and encourage consumers. Vocational rehabilitation counselors are to provide opportunities for self-determination to flourish, not merely to define and teach self-determination skills. The VR process might be the first place an individual with a disability is supported in making his or her own choices as a young adult.

The survey used in Thoma and Sax's study was a modified version of a national survey of teachers by Wehmeyer, Agran and Hughes (2000) and a survey of special education teachers by Thoma, Nathanson, Baker and Tamura (2002). There are multiple studies examining different populations of professionals' promotion of self-determination using a modified version of the Wehmeyer et al. (2000) survey (Carter, Lane, Pierson, & Stang, 2008; Cho, 2010; Stang, Carter, Lane, & Pierson, 2009; Thoma & Sax, 2003).

A more recent study involves a dissertation by Cho (2010) under the direction of Wehmeyer (Chair) and colleagues (Kingston, Palmer, Carter, & Horn). This study examined 407 elementary special education and general education teachers' perceptions of importance, practices, and knowledge of self-determination. Cho found that both special education and general education teachers find self-determination important, teach similar strategies, and report problem-solving and choice making as components most frequently taught. Other results included the type of components taught are dependent on certain disability categories. Also, the three main barriers to teaching the essential components of self-determination were "Other Areas Student Needs Instruction, 57.0%"; "Don't Have Sufficient Time, 38.5%"; and "No Sufficient Training or Information, 30.1%" (Cho, 2010, p. 103). Cho's study provides a current self-determination survey that includes reliability measures.

Vocational rehabilitation intervention research. Intervention research helps to validate self-determination as a best practice within special education (Martin et al., 2006b). In order for self-determination to become a best practice within VR, further intervention research is needed. However, there are some intervention studies that relate to the components of self-determination that promote this construct within VR. For example, Kilsby and Beyer (2002) conducted intervention research involving the importance of consumers matching themselves to their own future employment placements; also known as job matching.

Job matching. Kilsby and Beyer (2002) tested the effectiveness of two interventions. The first intervention was a one-day training of job coaches on the concept of self-determination and how to conduct structured job reviews after each job taster. Job tasters are described as "A short, unpaid, time-limited work experience which takes place in the workplace in order to allow people to sample a variety of different jobs and work cultures" (Kilsby & Beyer, 2002, p. 127).

The second intervention consisted of a pictorial job review profile. The researchers investigated whether these two interventions would result in participants' increased independence in matching themselves to a job. They suggest this would demonstrate an increase in self-determination.

They found that encouraging self-determination in the supported employment environment led to a higher rate of career success (Kilsby & Beyer, 2002). The researchers also indicated that a lack of self-determination within the supportive employment process can contribute to learned helplessness and dependency. They discussed how demonstrating independence is too simplistic to describe self-determination. As in most of the research related to self-determination and VR, Wehmeyer's (1992) definition of self-determination was used within this study, "The attitudes and abilities required to act as the primary causal agent in one's life and to make choices regarding one's actions free from undue external influence or interference" (p. 305).

The researchers admit there are issues within supported employment (Kilsby & Beyer, 2002), such as the difficulty of job coaches finding available jobs for people with disabilities, especially those that are matched based on personal preference. Another issue in regard to supported employment involves people with disabilities' lack of knowledge of available jobs.

An independent group design was implemented to include: a pilot study, two months to establish inter-observer reliability, and three phases lasting three months each (Kilsby & Beyer, 2002). The three phases included baseline, first intervention, and second intervention.

Dependent variables were operationalized by the scores from the ICAP (Inventory for Client & Agency Planning) and the extent to which job coach questions required job seekers to express

their preferences. Another dependent measure came from self-appraisals of job performance during the tasks of job tasters.

Participants included 40 job seekers ages 19–52 years old, all with intellectual disabilities (Kilsby & Beyer, 2002). Participants also included 14 job coaches with 2–8 years of experience in supported employment. Consumer participants took part in three job tasters for a total of six sessions. Some of these consumer participants dropped out before the end of the phases, thereby decreasing the sample size.

Results suggested that intervention 1 and intervention 2 led to decreased assistance of job coaching and increased independence of the job seekers (Kilsby & Beyer, 2002). It was also found that job matching skills were consistent with preferences. A one-way ANOVA was conducted to determine differences between intervention 1 and 2. A summary of the results included significance in the following responses to the interventions: overall rate of assistance was lower than baseline; observations demonstrated an increase in job coaches' open-ended questions which lead to better consumers preferences; and, after baseline, pictorial reviews were more preference oriented. Researchers also suggested that despite the lower rate of assistance in intervention 2, job seekers maintained accuracy in assessing their performance and identifying employment preferences.

The results of this study provide information for the development of self-determination within VR consumers. Some of the limitations of this study included latency effect and issues with self report; specifically, the possibility of job seekers overestimating their performances on tasks during job tasters. Even with these limitations, it can be said that the more independence the consumer has during job matching the greater demonstration of self-determination (Kilsby & Beyer, 2002). Martin, Mithaug, and Husch (1988) describe the importance of job matching:

Consumers of supported employment services, not staff or parents, need to match their interests and abilities to available community jobs, and then make a choice. Work that matches interests increases motivation. These factors may be more critical to employment success than specific job-skills. But without consumer input directing the placement process, how can the match between consumer interests and job conditions be assured? (p. 87)

Martin et al. (2005) examined the relationship between job matching and choice.

Participants included eight adults with severe disabilities and 11 caregivers. Methods included a combination of using the *Choose and Take Action* software that assesses vocational choices and watching/doing a job choice in the community. This study found that individuals with disabilities' choices rarely matched those identified by the caregivers. Specifically, when comparing the individuals with disabilities' top ranking choices compared to the caregivers there were only two out of 33 agreements that matched. These agreements were further divided into three areas of choice that demonstrate the lack of agreement between the two groups. For example, there were two out of 11 agreements for choice of setting; zero out of 11 agreements for choice of activity; and zero out of 11 agreements for match of characteristics. Being able to match consumers with the job of their choice is ideal in fostering self-determination, and is implemented through consumer-driven services.

Consumer-driven services. In a quasi-experimental research study by Farley et al. (1992), results suggest that the more a consumer is involved in the VR process (consumer-driven) the better the employment outcomes would be for the consumer. This study included a combination of two programs: Occupational Choice Strategy (OCS), a small group and

individual vocational exploration program (Roessler & Schriener, 1988); and Know Thyself (KT), an individual approach of discussing evaluation results.

The study included 75 VR consumers a majority of whom were male (71%), mean age of 24 who had an orthopedic or other medical disability. Dependent variables were measured by the following instruments: Vocational Self-Awareness (Farley, 1988); My Vocational Situation (Holland, Daiger, & Power, 1980); Career Decision Scale (Osipow, 1980); Employability Maturity Interview (Morelock, Roessler, & Bolton, 1987); and Program Satisfaction Survey (Farley et al., 1992). Data analyses of the first four instruments were conducted using independent t-tests in comparing the control and experimental groups. An independent samples t-test was used to analyze post-test satisfaction surveys.

Results indicated that the control group ($n = 37$) demonstrated some gains by being assessed; however, the experimental group ($n = 38$) demonstrated greater gains from participating in the two programs (OCS and KT). For example, significantly higher scores were found in the experimental group by the following three dependent measures: vocational self-awareness, career-decidedness, and decision-making confidence (Farley et al., 1992). These findings further support consumer-driven services which relate to self-determination development within VR.

Other research related to consumer-driven services also suggests positive employment outcomes. For example, Hartnett et al. (2002) conducted a study comparing two groups; one that received typical VR services (i.e. control group) and the other group received what was called the Consumer Choice Demonstration Project services (i.e. treatment group). Their study consisted of a review of three years of program outcomes for a total of 270 randomly assigned participants of the treatment group and 4,281 of the control group. Results of this study

indicated that those involved in the consumer choice services were more likely to complete the VR process and have a higher income. Specifically, 60% of the treatment group completed the rehabilitation program successfully as compared to 40% for the control group. The researchers discuss the potential for their findings as having an impact on consumer-driven program and policy development; however, admit that Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI) continue to prevent consumers from seeking out higher paying jobs. Overall, their findings support the importance of consumer choice as a guiding factor in the rehabilitation process.

Although caregivers and professionals may be accustomed to choosing vocational goals for people with severe disabilities, the experts on self-determination are suggesting different actions (Martin et al., 2005). People with disabilities who are self-determined and given the opportunity to choose their vocational goals have better employment and adult outcomes (Kilsby & Beyer, 2002; Martin et al., 2002, 2005; Wehmeyer, 2003).

A review of the literature revealed that there is a lack of experimental intervention studies within VR focusing on self-determination. Positive outcomes have been found through special education research for persons with disabilities who are self-determined. Similar research needs to be conducted within VR. For example, possible modifications of these previous studies could be implemented in VR to include studies that investigate self-directed IPE and related documents; perceptions of consumers toward the VR process; development of self-determination program practices similar to special education curriculum; and assessment of VR counselors and consumers knowledge of self-determination.

Table 5 demonstrates some of the research support of self-determination. As noted, a majority of the research has focused on self-directed IEPs. These important research areas provide support for self-determination and at the same time provide a visual depiction of the gaps in research. For example, in Table 5 future researchers focusing on self-determination may identify that job matching and other vocational rehabilitation-related areas require further investigation.

Understanding the common limitations within previous research is also important for the development of future research. Table 6 provides a summary of the threats to internal and external validity of research involving self-determination. For example, one common limitations of previous self-determination research includes gaining access to consumers and documentation. Another example of a common limitation of self-determination research is the lack of a common definition which can prevent the development of evidences based curriculum and programs (Wehmeyer, 2004). Table 6 provides information about what is needed in future research of self-determination and VR consumers.

Table 5

Research to Support Self-determination in Vocational Rehabilitation Consumers

Reference of the Research	Types of Studies Related to Self-determination				
	Self-Directed IEP/ITP	Post School Outcomes	Consumer Choice	Knowledge of Self-determination	Job Matching
Allen, Smith, Test, Flowers, and Wood (2001)	•				
Chambers, Wehmeyer, Saito, Lida, Lee, and Singh (2007)	•				
Cross, Cooke, Wood, & Test (1999)			•		
Farley, Bolton, and Parkerson (1992)			•		
Hagen-Foley, Rosenthal, and Thomas (2005)			•		
Hartnett, Collins and Tremblay (2002)	•				
Held, Thoma, & Thomas (2004)			•		
Hein, Lustig and Uruk (2005)					•
Kilsby and Beyer (2002)					
Lehmann, Basset, & Sands (1999)	•				
Lovitt, Cushing, and Stump (1994)	•				
Martin, Marshall, and Sale (2004)	•				
Martin, Van Dycke, Greene, Christensen, Woods and Lovett (2006)	•				
Martin, Woods, Sylvester, and Gardner (2005)	•				•
Morningstar, Turnbull, and Turnbull (1995)	•				
Powers, Turner, Matuszewski, Wilson and Loesch (1999)	•				
Snyder (2000)	•				
Sweeny (1997)	•				
Thoma and Sax (2003)				•	
Thoma, Rogan, and Baker (2001)	•				
Vacc, Vallicorsa, Parker, Bonner, Lester, and Richardson et al. (1985)	•				
Van Dycke (2005)	•				
Wehmeyer and Metzler (1995)			•		
Wehmeyer and Palmer (2003)		•			
Wehmeyer and Schwartz (1997)		•			
Wehmeyer, Palmer, Soukup, Garner and Lawrence (2007)		•			
Wood, Fowler, Uphold, and Test (2005)				•	
Zhang (2001)	•				

Table 6

Common Threats to Internal and External Validity within Self-determination Research

Type of Threat	Explanation
Maturity	Although there is a need for more longitudinal studies of self-determination (maturation) could be the reason for some participants having an increase in self-determination; due to its developmental nature.
Small Sample Size	Some self-determination research includes small sample sizes and as a result less statistical power exists. A combination of different designs of research and an increase in sample size are needed to further validate self-determination as a best-practice.
Lack of Access	Many studies discuss barriers to access documents and meetings such as IPE/IEPs. In order to conduct a true experiment in regard to the participation of a consumer during these federally mandated procedures, having multiple observers would be necessary.
Lack of Evidenced-based Self-determination VR Programs and Instruments	Experts in the field of special education have developed and validated many self-determination related curricula and instruments; however, there continues to be a need for program development within VR.
Lack of Cultural Differences	In order to assess the differences of perception and effects of self-determination interventions in VR cultural differences need to be included as a variable.
Lack of Funding	Not surprisingly, the economy is going to affect VR agencies and in turn prevent funding for research. In difficult economic times, VR counselors can become creative in implementing self-determination practices within already established programs.
Lack of Common Definition of Self-determination	Self-determination is a complex concept and in order to move forward in adopting this important value and research focus a common definition accepted by the profession is needed. Also an increase in self-determination training within graduate programs and personnel development will need to occur in order to extend the understanding of self-determination within the field.
Lack of multiple state research studies	A common limitation to the studies discussed throughout this paper included lack of generalizability due to single state research studies.
Self report measures	Although self report measures can provide valuable information to researchers, more triangulation is needed to provide evidenced-based results. Examples might include, surveying people with disabilities and their caregivers about the IPE process and observing participation.

Wehmeyer (2003) states that there continues to be a need in VR research for model development pertaining to self-determination. “It appears, then, that there are more than just compliance-related reasons to focus on promoting self-determination among VR consumers” (Wehmeyer, 2003, p. 69). Wehmeyer’s third area of support for self-determination in VR is the increase in demand for consumer-driven services. The increase in demand for consumer-driven services has developed over time, especially through the Disability Rights Movement. As a result, consumer-driven services have become an important part of the success of VR services.

The increase in demand for consumer-driven services. Since the 1950s and 1960s, consumers and their advocates have voiced their concerns to create change. The Disability Rights Movement created more freedom; however, there still remains many barriers to equality. Research, policy, and legislation reform have the power to change the VR process, but without a continued engagement and courage from the consumers themselves self-determination related practices will not be fully realized.

Ward (1988) states self-determination “requires not only that people with disabilities develop inner resources, but that society support and respond” (p. 2). Although consumer-driven preferences are a best practice, many times individuals with intellectual disabilities are not given the option to use these skills (Stock, Davies, Secor, & Wehmeyer, 2003). For example, consumers with intellectual disabilities often lack diverse work experiences and knowledge of employment options. Wehmeyer (2004) states, “As professionals in rehabilitation, the route to ‘enablement’ is by providing opportunities and supports that promote and enhance the self-determination of people with disabilities” (p. 23).

Increasing consumer-driven services. Kosciulek (2004) provides suggestions to help promote empowerment in VR consumers which includes: “... treating all consumers as adults

regardless of severity of disability, using age-appropriate language and techniques, placing emphasis on consumer strengths, and respecting consumer values and beliefs” (p. 43). Other elements within the VR process where self-determination, specifically consumer choice, can be implemented or assessed include, accepting the risk of failure and continuing to review what has and has not worked in the past. Kosciulek (2004) suggests that VR professionals can increase empowerment of their consumers through teaching self-determination skills and knowledge of federal mandates.

One result of the focus on consumer-driven services has been the transition of sheltered workshops to supported employment in VR programs in 1986 (Wehman, Inge, Revell, & Brooke, 2007). The Rehabilitation Act (1973) as amended mandated that agencies assist in consumers becoming more integrated into the community. As a response to this mandate, supported employment was developed. Although supported employment has become a more accepted practice it continues to have its challenges. There are concerns in the areas of job retention and lack of competitive job placement (Kregel & Wehman, 1989; Wehman et al., 2007; Wehman & Kregel, 1995). Even with these concerns, research by Test, Hinson, Solow and Keul (1993) found that 92.8% of the participants preferred supported employment versus sheltered employment due to increased income and job satisfaction. Although supported employment is preferred over sheltered employment, for some consumers these jobs have turned into day programs and continue to isolate people with disabilities instead of resulting in a true integration into the community.

Wehman et al. (2007) suggested a national mandate of participation in self-determination training as one way to change contemporary day program institutions. A support of this national

focus of self-determination within VR consumers begins with ethical standards. These consumer-driven services are not just a good idea, but an ethical standard for VR counselors.

Consumer-driven services: An ethical standard. The Ethical Code of rehabilitation counselors consists of five principles, all of which relate to the importance of consumer-driven services, especially the principle of *Autonomy* (Patterson, Patrick, & Parker, 2000). Patterson et al. (2000) conducted a study of 21 rehabilitation counselors that resulted in a discussion of the ethical dilemma of autonomy versus beneficence in implementing consumer-driven services. One example of an ethical dilemma might be when a consumer chooses a job that may be unrealistic. The researchers' suggest how a rehabilitation counselor can work through these challenges by fostering the consumers' development of: understanding self and environment; improving decision-making process; making educational and career decisions; and adjusting and adapting to the world of work. In spite of challenges associated with ensuring consumer-driven services that promote autonomy, these services are identified as a valued ethical standard within the VR process and should be implemented.

Consumer-driven services can be expanded in the following ways: co-management; person driven career-planning; choice coordinators; and collaboration of service providers, consumer organizations, and researchers (Hagen-Foley et al., 2005). Collaborative efforts are effective ways to ensure implementation of consumer choice. Consumers should be included in all aspects of the VR process; for example, the development of policies, programs, IPE documents, job matching, and assessments.

Consumer choice has developed into a social movement and led to the development of institutes such as The National Institute on Consumer-Directed Long-Term Services (Hagen-Foley et al., 2005). This institute provides representatives to help ensure freedom of choice and

support self-representation by consumers. The National Institute on Consumer-Directed Long-Term Services upholds the following principles:

- (a) Systems should be based on the presumption that consumers are the experts on their service needs;
- (b) Different types of services warrant different levels of professional involvement;
- (c) Choice and control can be introduced into all service delivery environments;
- (d) Not only do consumer-directed service systems support the dignity of people requiring personal assistance, but also they can be less costly, when properly designed;
- (e) Consumer direction should be available to all, regardless of payer. (p. 111)

These suggestions provide direction of how rehabilitation counselors can implement consumer-driven practices.

Consumer recommendations. Consumers' recommendations and satisfaction with their services have been a focus of consumer-driven research. Hein et al. (2005) conducted a qualitative study to explore consumers' thoughts on VR programs and how they can improve. This study consisted of open-ended survey questions that were analyzed by content analysis and then divided into four categories that included concerns about: general counseling skills; program-specific counseling skills; treatment outside of counseling sessions; and concerns about education and employment.

Participants of this study ($n = 1,346$) ranged in age from 18–76 years. A 47-item questionnaire that focused on consumer satisfaction, developed by University of Michigan Bureau of Business and Economic Research/Center for Manpower Studies, was used to measure consumer satisfaction. Two versions of this questionnaire were administered: one for those who were employed and one, without the employment questions, for the unemployed participants. Although the survey used Likert Scale responses, the researchers chose only to analyze and use

the open-ended questions such as: “What could Vocational Rehabilitation Services do to improve your satisfaction with the program?” (Hein et al., 2005, p. 32).

In this study, a priori coding schemes or a start list were not used; however, data were organized through an inductive process. Therefore, themes emerged throughout the analysis. Intercoder reliability of 70% was established for themes. The qualitative results included consumers suggesting that their counselors have a comprehensive array of counseling skills (e.g. therapeutic skills, vocational skills, and case management skills). The researchers suggest that consumers should be included in policy and program development.

Wehmeyer’s (2003) three reasons that support self-determination in the VR process include: federal mandates, research, and an increase in demand for consumer-driven services. One of the areas to increase support of self-determination in VR is an increase in more evidence-based research, specifically with adults and employment outcomes. The following section will address issues and ways to improve self-determination within the field of VR through the advancement of evidenced-based practices, cultural values, code of professional ethics, and sustainability.

Issues of Self-Determination Practice in Vocational Rehabilitation

Evidence-Based Practice

Evidence-based practice has become a focus in legislation and fields such as psychology, education, and counseling (Detrich, 2008). “The evidence-based practice movement is an effort to assure that scientific knowledge informs the practitioner’s decisions regarding interventions; however, it does not minimize the decision-making responsibility of the individual practitioner” (Detrich, 2008, p. 89). Detrich discussed the importance of having clear definitions of constructs and a format of deciding what is an evidence-based practice.

The process an intervention would need to go through in order to become an evidence-based practice, according to Detrich (2008), includes: combining qualitative and quantitative studies in order to develop well established quantitative research; combining experimental and descriptive quantitative methods in order to develop better quantitative experimental designed research; and combining well established experimental designed studies in order to provide evidenced-based interventions. Research in the area of self-determination and VR is in the early stages of this process and further experimental designed studies are needed to develop evidence-based practice. Although there remains the need for more research development of self-determination within VR, Izzo and Lamb (2003) provide suggestions of ways to increase implementation in current practice.

Suggestion of Implementation

Self-determination, according to Izzo and Lamb (2003), relates to the following areas of VR: fostering career decision-making skill development within consumers, collaborating with other professionals, implementing practices similar to model transition programs, and expanding the development of policy. An increase in choice and self-determination within career development activities during education is associated with better post-school outcomes. Self-determination can be nurtured in the career development process based on five common stages: awareness, exploration, decision-making, preparation, and placement.

These 5 common stages of career development can be compared to the essential components of self-determination (i.e. choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership skills, self-management and self-regulation, and self-awareness and self-knowledge) (Wehmeyer & Field, 2007) (see Appendix H). For example, the career development stages relate to the following self-determination components:

awareness (choice-making – expressing preferences); exploration (self-awareness and self-knowledge – awareness of strengths and limitations); decision-making (decision-making – providing consumers with the opportunity to make their own decisions); preparation (goal-setting and attainment skills – identifying individualized goals and action steps); placement (self-management and self-regulation – acting on individualized goals).

Self-determination and career development also are skills needed within post-secondary educational settings (Izzo & Lamb, 2003). These authors suggest that there should be an increase in students with disabilities enrolling in college. Too often these students do not successfully complete college due to the differences of support available in post-secondary education eligibility programs versus and entitled secondary education programs. Self-determination practices within VR can provide continued supports during post secondary education and other adult outcomes.

According to Izzo and Lamb (2003), students with disabilities lack self-determination skills and some of these students previously depended on parents and school professionals as advocates. Professionals should allow consumers to take risks as a part of implementing self-determination. One way to increase self-determination skills is through career development. Table 7 includes examples of model programs that integrate self-determination and career development.

Table 7

Model Programs that Integrate Self-Determination and Career Development

Model Program	Results from Studies Assessing Efficacy
<i>Youth Transition Program (YTP)</i>	This program was a model for teaching self-determination and transition skills. The program included a three member team made up of a: special educator, transition specialist, and VR counselor. The program was implemented during the last two years of high school and two years following high school. Results of the program included: 90% of YTP completed high school; 82% obtained competitive employment, went to college and or a combination of both; and 80% maintained employment or post secondary education for two years post YTP.
<i>The Great Oaks Job Training Coordinator's Program in Ohio</i>	Transition services were provided during their last year of high school and one year post high school. An experimental study was conducted that included: an experimental group: $n = 30$ and a control group: $n = 17$. Results indicate that the experimental group had a significantly higher rate of: employment, involvement in social groups, and obtaining an account/ credit cards.
<i>Teaching All Students Skills for Employment and Life (TASSEL):</i>	This program consisted of a Student-Centered Transition Planning where the students chose an academic or occupational course of study. Follow-up results included; 74% employed 30 months after leaving school.

Common characteristics of this review of model programs resulting in successful outcomes included collaborating between schools and agencies; involving the community as a part of self-determination and career development; following-up with students who graduate from model programs; and evaluating programs. Even with model programs, mandates, and policies there continues to be a lack of collaborative efforts to include rehabilitation counselors in the transition process (Izzo & Lamb, 2003).

The first step to increasing collaboration, as the authors point out, would be to invite VR counselors to the transition planning process. Agran, Cain, and Calvin (2002) conducted a study where 48% of Utah rehabilitation counselors stated that they were never invited to participate in the transition planning. Collaboration continues to be an important element of the success of self-determination of adults with disabilities.

One of the challenges of collaboration involves others lack of understanding of the VR counselors' professional role in working with young adults. Lamb (2003) conducted a qualitative study where counselors were interviewed and major responsibilities of VR counselors working with youth were addressed. Some of these responsibilities included the VR counselor connecting with the special education teachers and students, to provide career development resources and promote self-determination.

Recommendations of increasing the implementation of self-determination included increasing the assessment of programs and training of VR counselors in self-determination (Izzo & Lamb, 2003). Other recommendations included increasing collaborative efforts and shared funds of professionals working with people with disabilities. As noted before, improving programs can be supported through research. Improving research can be gained through: collecting national data on the nature and frequency of special education and rehabilitation collaboration; increasing investigations of best practices of youth in transition and post-school outcomes; and collecting follow-up data of rehabilitation services, specifically what youth with disabilities find critical. These suggestions help to develop better ways of including self-determination as a part of career development which help produce positive adult outcomes for people with disabilities.

Cultural Values and Self-Determination

The issues surrounding self-determination discussed so far include a need for more evidenced-based practices, program development, and collaboration. Another issue of implementation of self-determination includes the misconception that this construct contradicts different cultural values (Wehmeyer, 2004). Gaining a better understanding of self-determination can help counteract this misconception. Ignoring the cultural influence of the development of self-determination would be a disservice to consumers of VR.

People with disabilities make up the largest and most diverse minority group in the United States; therefore, taking into consideration the cultural difference among people with disabilities while teaching self-determination skills is an important and necessary practice (Leake & Boone, 2007; Trainor, 2008). Certain cultures promote individualism; whereas, others promote collectivism (Kasahara & Turnbull, 2005; Valenzuela & Martin, 2005). A person's choice for future goals may not be accepted without family influence.

Being self-determined means different things to different cultures; therefore, professionals should be encouraged to continuously educate themselves in the area of multicultural awareness (Bryan, 1999; Trainor, 2002). Self-determination may seem as though it is an individualistic concept; however, it is about choice. Self-determination can be applied to any culture because it is about a person's right to choose (Wehmeyer, 2004). For example, a consumer may choose to live at home while going to college, not because the local VR agency cannot fund a dorm but because the consumer chooses to do so. Being aware of cultural differences is not just a good idea, it is a professional rehabilitation counseling ethical standard.

The importance of cultural competence is addressed throughout the Code of Professional Ethics for Rehabilitation Counselors (CRCC, 2009). For example, rehabilitation counselors are

to “demonstrate respect for the cultural background of clients in developing and implementing rehabilitation and treatment plans, and providing and adapting interventions” (CRCC, 2009, p. 3). Some professionals who conduct research work with people with disabilities suggest that the value of self-determination and certain culture values contradict (Trainor, 2002). Vocational rehabilitation counselors should gain a comprehensive understanding of self-determination, and how this value works in tandem with, not against different cultures.

There is a lack of assessment regarding cultural differences in relation to self-determination research and model development (Trainor, 2002, 2008). A majority of the intervention research studies have included observations of how often a student participates (i.e. speaks or leads) in an IEP meeting. Cultural differences have implications for people with disabilities’ participation in IPE and IEP meetings. For example, a person with a disability may not speak up during the IPE meeting not because he or she lacks self-determination skills, but because of a cultural value.

Researchers taking into account cultural values and their influences on people with disabilities, their advocates, and professionals are an important step in discriminating variables that contribute to self-determination skills. Leake and Boone (2007) conducted 20 focus groups to gain multicultural perspectives related to self-determination of 122 participants. Participants included youth with emotional and/or behavior disorders, parents, and teachers.

Results included, “individual variability within ethnic groups underlines the need to adhere to the principle of individualization when promoting self-determination (Leake & Boone, 2007, p. 104). Individualization is the foundation of IEPs and IPEs; therefore, differing cultural values is an important component to include during these meetings and completion of

documentation. Developing comprehensive research and evidence-based programs of special education and VR must be sustained, in order to have a lasting impact.

Sustainability

Evidenced-based research is an essential aspect of the development of self-determination programs in the VR environment in sustainability. Three main elements must be implemented in order for sustainability to occur in programs according to Benz, Lindstrom, Unruh, and Waintrup (2004). These include key administrative support, positive outcomes, and meeting the needs of the local community. Too often, important concepts such as self-determination are implemented within agencies and fade out due to lack of financial, research, and administrative support.

Although there is a lack of intervention research and evidenced-based self-determination programs within VR, it is important for researchers and program developers to consider the long term goals of assessing these programs for sustainability. Baker, Horner, Sappington, and Ard (2000) discuss three ways to preserve self-determination within the field: develop a functional definition, a valid assessment, and provide evidence of positive quality of life outcomes for people with disabilities. They also admit that Wehmeyer and other experts in the field of self-determination have created a functional definition and assessments; however, challenge the field to produce more evidence of positive outcomes.

Last, due to economic hardship and a reduction of federal and state funding, encouraging agencies to adopt new programs that involve expenses such as training staff could present a challenge (Field et al., 1998). Vocational rehabilitation service providers will need to be creative in combining self-determination skill building in current programs. Vocational rehabilitation counselors will also need to advocate for further development of new research and programs to encourage an increase in self-determination implementation.

Conclusion

In summary, it is evident that self-determination has an important place within the VR process (Field et al., 1998; Wehmeyer, 2003). This is further supported by Attorney Graham Sisson, who has a physical disability, who in an interview about “choice” and “autonomy”, both components of self-determination, stated:

Making your own choices and directly making all the major decisions for your life. I decided who I was going to marry, where I was going to go to school, where I was going to live and work, and what I was going to eat every day . . . [from] making the very simplest choices to the most complex choices autonomy with limited choices is meaningless your life is a product of your choices . . . why not be the person that makes those choices?” (Bell, Henthorne, Hill, Turnbull-Humphries, & Zito, 2009, p. 20)

The challenge will be how to implement self-determination skill building and continue research to develop evidenced-based programs.

More research in the area of self-determination and VR is needed in order to continue the professions’ efforts to increase consumer-driven services. One conclusion is the need to increase VR experimental designed studies on consumer-driven services such as job matching. Another suggestion would be collecting further outcome data of current VR services and the amount consumer choice utilized (Brooke, Inge, Armstrong, & Wehman, 1997; Brooke et al., 1995; Wehman et al., 2007).

From the development of the IPE to follow-up services, self-determination can be more than a skill taught but rather a philosophy adopted by all VR counselors. In doing so, it is important for all professionals to remember, “self-determination is a function of the interaction between an individual’s skills and the opportunities provided by their environments” (Field et al.,

1998, p. 121). People with disabilities continue to break down the many barriers that exist; however, inequalities continue to remain especially in relation to employment. In conclusion, developing self-determination evidenced-based practices within VR can continue efforts of promoting equality and positive adult outcomes for people with disabilities (Field et al., 1998; Kilsby & Beyer, 2002; Martin et al., 2002, 2005; Wehmeyer, 1993, 2003; Wehmeyer & Kelchner, 1994).

One way to begin the process of developing evidenced-based practices is through the development of descriptive research that accesses where the field currently stands in relation to perceptions and practices of self-determination. This increase in awareness can lead to future intervention research and eventually evidenced-based practices. The following method section provides the steps that were taken to conduct descriptive research that explored three southeastern states VR counselors' and job coaches' perceptions of importance and support for self-determination.

CHAPTER III. METHODS

Support and importance of self-determination within vocational rehabilitation (VR) practices were explored through this research. A non-experimental survey design was used to expand the research in the area of self-determination within VR consumers. A survey by Cho (2010) was modified and used, which is further described in the instrumentation section. This chapter explains the research method, participants, and instrumentation used to examine self-determination within VR. Also, a detailed explanation of the procedures and analysis conducted for the results of this research is presented.

Participants

Six hundred VR counselors and 156 job coaches were emailed a link to the *Self-Determination within Vocational Rehabilitation Survey* (SDVRS). Participants of this study included a convenient sample of 163 VR counselors (26% response rate) and 40 job coaches (26% response rate) from the Alabama, Georgia, and Mississippi State Departments of Rehabilitation Services. There are fewer job coaches employed within each state versus VR counselors which explains the differing group sizes.

These three states' VR counselors and job coaches serve different populations of people with disabilities to include caseloads labeled: general, transition, deaf, blind, mental health, and substance abuse. An introductory email including a link to the SDVRS was sent to all Alabama, Georgia, and Mississippi VR counselors and job coaches (see Appendix B).

According to the Alabama Department of Rehabilitation Services' (ADRS) Human Resources Director, there were 155 ADRS vocational rehabilitation counselors and 66 job coaches in the state of Alabama at the time of this study (J. E. Burdeshaw, personal communication, May 24, 2011). According to the ADRS web site, VR counselors all have a master's degree from an accredited college or university in rehabilitation counseling, rehabilitation services, rehabilitation administration, vocational evaluation, or counseling. Job coaches all have at least a high school diploma and are jointly funded by ADRS and local school systems. They serve as placement staff and assist in job readiness and attainment. Job coaches work directly with a transition counselor and special education teachers in the school system they serve.

According to the Georgia Department of Rehabilitation Services' (GDRS) Human Resources Director, there were approximately 300 GDRS vocational rehabilitation counselors and 50 job coaches in the state of Georgia (C. Fleming, personal communication, June 27, 2011). The GDRS Human Resource Director stated that there are three levels of rehabilitation counselors: certified, provisional, and caseworker. She stated that a majority of the VR counselors were certified. According to the Georgia Department of Labor web site, all certified VR counselors have a master's degree in education, counseling, rehabilitation counseling or social services and fulfilled a 1 year work experience requirement in social work, or counseling. Job coaches in the state of Georgia all have a bachelors or associates degree in a related field; however, those with a high school diploma and experience working with individuals with disabilities are considered.

The Mississippi Department of Rehabilitation Services' (MDRS) Program Coordinator stated there were approximately 145 MDRS vocational rehabilitation counselors in the state of

Mississippi (J. White, personal communication, August 5, 2011). MDRS rehabilitation counselors all had an accredited master’s degree in rehabilitation counseling/related field or an accredited bachelor’s degree and one year experience. The MDRS Program Coordinator also stated that VR counselors contract job coaches on an as-needed basis and described job coaches as reputable people in the community who assist in serving consumers in seeking employment. Based on the other two states’ percentages of job coaches employed, MDRS contracts approximately 40 job coaches. The following section includes detailed participant information.

Descriptive Results

Participants in this study included 163 vocational rehabilitation (VR) counselors (80.3%) and 40 job coaches (19.7%) from three southern states making a total sample size of 203. There were a total of 63 (31.0%) participants from Alabama; 37 were VR counselors and 26 job coaches. There were 104 total participants from Georgia (51.2%); 95 were VR counselors and 9 job coaches. There were 36 (17.7 %) participants from Mississippi; 31 VR counselors and 5 job coaches. Descriptive results are presented in Tables 8–13.

Table 8

Frequencies and Percentages for Job Titles (N = 203)

Variable	f	%
Job Title		
Vocational Rehabilitation Counselor	163	80.3
Job Coach	40	19.7

Table 9

Frequencies and Percentages for State of Employment Comparing Job Title (N = 203)

Variable	VR Counselor	Job Coach	Total	%
State				
Alabama	37	26	63	31.0
Georgia	95	9	104	51.2
Mississippi	31	5	36	17.7

In addition to job title and state, each participant reported type of caseload, age of consumers, and source of learning about self-determination. The six types of caseloads included: Blind (9.4%), Deaf (8.4%), General (61.1%), Mental Health (27.6%), Substance Abuse (19.2%), and Transition (52.7%). Seventy-two (72) participants (35.5%) worked with consumers of transition age (14–23), whereas 131 (64.5%) worked with consumers ages 24 or above. Vocational rehabilitation counselor participants’ months of experience ranged from 2 months (0.6%) to 432 months (0.6%) with 15 months (9.2%) being the most frequently listed amount of experience. Job coach participants’ months of experience ranged from 2 months (2.5%) to 360 months (5.0%), with 12 (7.5%), 60 (7.5%), and 240 (7.5%) months being the most frequently listed amounts of experience.

Table 10

Frequencies and Percentages for Caseload (N = 203)

Variable	VR Counselor	Job Coach	Total	%
Caseload				
Blind	12	7	19	9.4
Deaf	10	7	17	8.4
General	109	15	124	61.1
Mental Health	41	15	56	27.6
Substance Abuse	33	6	39	19.2
Transition	77	29	106	52.2

Table 11

Frequencies and Percentages for Age of Consumers (N = 203)

Variable	VR Counselor	Job Coach	Total	%
Age				
14-23	41	31	72	35.5
24 or above	122	9	131	64.5

Table 12

Frequencies and Percentages for Months of Experience (N = 203)

Variable	VR Counselor	Job Coach	Total	%
Months of Experience				
2	1	1	2	1.0
6	1	1	2	1.0
8	1	1	2	1.0
10	1	0	1	0.5
11	3	1	4	2.0
12	15	3	18	8.9
24	6	2	8	3.9
30	1	0	1	0.5
36	9	1	10	4.9
48	13	1	14	6.9
60	12	3	15	7.4
72	3	1	4	2.0
84	7	2	9	4.4
96	6	2	8	3.9
100	0	2	2	1.0
108	9	1	10	4.9
120	10	2	12	5.9
132	8	1	9	4.4
144	3	2	5	2.5
156	5	1	6	3.0
168	5	1	6	3.0
180	8	1	9	4.4
192	1	0	1	0.5
204	4	1	5	2.5

(table continues)

Table 12 (continued)

Variable	VR Counselor	Job Coach	Total	%
216	3	0	3	1.5
228	3	2	5	2.5
240	7	3	10	4.9
264	4	0	4	2.0
276	2	0	2	1.0
288	1	0	1	0.5
300	4	1	5	2.5
312	2	1	3	1.5
324	1	0	1	0.5
360	0	2	2	1.0
372	1	0	1	0.5
384	1	0	1	0.5
420	1	0	1	0.5
432	1	0	1	0.5

Finally, the sources from which job coaches and rehabilitation counselors learned about the term self-determination are listed: Undergraduate Training (26.1%), 50 VR counselors and three job coaches; Graduate Training (57.6%), 111 VR counselors and six job coaches; Agency Inservice Training (36.5%), 57 VR counselors and 17 job coaches; Conference or Workshop (50.7%), 78 VR counselors and 25 job coaches; Education Text (18.2 %), 32 VR counselors and 5 job coaches; Professional Journal (23.2%), 44 VR counselors and 3 job coaches; Colleagues (29.1%), 46 VR counselors and 13 job coaches; None of the Above (8.4%), 9 VR counselors and 8 job coaches. The most frequent sources for the two different professions were Graduate Training for VR counselors and Conferences/Workshops for job coaches.

Table 13

Frequencies and Percentages for Source of Learning the Term Self-Determination (N = 203)

Variable	VR Counselor	Job Coach	Total	%
Source				
Undergraduate Training	50	3	53	26.1
Graduate Training	111	6	117	57.6
Agency Inservice Training	57	17	74	36.5
Conference or Workshop	78	25	103	50.7
Education Text	32	5	37	18.2
Professional Journal	44	3	47	23.2
Colleagues	46	13	59	29.1
None of the Above	9	8	17	8.4
Other	12	3	15	7.4

Instrumentation

The Self-Determination within Vocational Rehabilitation Survey (SDVRS) used in this research is a modified version of Cho's (2010) Self-Determination and Student Directed Learning: Expanded Version (SDSDL) survey. Cho's (2010) instrument is based on a long history of development and use of similar instruments (Carter, Lane, Pierson, & Stang, 2008; Cho, 2010; Stang, Carter, Lane, & Pierson, 2009; Thoma & Sax, 2003; Wehmeyer et al., 2000). Cho's SDSDL survey was expanded from a national survey that examined the self-determination practices of secondary teachers (Wehmeyer et al., 2000). Specifically, Wehmeyer and his

colleagues developed their national survey to assess teachers' promotion of self-determination and student-directed learning.

Wehmeyer et al.'s (2000) national survey has been used in many different studies with differing populations (Carter et al., 2008; Cho, 2010; Stang et al., 2009; Thoma & Sax, 2003). Each of these studies included similar survey questions about self-determination. The differences within these studies included the populations surveyed, the layout of the survey itself, and statistics used to analyze data. From there, the studies would include similar questions regarding self-determination, but some of the researchers' added survey items to make the instrument relevant to their research questions. For example, Thoma and Sax (2003) combined the Wehmeyer et al. (2000) survey of teachers and the Thoma, Nathanson, Baker and Tamura (2002) survey of special education teachers in order to assess VR counseling students' knowledge and perceptions of self-determination.

Research by Carter et al. (2008) compared high school (transition age) general and special education teachers' perceived importance and frequency of promoting self-determination within the classroom. Carter et al.'s (2008) survey included a six-point Likert scale assessing the components of self-determination. Their instrument had coefficient alpha reliabilities of 0.86 for importance and 0.83 for instruction of self-determination.

Stang et al. (2009) also compared general and special education teachers' ratings of importance and instruction time of self-determination. The difference in the population of the Carter et al. study and Stang et al. study was that the latter included elementary and middle school teachers. Stang and colleagues self-determination survey also included a Likert scale and reliability measures of .83 for importance and .81 for instruction (2009).

Cho's (2010) self-determination dissertation surveyed special education and general education teachers'. The survey for the current study, the SDVRS, was developed from Cho's survey because it provides a current instrument with reliability measures of .90 for importance and .83 for instruction of self-determination. Although there were many similarities between Cho's survey and the SDVRS, there are also notable differences.

Specifically, this researcher took Cho's questions and made them relevant to the VR profession. For example, a question inquiring about choice-making in Cho's survey stated "Choice-Making (Encouraging students to identify interests, express preferences, and make choices; providing students the opportunity to select preferences in socially and age-appropriate ways" (Cho, 2012, p. 154), whereas in the SDVRS the question reads, (Asking consumers to identify interests, Example: During the Individualized Plans for Employment (IPE) process, asking the consumer what jobs they prefer instead of what jobs you or others think they should apply for) (see Appendix D).

The SDVRS also expanded Cho's survey by adding three questions for each of the seven essential components of self-determination, i.e. choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership skills, self-management and self-regulation, and self-awareness and self-knowledge (Wehmeyer & Field, 2007) (see Appendix H). Different from Cho's survey, these questions within the SDVRS were then combined to form one score of importance and one score of time for each of the two participant groups. This changed the dependent variables from categorical to continuous variables, which increased the amount of statistical measures possible. For example, once the variables were combined to form continuous variables, ANOVAs were found to be an appropriate statistical

measure. Another difference in the SDVRS and Cho's survey was the demographic questions which again related to the rehabilitation field (see Appendix D).

The SDVRS is a 52-item survey: 1 fill-in-the-blank, 6 multiple-choice, and 45 five-point Likert scale (i.e. 1 = never, 3 = sometimes, 5 = often) (see Appendix D). This survey includes an average of three lines per question, does not require any calculations, and takes approximately 15 minutes to complete. The SDVRS was modified to fit the study participant population of VR counselors and job coaches.

Professional demographic information such as type of caseload and years of experience working with people with disabilities are addressed in seven of the items (1–6 and 8). Three questions (items 7, 9, and 52) inquired about knowledge, importance, and promoting self-determination in general and serve as discussion points. The remaining 42 Likert scale questions (items 10–51) relate to the importance and time allocated to supporting self-determination.

Cronbach's coefficient alpha assessed the internal consistencies of the importance and time allocated to supporting self-determination. The 21 survey questions pertaining to importance of self-determination resulted in a Cronbach's alpha of .901. The 21 survey questions pertaining to time devoted to implementing self-determination resulted in a Cronbach's alpha of .907.

Procedures

The SDVRS was developed on <http://www.surveymonkey.com>. An online format was chosen due to its efficiency and cost effectiveness (Dillman, 2007). The researcher's doctoral committee found face validity for the SDVRS survey items.

An initial invitation email was sent to approximately 600 vocational rehabilitation counselors and over 156 job coaches in Alabama, Georgia, and Mississippi explaining the

procedures, purpose of the study, and providing a link to the survey (see Appendix B). The researcher explained within this initial email that the study was voluntary and that the potential participant was not obligated to complete the survey. An information letter with more details about the study and confidentiality was provided on the first page of the online survey (see Appendix C). A reminder email was sent 1 week after the second email (see Appendix B) to all potential participants.

The first question on the SDVRS asked whether the participant was a job coach or a VR counselor, therefore if someone other than these two job categories received the survey they would know by the first question that the survey was not intended for them. The exception would be for some states in which job coaches are given a different title. To address this possible situation, a description was included in the email that job coach was a general term to include their specific related title. For example, in the state of Mississippi, job coaches are referred to as vocational training instructors.

Before any emails or links to the survey were sent, state agencies were contacted to identify who to establish state approval from. For example, in Alabama, this researcher met with both the Transition Coordinator and the VR Coordinator in order to explain this research and give the proper forms to be signed for IRB approval.

Once this researcher received IRB approval (see Appendix A), all signed and stamped IRB forms to the three participating states were distributed. By this point the researcher had identified the person who would be distributing the emails with the link to the survey. This researcher created the initial email and follow-up emails (see Appendix B) so that the administrators in each state could copy and paste the messages and send it to VR counselors and job coaches.

Analysis

Data analysis included descriptive and analysis of variance statistics. Data were analyzed through the Statistical Package for the Social Sciences (SPSS) version 19 (SPSS Inc., Chicago IL). Demographic data was collected (i.e., amount of experience, settings of where the participants work, and specific courses where they learned about self-determination). Means and standard deviations of each area (i.e. support and importance) are presented by highest to lowest rated items.

An analysis of variance (ANOVA) was used to determine whether there were differences in the scores of importance and time allocated to supporting self-determination between VR counselors and job coaches (see Table 14). A correlation analysis examined whether the VR counselors' and job coaches perceptions of importance were reflected in the amount of time they spend supporting self-determination. Last, an analysis of variance (ANOVA) was used to determine whether there were differences in the scores of importance and time allocated to supporting self-determination between rehabilitation professionals who work with consumers of transition age and non-transition age.

Table 14

Analysis of the Research Questions

Research Question	Analysis	Number of Items
1. Are there differences in the ratings of importance which VR counselors and job coaches assign to supporting self-determination?	An ANOVA was used to examine any significant differences among the VR counselors and job coaches and self-determination in relation to importance.	21
2. Are there differences in the time which VR counselors and job coaches allocate to supporting self-determination?	An ANOVA was used to examine any significant differences among VR counselors and job coaches and self-determination in relation to time.	21
3. Are VR counselors' and job coaches' perceptions of the importance of self-determination reflected in the time they devote to supporting self-determination?	The relationship between VR counselors' and job coaches' ratings of importance and time allocated to implementing self-determination was examined by correlation analysis.	42
4. Are there differences in the ratings of importance that rehabilitation professionals who work with consumers of transition age and non-transition age assign to supporting self-determination?	An ANOVA was used to examine any significant differences in ratings of importance that rehabilitation professionals who work with consumers of transition age and non-transition age assign to supporting self-determination.	21
5. Are there differences in the time that rehabilitation professionals who work with consumers of transition age and non-transition age allocate to supporting self-determination?	An ANOVA was used to examine any significant differences in ratings of time that rehabilitation professionals who work with consumers of transition age and non-transition age allocate to supporting self-determination.	21

Summary

The procedures and analysis used to investigate self-determination within VR were described in this chapter. First, the participant population was defined and separated by differences outlined by the three states' rehabilitation departments. Second, the development of the SDVRS was explained in the instrumentation section and included reliability measures. Next, procedures were addressed through the descriptions of obtaining face validity and emails sent with a link to the SDVRS survey. Finally, analyses used to obtain results were presented in text and table format.

CHAPTER IV. RESULTS

A review of literature on self-determination revealed a need for more research in this area within vocational rehabilitation (VR). The purpose of this study was to investigate VR counselors' and job coaches' perceived implementation and importance of self-determination within the VR process. The following research questions were addressed:

1. Are there differences in the ratings of importance that VR counselors and job coaches assign to supporting self-determination?
2. Are there differences in the time that VR counselors' and job coaches' allocate to supporting self-determination?
3. Are VR counselors' and job coaches' perceptions of the importance of self-determination reflected in the time they devote to supporting self-determination?
4. Are there differences in the ratings of importance that rehabilitation professionals who work with consumers of transition age and non-transition age assign to supporting self-determination?
5. Are there differences in the time that rehabilitation professionals who work with consumers of transition age and non-transition age allocate to supporting self-determination?

This chapter summarizes the results found in this study.

Research Questions Results

This section addresses the results from the analysis of each question. For each of the following research questions the mean (*M*) and standard deviation (*SD*) are presented along with

results of the ANOVA for questions one, two, four, and five, as well as the results of a correlation for question three. There were 21 questions combined to make up the *Importance score* and 21 questions combined to make up the *Time score*. The specific research questions are stated below, along with their results, in text and table format.

Research Question 1

Are there differences in the ratings of importance that VR counselors and job coaches assign to supporting self-determination?

Null Hypothesis. There will be no significant differences in the ratings of importance that VR counselors and job coaches assign to supporting self-determination as measured by an analysis of variance.

The average combined *Importance score* for VR counselors was 92.85 ($SD = 8.872$) and for job coaches was 93.73 ($SD = 8.127$). An ANOVA was used to determine any significant differences in the ratings of importance that VR counselors and job coaches assigned to supporting self-determination. At an alpha level of .05, the results showed that there were no significant differences between VR counselors' and job coaches' ratings of the importance of self-determination. The Levine's Test of equality for error of variances was not significant (0.721) and the observed power was (0.088).

Table 15

Means and SD for Importance Ratings of Self-determination

Job Title	Mean	Std. Deviation	N
VR Counselor	92.85	8.872	163
Job Coach	93.73	8.127	40
Total	93.02	8.718	203

Table 16

ANOVA Results for Importance Ratings of Self-determination

Tests of Between-Subjects Effects						
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	24.781 ^a	1	24.781	.325	.569	.002
Intercept	1118002.436	1	1118002.436	14661.475	.000	.986
Job Title	24.781	1	24.781	.325	.569	.002
Error	15327.141	201	76.254			
Total	1771843.000	203				
Corrected Total	15351.921	202				

^a R Squared = .002 (Adjusted R Squared = -.003)

Research Question 2

Are there differences in the time that VR counselors and job coaches allocate to supporting self-determination?

Null Hypothesis. There will be no significant differences in the time that VR counselors and job coaches allocate to supporting self-determination as measured by an analysis of variance.

The average combined *Time score* for VR counselors was 86.61 ($SD = 10.434$) and for job coaches was 88.80 ($SD = 10.515$). An ANOVA was used to determine any significant differences in the ratings of time that VR counselors and job coaches assigned to supporting self-determination. At an alpha level of .05, the results showed that there were no significant differences among VR counselors' and job coaches' ratings of time they allocate to supporting self-determination. The Levine's Test of equality for error of variances was not significant (0.938) and the observed power was (0.222).

Table 17

Means and SD for the Ratings of Time Allocated to Self-determination

Job Title	Mean	Std. Deviation	N
Rehabilitation Counselor	86.61	10.434	163
Job Coach	88.80	10.515	40
Total	87.04	10.461	203

Table 18

ANOVA Results for Ratings of Time Allocated to Self-determination

Tests of Between-Subjects Effects						
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	154.414 ^a	1	154.414	1.414	.236	.007
Intercept	988205.330	1	988205.330	9049.470	.000	.978
Job Title	154.414	1	154.414	1.414	.236	.007
Error	21949.271	201	109.200			
Total	1560003.000	203				
Corrected Total	22103.685	202				

^a R Squared = .007 (Adjusted R Squared = .002)

Research Question 3

Are VR counselors' and job coaches' perceptions of the importance of self-determination reflected in the time they devote to supporting self-determination?

Null Hypothesis. There will be no relationship between VR counselors' and job coaches' perceptions of the importance of self-determination and the time they devote to supporting self-determination as measured by a correlation analysis.

There was a moderate relationship between the combined ratings of time and importance of self-determination, $r = .589$, ($p < .001$).

Table 19

Correlations of the Combined Self-determination Global Constructs of Importance and Time

		Self-determination Importance Measures	Self-determination Time Measures
Self-determination	Pearson Correlation	1	.589**
Importance Measures	Sig. (2-tailed)		.000
	N	203	203
Self-determination	Pearson Correlation	.589**	1
Time Measures	Sig. (2-tailed)	.000	
	N	203	203

** Correlation is significant at the 0.01 level (2-tailed).

Research Question 4

Are there differences in the ratings of importance that rehabilitation professionals who work with consumers of transition age and non-transition age assign to supporting self-determination?

Null Hypothesis. There will be no significant differences in the ratings of importance that rehabilitation professionals who work with consumers of transition age and non-transition age assign to supporting self-determination as measured by an analysis of variance.

The average *Importance* score for rehabilitation professionals who work with consumers of transition age (14–23 years old) was 92.42 ($SD = 8.674$) and for non-transition age (24 years old or above) was 93.35 ($SD = 8.757$). An ANOVA was used to determine any significant

differences in the ratings of importance rehabilitation professionals who work with consumers of transition age and non-transition age allocate to supporting self-determination. At an alpha level of .05, the results showed that there were no significant differences. The Levine's Test of equality for error variances was not significant (0.792) and observed power was (0.112).

Table 20

Means and SD for Importance Ratings of Self-determination

Age of Consumers	Mean	Std. Deviation	N
14-23 Years	92.42	8.674	72
24 Years or Above	93.35	8.757	131
Total	93.02	8.718	203

Table 21

ANOVA Results for Importance Ratings of Self-determination

Source	Type III Sum of			F	Sig.	Partial Eta Squared
	Squares	Df	Mean Square			
Corrected Model	40.574 ^a	1	40.574	.533	.466	.003
Intercept	1603425.126	1	1603425.126	21048.993	.000	.991
Age of Consumers	40.574	1	40.574	.533	.466	.003
Error	15311.347	201	76.176			
Total	1771843.000	203				
Corrected Total	15351.921	202				

^a R Squared = .003 (Adjusted R Squared = -.002)

Research Question 5

Are there differences in the time that rehabilitation professionals who work with consumers of transition age and non-transition age allocate to supporting self-determination?

Null Hypothesis. There will be no significant differences in the time that rehabilitation professionals who work with consumers of transition age and non-transition age allocate to supporting self-determination as measured by an analysis of variance.

The average *Time score* for rehabilitation professionals who work with consumers of transition age (14–23 years old) was 86.35 ($SD = 10.551$) and for non-transition age (24 years old or above) was 87.42 ($SD = 10.431$). An ANOVA was used to determine any significant differences in the time rehabilitation professionals who work with consumers of transition age and non-transition age allocate to supporting self-determination. At an alpha level of .05, the results showed that there were no significant differences. The Levine's Test of equality for error variances was not significant (0.975) and observed power was (0.107).

Table 22

Means and SD for Time Ratings of Self-determination

Age of Consumers	Mean	Std. Deviation	N
14–23 Years Old	86.35	10.551	72
24 Years Old or Above	87.42	10.431	131
Total	87.04	10.461	203

Table 23

ANOVA Results for Time Ratings of Self-determination

Source	Type III Sum			F	Sig.	Partial Eta Squared
	of Squares	Df	Mean Square			
Corrected Model	53.457 ^a	1	53.457	.487	.486	.002
Intercept	1402951.664	1	1402951.664	12788.679	.000	.985
Age of Consumers	53.457	1	53.457	.487	.486	.002
Error	22050.228	201	109.703			
Total	1560003.000	203				
Corrected Total	22103.685	202				

^a R Squared = .002 (Adjusted R Squared = -.003)

Summary

Analyses of four out of the five research questions for this study were ANOVAs, none of which were statistically significant; therefore, post hoc tests were not included. A correlational analysis for the third research question suggested a moderate relationship between participants' ratings of importance with the time devoted to self-determination practices. Findings, limitations, and suggestions for future research are discussed in the next chapter.

CHAPTER V. DISCUSSION

A discussion of findings, suggestions for future research, and implications are presented in this chapter. In addition, this chapter presents a discussion of how future studies involving self-determination can combine survey and intervention research in order to provide clearer understanding of practices that support the development and enhancement of self-determination in VR consumers. Limitations of this study are addressed to provide researchers with suggestions of how to continue and expand future research in this area.

Discussion of Findings

The purpose of this study was to examine ratings of importance and practices of self-determination employed by rehabilitation professionals, specifically vocational rehabilitation (VR) counselors and job coaches. In order to assess these areas, the following research questions were addressed:

1. Are there differences in the ratings of importance that VR counselors and job coaches assign to supporting self-determination?
2. Are there differences in the time that VR counselors and job coaches allocate to supporting self-determination?
3. Are VR counselors' and job coaches' perceptions of the importance of self-determination reflected in the time they devote to supporting self-determination?

4. Are there differences in the ratings of importance that rehabilitation professionals who work with consumers of transition age and non-transition age assign to supporting self-determination?

5. Are there differences in the time that rehabilitation professionals who work with consumers of transition age and non-transition age allocate to supporting self-determination?

The significance or non-significance and implications for practice of these research questions are discussed below.

Descriptive Data

The first descriptive information obtained in this study pertained to job title and state of employment. Participants in this study included VR counselors and job coaches across three southeastern states: Alabama, Georgia, and Mississippi. With 163 VR counselors and 40 job coaches participating, the imbalance of groups and low response rate of job coaches may present some concern, at first glance. However, the differing responses in the two groups are representative of the population within each state. In each of the three participating states, there are more VR counselors employed than job coaches. For example, in Mississippi job coaches are titled vocational training instructors and are hired when needed depending on VR counselors' caseloads.

Finally, the source from which participants learned about self-determination presents another pertinent descriptive result. Graduate training (57.6%) for VR counselors and conferences or workshops (50.7%) for job coaches were listed as the main sources for learning about self-determination. This provides possible applicable information for rehabilitation administrators. For example, from this research administrators may decide to increase their

professional development regarding self-determination for all rehabilitation employees, especially for those who do not have graduate training.

This also suggests that sending employees who do not have graduate training to conferences and workshops may provide them with knowledge that will better serve consumers. As others have stated, incorporating self-determination into daily practice will require a different focus in service delivery. For example, Hong and Shull (2009) suggested that one way to foster self-determination within students with disabilities requires a paradigm shift from the traditional instruction styles to a more open forum of encouraging these students to make their own choices during the learning process. “Teachers must keep in mind that helping students with disabilities to become self-determined is more than a curriculum or a strategy; it is a way of life” (Hong & Shull, 2009, p. 80). This paradigm shift requires further professional development in all fields that serve individuals with disabilities, including vocational rehabilitation.

Research Questions 1 and 2

The average combined *Importance score* for VR counselors was 92.85 ($SD = 8.872$) and for job coaches was 93.73 ($SD = 8.127$). The average combined *Time score* for VR counselors was 86.61 ($SD = 10.434$) and for job coaches was 88.80 ($SD = 10.515$). An ANOVA was used to determine any significant differences in the ratings of importance and time that VR counselors and job coaches assigned to supporting self-determination. At an alpha level of .05, the results showed that there were no significant differences among VR counselors’ and job coaches’ ratings of the importance or time of self-determination.

According to this study, regardless of their training (degree level), rehabilitation professionals who find self-determination important indicate that they implement these practices within the VR process. In a similar study, Cho’s (2010) participants included two groups,

elementary general education and special education teachers. In Cho's study there were no differences found in ratings of importance or time devoted to self-determination for either group. Due to self-determination being a part of special educators' and VR counselors' college curriculum and legislation one might presume that their scores would be higher than job coaches or general educators. This study along with Cho's both suggests that regardless of degree training self-determination is being facilitated, however, there continues to be a need for further development.

Research Question 3

There was a significant relationship between the combined ratings of importance and time allocated to self-determination, $r = .589$, $p < .001$. Cho (2010) stated that in Carter, Lane, Pierson, and Stang (2008), also a similar study, that the high school teacher participants possibly yielded higher correlations of importance and time scores due to there being more self-determination curriculum for this age group. The same could be said for the lower correlations of this current study due to their being a lack of programs specifically for self-determination practices within VR.

Findings of this study and others provide an area for more exploration in future research. For example, research on why there is not a stronger relationship between the importance placed on self-determination by rehabilitation professionals and how often they implement these practices may be needed. Interviewing participants and or adding additional questions would be another way to explore this further.

Research Questions 4 and 5

The average *Importance score* for rehabilitation professionals who work with consumers of transition age (14–23 years old) was 92.42 ($SD = 8.674$) and for non-transition age (24 years

old or above) was 93.35 ($SD = 8.757$). The average *Time score* for rehabilitation professionals who work with consumers of transition age (14–23 years old) was 86.35 ($SD = 10.551$) and for non-transition age (24 years old or above) was 87.42 ($SD = 10.431$). An ANOVA was used to determine any significant differences in the ratings of the importance and time rehabilitation professionals who work with consumers of transition age and non-transition age allocate to supporting self-determination. At an alpha level of .05, the results showed that there were no significant differences.

The results suggest that there are no significant differences between rehabilitation professionals who work with consumers of transition age and non-transition age in their ratings of importance or the time they devote to self-determination practices. Although there are no significant differences between these two age groups of consumers, it is important to note that consumers of different ages need self-determination skills nurtured during the rehabilitation process; however, they may need them implemented in different ways. For example, when working with young adults, rehabilitation professionals may need to provide different types of self-determination skill building activities that will hold their interests. Wehmeyer et al. (2011) suggested that the use of technology is one way to increase students with disabilities involvement and interests in self-determination programs.

Limitations and Recommendations

Sample Bias

One limitation to this study included the survey being distributed to a nonrandomized convenient sample of three southern states which limits conclusions nationally and threatens external validity. Research from multiple areas nationally and with a larger sample size would help to decrease this sample bias. This would, however, increase the issue of lack of universal

job titles and definition of self-determination which is explained further under the lack of universality subheading.

Another limitation to this study is that the research is based on self-report measures which presents possible bias and limits conclusions from the findings of this research. Self-report measures could be eliminated in a research study where observations are made during Individualized Plan for Employment (IPE) meetings and/or on job sites where job coaches work with consumers.

Including other rehabilitation professionals in future research would provide a more conclusive summary for administrators in relation to self-determination development. Some examples of other rehabilitation professionals to include in any future research in the area of VR and self-determination are independent living specialists, assistive technology specialists, rehabilitation administrators, and community rehabilitation providers. There are many people who come in contact with consumers during the rehabilitation process, some of whom are contracted for their services; however, gaining access to these professionals during the VR process would help to expand this research in gaining more information about the importance and implementation of self-determination practices.

Time of Year

The SDVRS was emailed during the winter holidays which, may have contributed to a lower response rate. Choosing a month without holidays and communicating with the state agencies about a convenient time of year may increase the response rate, thus improving future research. For example, one of the administrators who assisted this researcher in distributing the survey stated that she waited a week to email this link due to most of the rehabilitation

professionals being at a conference. Open communication with state administrators is essential in getting a large enough sample size in future research.

Lack of Universal Definitions and Processes

Two areas may have contributed to confusion within this study in regards to lack of universal definition of self-determination. First, the lack of a universal definition of self-determination as discussed throughout Chapters 1 and 2 can make the research in this area inconclusive. Many researchers in the areas of special education and rehabilitation have used Wehmeyer's (1992) and his colleagues' definitions and research of self-determination as a foundation for their own; however, there are many other professions that use different definitions. These inconsistent definitions could lead to a lack of understanding of the term self-determination and, in turn, prevent its development as an evidenced-based practice.

Second, the lack of a universal definition of job coaches as a profession became a barrier within this research. For example, all three of the participating states had differing titles for the job coach profession. In Mississippi, the job coaches are titled vocational training instructors; this led to a zero response rate at first until an email was sent explaining that this research was using job coach as a general term to include vocational training instructors.

A statewide study surveying parents of students with disabilities and special education and rehabilitation professionals about the experiences of students with disabilities with post-secondary education in Alabama demonstrates the importance of job coaches. For example, one survey question asked which of the following six transition programs "positively impacted the success of their students": Career/Technical, Job Coach, Assigned Rehabilitation Counselor, Transition/Work Study Coordinator, Community Transition Team, or ATI Transition Demonstration Site (Browning, Rabren, & Hall, 2001, p. 62). The results showed

that job coaches were rated the highest out of the six components at 74%. This result suggests that job coaches are a vital part of the successful outcomes for individuals with disabilities; therefore, a national universal definition for this profession would benefit research, professional development, and individuals with disabilities.

Future Survey Development Recommendations

Finding a survey specifically addressing the topic of self-determination within VR was difficult because few addressed reliability. Cho (2010) and previous studies using the survey developed originally by Wehmeyer, Agran, and Hughes (2000) included reliability measures which is why their survey was used and modified for this study. This researcher suggests that experts in the rehabilitation field continue to develop a more rigorous survey regarding self-determination and rehabilitation.

Finally, developing more intervention research in the area of self-determination within rehabilitation would lead to more evidenced-based practices (Detrich, 2008). A universal language, as discussed above, would need to be addressed before clear intervention research and practices could be validated and developed. This research added to the descriptive quantitative research; however, as Detrich points out there needs to be a combination of robust intervention research in order for evidenced-based self-determination practices to develop within the rehabilitation field.

One way to accomplish this would be to replicate and expand the intervention research that has been conducted within the field of special education. Self-determination, although already accepted and implemented within rehabilitation, has the potential to become an evidenced-based practice in programs and research. With further development of self-

determination instruments in combination with sound intervention research self-determination evidenced-based practices should be realized.

Implications

One implication from this study includes a better understanding of where the field of VR—specifically in Alabama, Georgia, and Mississippi—stands in relation to the importance and support of self-determination. For example, this study suggests that the VR counselors and job coaches that find self-determination important also devote time to implementing it. This study supports the value of promoting self-determination within the rehabilitation field.

As Cho (2010) discussed, although teachers' found self-determination important they admitted they needed further training. Similarly, this study found both VR counselors and job coaches indicated that they continue to gain their self-determination knowledge from conference/workshops and agency inservice trainings. This study provides rehabilitation administrators information to share during professional development programs. Specifically, using the examples from the survey in discussions could provide clear scenarios of how self-determination can be encouraged throughout the rehabilitation process. This study, along with other research in the area of self-determination provides educational information, discussion points, and encourages further research development on this topic.

Although self-determination is not new to the field of rehabilitation there continues to be a need for more understanding and development for it to be a standard practice within VR. This study provides information about job coaches' and VR counselors' perceptions of importance and time in promoting self-determination. The information from this study, along with other self-determination research in the fields of special education and VR, can advance the direction

of a clearer understanding of what self-determination is and how to effectively implement it into practice.

Conclusion

In conclusion, this research, although not without limitations, does suggest a need for expanding self-determination practices within rehabilitation by including this topic area in future service delivery programs, professional development, and research. “People who are self-determined make things happen in their own lives” (Wehmeyer & Parent, 2001, p. 1). Rehabilitation professionals, whether VR counselors or job coaches, should encourage consumers to make their own choices, whether simple or complex; in order to promote the development of self-determination and positive employment outcomes. Understanding what self-determination is and how to implement it within rehabilitation will remind professionals and consumers alike that the rehabilitation process is about working with people with disabilities in meeting their full potential.

REFERENCES

Agran, M., Cain, H. M., & Cavin, M. D. (2002). Enhancing the involvement of rehabilitation counselors in the transition process. *Career Development of Exceptional Individuals*, 25(2), 141–155.

Agran, M., & Hughes, C. (2005). Introduction to special issue: Self-determination reexamined: Are people with severe disabilities any more self-determined? Introduction to the special issue on self-determination: How far have we come? *Research & Practice for Persons with Severe Disabilities*, 30(3), 105–107.

Algozzine, B., Browder, D., Karvonen, M., Test, D. W., & Wood, W. M. (2001). Effects of intervention to promote self-determination for individuals with disabilities. *Review of Educational Research*, 71, 219–277.

Allen, S. K., Smith, A. C., Test, D. W., Flowers, C., & Wood, W. M. (2001). The effects of self-directed IEP on student participation in IEP meetings. *Career Development for Exceptional Individuals*, 24, 107–120.

Americans with Disabilities Act of 1990, Public Law 101-336, 42 U.S.C. 12101.

Americans with Disabilities Act Amendments of 2008, Public Law 110-325, 42 U.S.C. 12101.

Angyal, A. (1941). *Foundations for a science of personality*. Cambridge, MA: Harvard University Press.

- Baker, D. J., Horner, R. H., Sappington, G., & Ard, W. R. (2000). A response to Wehmeyer (1999) and a challenge to the field regarding self-determination. *Focus on Autism and Other Developmental Disabilities, 15*(3), 154–156.
- Bell, B., Henthorne, S. R., Hill, D. A., Turnbull-Humphries, J. W., & Zito, S. T. (2009). Autonomy and disability: A quest for quality of life. In C.A. Marshall, E. Kendall, M. E. Banks, & R. M. Gover (Eds.), *Disabilities: Insights from across fields and around the world* (Vol. 2; p. 17–38). Westport, CT: Praeger.
- Benz, M., Lindstrom, L., Unruh, D., & Waintrup, M. (2004). Sustaining secondary transition programs in local schools. *Remedial and Special Education, 25*(1), 39–50.
- Beveridge, S., & Fabian, E. (2007). Vocational rehabilitation outcomes: Relationship between individualized plan for employment goals and employment outcomes. *Rehabilitation Counseling Bulletin, 50*(4), 238–246.
- Biestek, F. P., & Gehrig, C. C. (1978). *Client self-determination in social work: A fifty year history*. Chicago: Loyola University Press.
- Brooke, V., Inge, K., Armstrong, A., & Wehman, P. (Eds.). (1997). *Supported employment handbook: A customer-driven approach for person with significant disabilities*. Richmond, VA: Virginia Commonwealth University Rehabilitation Research and Training Center on Workplace Supports and Job Retention.
- Brooke, V., Wehman, P., Inge, K., & Parent, W. (1995, December). Toward a customer-driven approach of supported employment. *Education and Training in Mental Retardation and Developmental Disabilities, 308–320*.
- Brooks-Lane, N., Hutcheson, S., & Revell, W. G. (2007). Community rehabilitation programs and human services: Their evolution and role. In P. Wehman, K. J. Inge, W. G. Revell, &

- V. A. Brooke (Eds.), *Real work for real pay: Inclusive employment for people with disabilities* (pp. 19–36). Baltimore, MD: Paul H. Brookes Publishing Co., Inc.
- Browning, P., Rabren, K., & Hall, G. (2001). *The status of transition in Alabama: A statewide study*. Transition Leadership Institute, Auburn University, AL.
- Bryan, W. (1999). *Multicultural aspects of disabilities: A guide to understanding and assisting minorities in the rehabilitation process*. Springfield, IL: Charles C. Thomas Publisher.
- Carter, E. W., Lane, K. L., Pierson, M. R., & Stang, K. K. (2008). Promoting self-determination for transition-age youth: Views of high school general and special educators. *Council for Exceptional Children*, 66(1), 55–70.
- Chambers, C. R., Wehmeyer, M. L., Saito, Y., Lida, K., Lee, Y., & Singh, V. (2007). Self-determination: What do we know? Where do we go? *Exceptionality*, 12(1), 3–15.
- Cho, H. (2010). *Self-determination and elementary education: Elementary school teachers' knowledge of and use of interventions to promote the self-determination of students*. Dissertation Abstracts International Section A, 70. Retrieved from <http://gradworks.umi.com/33/72/3372404.html>
- Code of Professional Ethics for Rehabilitation Counselors. (1987). *Journal of Applied Rehabilitation Counseling*, 18(4), 25–31.
- Commission on Rehabilitation Counselor Certification. (2009). *Code of professional ethics for rehabilitation counselors*. Schaumburg, IL: Author.
- Council on Rehabilitation Education (CORE) Accreditation Standards. (2008). Pages 1–18. Retrieved from: <http://www.core-rehab.org/Standards.html>

- Cross, T., Cooke, N. L., Wood, W. M., & Test, D. W. (1999). Comparison of the effects of MAPS and ChoiceMaker on student self-determination skills. *Education and Training in Mental Retardation and Developmental Disabilities, 34*, 499–510.
- Deci, E., & Ryan, R. (Eds.). (2002). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.
- Detrich, R. (2008). From policy to practice: IDEIA and evidence-based practice. In E. L. Grigorenko (Eds.), *Educating individuals with disabilities: IDEIA 2004 and beyond*. New York: NY: Springer Publishing Company, LLC.
- Dillman, D. A. (2007). *Mail and internet surveys: The tailored design method* (2nd ed., 2007 update). Hoboken, NJ: John Wiley & Sons.
- Doll, B., Sands, D. L., Wehmeyer, M. L., & Palmer, S. (1996). Promoting the development and acquisition of self-determination behavior. In D. J. Sands & M. L. Wehmeyer (Eds.), *Self-determination across the life span: Independence and choice for people with disabilities* (pp. 63–88). Baltimore, MD: Paul H. Brookes.
- Education for All Handicapped Children Act of 1975, Public Law 94-142, 20 U.S.C. 1410.
- Education for All Handicapped Children Act Amendments of 1986, PL 99-506, 20 U.S.C. 1410.
- Farley, R. (1988). *Vocational self-awareness scale*. Fayetteville, AR: University of Arkansas Research and Training Center in Vocational Rehabilitation.
- Farley, R. C., Bolton, P., & Parkerson, R. (1992). Effects of client involvement in assessment on vocational development. *Rehabilitation Counseling Bulletin, 35*(3), 146–153.
- Field, S., & Hoffman A. (1996). *Steps to self-determination*. Austin, Texas: ProEd, Inc.

- Field, S., Martin, R., Miller, R., Ward, M., & Wehmeyer, M. (1998). Self-determination for persons with disabilities: A position statement of the division on career development and transition. *Career Development for Exceptional Individuals, 21*(2), 113–128.
- Flexer, R. W., Baer, R. B., Luft, P., & Simmons, T. J. (2008). *Transition planning for secondary students with disabilities*. New Jersey: Pearson Education Inc.
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston: Allyn & Bacon.
- Gilson, S. F. (1998). Choice and self-advocacy: A consumer's perspective. In P. Wehman, & J. Kregel (Eds.), *Chapter 1: More than a job*. Baltimore, MD: Paul H. Brookes Publishing Co., Inc.
- Granse, M. L., Kinebanian, A., & Josephsson, S. (2006). Promoting autonomy of the client with persistent mental illness: A challenge for occupational therapists from the Netherlands, Germany and Belgium. *Occupational Therapy International, 13*(3), 142–159.
- Hahn, H. (1991). Alternative views of empowerment: Social services and civil rights. *Journal of Rehabilitation, 57*(4), 17–19.
- Hagen-Foley, D. L., Rosenthal, D. A., & Thomas, D. F. (2005). Informed consumer choice in community rehabilitation programs. *Rehabilitation Counseling Bulletin, 48*(2), 110–117.
- Halloran, W. D. (1993). Transition services requirement: Issues, implications, challenge. In R. C. Eaves & P. J. McLaughlin (Eds.), *Recent advances in special education and rehabilitation* (pp. 210–224). Boston: Andover Medical.
- Halpern, A. S. (1985). Transition: A look at the foundations. *Exceptional Children, 51*, 479–486.
- Halpern, A. S. (1992). Transition: Old wine in new bottles. *Exceptional Children, 58*(3), 202–211.

- Halpern, A.S. (1993). Quality of life as a conceptual framework for evaluating transition outcomes. *Exceptional Children, 59*, 486–498.
- Halpern, A. S. (1994). The transition of youth with disabilities to adult life: A position statement of the Division on Career Development and Transition, the Council for Exceptional Children. *Career Development for Exceptional Individuals, 17*, 115–124.
- Halpern, A. S., Herr, C. M., Wolf, N. K., Lawson, J. D., Doren, B., Johnson, M. D., et al. (1997). *Next S.T.E.P.: Student transition and educational planning*. Austin, TX: PRO-ED.
- Hartnett, J., Collins, M., & Tremblay, T. (2002). Longitudinal outcomes in Vermont's Consumer Choice Demonstration Project (1993–1999). *Journal of Vocational Rehabilitation, 17*(3), 145.
- Hein, S., Lustig, D. C., & Uruk, A. (2005). Consumers' recommendations to improve satisfaction with rehabilitation services: A qualitative study. *Rehabilitation Counseling Bulletin, 49*(1), 29–39.
- Held, M. F., Thoma, C. A., & Thomas, K. (2004). "The John Jones Show": How one teacher facilitated self-determined transition planning for a young man with autism. *Focus on Autism and Other Developmental Disabilities, 19*(3), 177–188.
- Hoffman, A., & Field, S. (1995). Promoting self-determination through effective curriculum development. *Intervention in School and Clinic, 30*, 134–141.
- Holland, J. L., Daiger, D. C., & Power, P. G. (1980). *My vocational situation*. Palo Alto, CA: Consulting Psychologists Press.
- Hong, B. S. S. & Shull, P. J. (2009). Self-determination as an educational outcome: A paradigm shift. *Special Education, 2*(21), 76-82.

- Houchins, D. E. (2002). Self-determination knowledge instruction and incarcerated students. *Emotional and Behavioral Difficulties, 7*, 132–151.
- Individuals with Disabilities Education Act of 1990 (IDEA), Public Law 101-476, 20 U.S.C. 1400.
- Individuals with Disabilities Education Act of 1997, Public Law 101-476, 20 U.S.C. 1400.
- Individuals with Disabilities Education Improvement Act (IDEIA) of 2004, Public Law 108-446, 20 U.S.C. 1400.
- Izzo, M. V., & Lamb, P. (2003). Developing self-determination through career development activities: Implications for Vocational Rehabilitation counselors. *Journal of Vocational Rehabilitation, 19*, 71–78.
- Jaskulski, T., Metzler, C. A., & Zierman, S. A. (1990). *Forging a new era. The 1990 reports on people with developmental disabilities*. Washington, DC: National Association of Developmental Disabilities Councils.
- Kasahara, M., & Turnbull, A. P. (2005). Meaning of family-professional partnerships: Japanese mothers' perspectives. *Exceptional Children, 71*, 249–265.
- Key provisions on transition: IDEA 1997 compared to H.R. 1350 (IDEA 2004). Retrieved March 20, 2007 from <http://www.ncset.org/publications/related/ideatransition.asp>
- Kilsby, M., & Beyer, S. (2002). Enhancing self-determination in job matching in supported employment for people with learning disabilities: An intervention study. *Journal of Vocational Rehabilitation, 17*(2), 125–135.
- Kosciulek, J. (2004). Empowering people with disabilities through vocational rehabilitation counseling. *American Rehabilitation, 40*–47.

- Kregel, J., & Wehman, P. (1989). Supported employment: Promises deferred for people with severe disabilities. *Journal of the Association of Persons with Severe Handicaps*, 14, 293–303.
- Lamb, P. (2003, February). *Case study on the role of the rehabilitation counselor in transitioning youth with disabilities to postsecondary education and employment*. Paper presented at the National Capacity Building Institute.
- Leake, D., & Boone, R. (2007). Multicultural perspective on self-determination from youth, parent, and teacher focus groups. *Career Development for Exceptional Individuals*, 30(2), 104–115.
- Lehmann, J. P., Bassett, D. S., & Sands, D. J. (1999). Students' participation in transition related actions: A qualitative study. *Remedial and Special Education*, 20, 160–169.
- Lehr, S., & Taylor, S. J. (1986). *Roots and wings: A manual about self-advocacy*. (Available from the Federation for Special Needs, 95 Berkeley Street, Suite 104, Boston, MA 02116.).
- Locke, J. (1690). *An essay on human understanding*. Retrieved from http://www.ilt.columbia.edu/publications/locke_understanding.html
- Longhurst, N. A. (1994). *The self-advocacy movement by people with developmental disabilities: A demographic study and directory of self-advocacy groups in the United States*. Washington, DC: American Association on Mental Retardation.
- Lovitt, T. C., Cushing, S. S., & Stump, C. S. (1994). High school students rate their IEPs: Low opinion and lack of ownership. *Intervention in School and Clinic*, 30, 34–38.

- Martin, Jr., E. D. (2001). *Significant disability: Issues affecting people with disabilities from a historical, policy, leadership and systems perspective*. Springfield, IL: Charles C. Thomas, Publisher.
- Martin, J. E., & Marshall, L. H. (1995). Choicemaker: A comprehensive self-determination transition program. *Intervention in School and Clinic, 30*, 147–156.
- Martin, J. E., & Marshall, L. H. (1997). ChoiceMaker self-determination assessment. Longmont, CO: Sopris West.
- Martin, J. E., Marshall, L. H., Maxson, L. M., & Jerman, P. L. (1997). *The Self-Directed IEP*. Longmont, CO: Sopris West.
- Martin, J. E., Marshall, L. H., & Sale, P. (2004). A 3-year study of middle, junior high, and high school IEP meetings. *Exceptional Children, 70*, 285–297.
- Martin, J., Woods, L., Sylvester, L., & Gardner, J. (2005). A challenge to self-determination: disagreement between the vocational choices made by individuals with severe disabilities and their caregivers. *Research & Practice for Persons with Severe Disabilities, 30* (3), 147-153.
- Martin, J. E., Mithaug, D. E., & Husch, J. V. (1988). *How to teach adaptability during community training and supported employment*. Colorado Springs, CO: Ascent Publications.
- Martin, J. E., Mithaug, D. E., Oliphint, J. H., Husch, J. V., & Frazier, E. S. (2002). *Self-directed employment: A handbook for transition teachers and employment specialists*. Baltimore, MD: Paul Brookes Publishing.

- Martin, J. E., Van Dycke, J. L., Christensen, W. R., Greene, B. A., Gardner, J. E., & Lovett, D. L. (2006a). Increasing student participation in IEP meetings: Establishing the self-directed IEP as an evidence-based practice. *Exceptional Children, 72*, 299–316.
- Martin, J. E., Van Dycke, J. L., Greene, B. A., Gardner, J. E., Christensen, W. R., Woods, L. L., et al. (2006b). Direct observation of teacher-directed IEP meetings: Establishing the need for student IEP meeting instruction. *Exceptional Children, 72*, 187–200.
- McDermott, F. E. (1975). *Self-determination in social work*. London, UK: Routledge and Kegan Paul.
- Morelock, K., Roessler, R., & Bolton, B. (1987). The employability maturity interview: Reliability and construct validity. *Vocational Evaluation and Work Adjustment Bulletin, 20*, 53–59.
- Morningstar, M. E., Turnbull, A. P., & Turnbull, H. R. (1995). What do students with disabilities tell us about the importance of family involvement in the transition from school to adult life? *Exceptional Children, 62*, 249–260.
- National Council on Disability. (2005). Living independently and in the community: Implementing lessons from the United States. (1331 F Street, NW, Suite 850, Washington, DC, 20004).
- Nirje, B. (1972). The right to self-determination. In W. Wolfensberger (Ed.), *Normalization: The principle of normalization in human services* (pp. 176–200). Toronto: National Institute on Mental Retardation.
- O'Brien, D. E., Revell, G., & West, M. (2003). The impact of the current employment policy environment on the self-determination of individuals with disabilities. *Journal of Rehabilitation, 19*, 105–118.

- Osipow, S. H. (1980). *Manual for the Career Decision Scale* (Rev. ed.). Columbus, OH: Marathon Consulting and Press.
- Parker, R. M., & Szymanski, E. M. (1998). *Rehabilitation counseling: Basics and beyond* (2nd ed.). Austin, TX: PRO-ED.
- Patterson, J. B., Patrick, A., & Parker, R. M. (2000, Summer). Choice: Ethical and legal rehabilitation challenges. *Rehabilitation Counseling Bulletin*, 43(4), 203–208.
- Pearsall, J., & Trumble, B. (Eds.). (2002) *The Oxford English reference dictionary* (2nd ed., Vols. 1–20). Oxford: Oxford University Press.
- Powers, L. E., Sowers, J., Turner, A., Nesbitt, M., Knowles, E., & Ellison, R. (1996). *Take charge: A model for promoting self-determination among adolescents with challenges*. In L. E. Powers, G. H. S. Singer, & J. Sowers (Eds.), *On the road to autonomy: Promoting self-competence for children and adolescents with disabilities* (pp. 291–322). Baltimore: Brookes.
- Powers, L. E., Turner, A., & Ellison, R. (2001). A multi-component intervention to promote adolescent self-determination. *Journal of Rehabilitation*, 67(4), 13–19.
- Powers, L. E., Turner, A., Matuszewski, J., Wilson, R., & Loesch, C. (1999). A qualitative analysis of student involvement in transition planning. *The Journal for Vocational Special Needs Education*, 21, 18–26.
- Rabren, K. & Curtis R. S. (2007). Partners in the transition process: Special education and vocational rehabilitation. In E. Davis Martin, Jr. (Ed.), *Principles and practices of case management in rehabilitation counseling* (pp. 33–70), Springfield, IL: Charles C. Thomas.
- Rehabilitation Act of 1973, Public Law 93-112, 29 U.S.C. 701.

- Rehabilitation Act of 1978, Public Law 95-602, 29 U.S.C. 701.
- Rehabilitation Act Amendments of 1986, Public Law 99-506, 29 U.S.C. 701.
- Rehabilitation Act Amendments of 1992, Public Law 102-569, 29 U.S.C. 701.
- Roessler, R., & Schriener, K. (1988). *Occupational choice strategy*. Fayetteville, AR: University of Arkansas Research and Training Center in Vocational Rehabilitation.
- Ryan, R. M., & Deci, E. L. (2000, January). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78.
- Sands, D. J., & Wehmeyer, M. L. (1996). *Self-determination across the life span: Independence and choice for people with disabilities*. Baltimore, MD: Paul H. Brookes Publishing Co., Inc.
- Schloss, P. J., Alper, S., & Jayne, D. (1993). Self-determination for persons with disabilities: Choice, risk, and dignity. *Exceptional Children, 60*(3), 215–225.
- Serna, L., & Lau-Smith, J. (1995). Learning with purpose: Self-determination skills for students who are at risk for school and community failure. *Intervention in School and Clinic, 30*, 142–146.
- Sigafoos, A. D., Feinstein, C.B., Damond, M., & Reis, D. (1988). The measurement of behavioral autonomy in adolescence: The autonomous functioning checklist. In C. B. Feinstein, A. Esman, J. Looney, G. Orvin, J. Schimel, A. Schwartzberg, A. Sorsky, & M. Sugar (Eds.), *Adolescent psychiatry, 15*, 432–462.
- Sikma, S. K. (2009). Supporting self-determination of older adults in community health settings: A curriculum development project. *Journal of Nursing Education, 48*(10), 574–578.

- Simpson, G., & Weiner, W. (1989). *Oxford English Dictionary*. Oxford: Oxford University Press.
- Sitlington, P. L., & Clark, G. M. (2006). *Transition education and services for students with disabilities* (4th ed.). Boston: Allyn & Bacon.
- Snyder, E. P. (2000). *Examining the effects of teaching ninth grade students receiving special education learning supports services to conduct their own IEP meetings*. Unpublished doctoral dissertation, Lehigh University, Bethlehem, PA.
- SPSS Inc. (2010). *SPSS base 19.0 for Windows user's guide*. Chicago IL: SPSS Inc.
- Stang, K., K., Carter, E. W., Lane, K. L., & Pierson, M. R. (2009). Perspectives special and general educators on fostering self-determination in elementary and middle schools. *Journal of Special Education, 43*(2), 94–106.
- Stock, S. E., Davies, D. K, Secor, R. R., & Wehmeyer, M. L. (2003). Self-directed career preference selection for individuals with intellectual disabilities: Using computer technology to enhance self-determination. *Journal of Vocational Rehabilitation, 19*, 95–103.
- Sweeney, M. A. (1997). *The effects of self-determination training on student involvement in the IEP process*. Unpublished doctoral dissertation, Florida State University, Tallahassee, FL.
- Test, D., Fowler, C., Wood, W., Brewer, D., & Eddy, S. (2005). A conceptual framework of self-advocacy for students with disabilities. *Remedial & Special Education, 26*(1), 43–54.
- Test, D., Hinson, K., Solow, J., & Keul, P. (1993). Job satisfaction of persons in supported employment. *Education and Training in Mental Retardation, 28*(1), 38–46.

- Thoma, C. A., Nathanson, R., Baker S. R., & Tamura, R. (2002), Self determination: What do special educators know and where do they learn it? *Remedial and Special Education, 23*, 242–247.
- Thoma, C. A., Rogan, P., & Baker, S. R. (2001). Student involvement in transition planning: Unheard voices. *Education and Training in Mental Retardation and Developmental Disabilities, 36*, 16–29.
- Thoma, C. A., & Sax, C. L. (2003). Self-determination: What do rehabilitation counseling students know and where do they learn it? *Journal of Vocational Rehabilitation, 19*, 89–94.
- Trainor, A. (2002). Self-determination for students with learning disabilities: Is it a universal value? *Qualitative Studies in Education, 15*(6), 711–725.
- Trainor, A. A. (2008). Using cultural and social capital theory to improve postsecondary outcomes and expand transition models for youth with disabilities. *Journal of Special Education, 42*, 148–162.
- Vacc, N. A., Vallecorsa, A. L., Parker, A., Bonner, S., Lester, C., Richardson, S. et al. (1985). Parents' and educators' participation in IEP conferences. *Education & Treatment of Children, 8*, 153–162.
- Valenzuela, R. L., & Martin, J. E. (2005). Self-directed IEP: Bridging values of diverse cultures and secondary education, *Career Development and Transition, 28*, 4–14.
- Van Dycke, J. L. (2005). *Determining the impact of self-directed IEP instruction on secondary IEP documents*. Unpublished doctoral dissertation, University of Oklahoma, Norman.

- Vandercook, T., York, J., & Forest, M. (1989). The McGill action planning system (MAPS): A strategy for building the vision. *Journal of the Association of Persons with Severe Handicaps, 14*, 205–215.
- Vehmas, S. (2004). Ethical analysis of the concept of disability. *American Association on Mental Retardation, 42*(3), 209–222.
- Wagner, M., D’Amico, R., Marder, C., Newman, & Blackorby, J. (1992). *What happens next: Trends in postschool outcomes of youth with disabilities*. Menlo Park, CA: SRI International.
- Ward, M. J. (1988). The many facets of self-determination. *Transition Summary, 5*, 2–3. Washington, DC: National Information Center for Children and Youth with Disabilities.
- Ward, M. J. (1992). OSERS initiative on self-determination. *Interchange, 12*(1), 1–7. Champaign, IL: Transition Institute, University of Illinois at Urbana-Champaign.
- Ward, M. J. (1996). Coming of age in the age of self-determination: A historical and personal perspective. In D. J. Sands & M. L. Wehmeyer (Eds.), *Self-determination across the life span: Independence and choice for people with disabilities* (pp. 1–16). Baltimore: MA, Paul H. Brookes.
- Wehman, P. (1993). *The ADA mandate for social change*. Baltimore: Brookes.
- Wehman, P., Inge, K., Revell, W., & Brooke, V. (2007). *Real work for real pay: Inclusive employment for people with disabilities*. Baltimore: Paul H. Brookes Publishing Company.
- Wehman P., & Kregel, J. (1995). Supported employment: At the crossroads. *Journal of the Association for Persons with Severe Handicaps, 20*, 286–299.

- Wehman, P., & Kregel, J. (1998) *More than a job*. Baltimore, MD. Paul H. Brookes Publishing Co., Inc.
- Wehmeyer, M. (1993). *Promoting self-determination using the life centered education curriculum*. Arlington, TX: The Arc. (ERIC Document Reproduction Service No. ED 364 006).
- Wehmeyer, M., Bersani, H., & Gagne, R. (2000) Riding the third wave: Self-determination and self-advocacy in the 21st century. *Focus on Autism and Other Developmental Disabilities*, 15(2), 106–115.
- Wehmeyer, M., & Lawrence, M. (1995). Whose future is it anyway? Promoting student involvement in transition planning. *Career Development for Exceptional Individuals*, 18, 69–83.
- Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children*, 63, 245–255.
- Wehmeyer, M. L. (1992). Self-determination and the education of students with mental retardation. *Education and Training in Mental Retardation*, 27, 302–314.
- Wehmeyer, M. L. (1996). Self-determination as an educational outcome: Why it is important to children, youth, and adults with disabilities? In D. J. Sands & M. L. Wehmeyer (Eds.), *Self-determination across the life span: Independence and choice for people with disabilities*. Baltimore, MD: Paul H. Brookes Publishing Co., Inc.
- Wehmeyer, M. L. (2003). Self-determination, vocational rehabilitation, and workplace supports. *Journal of Vocational Rehabilitation*, 19, 67–69.

- Wehmeyer, M. L. (2004). Beyond self-determination: Causal agency theory. *Journal of Developmental and Physical Disabilities, 16*(4), 337–359.
- Wehmeyer, M. L., Agran, M., & Hughes, C. (2000). A national survey of teachers' promotion of self-determination and student directed learning. *The Journal of Special Education, 34*(2), 58–68.
- Wehmeyer, M. L., & Berkobien, R. (1991). Self-determination and self-advocacy. A case of mistaken identity. *Newsletter of the Association for Persons with Severe Handicaps, 17*(7), 11.
- Wehmeyer, M. L., & Field, S. L. (2007) *Self-determination: Instructional and assessment strategies*. Thousand Oaks, CA: Corwin Press.
- Wehmeyer, M. L., & Kelchner, K. (1995). *Whose future is it anyway?* Arlington, TX: The ARC.
- Wehmeyer, M. L., Kelchner, K., & Richards, S. (1996). Essential characteristics of self determined behavior of individuals with mental retardation. *American Journal on Mental Retardation*.
- Wehmeyer, M. L., & Metzler, C. A. (1995). How self-determined are people with mental retardation? The national consumer survey. *Mental Retardation, 33*, 111–119.
- Wehmeyer, M. L., & Palmer, S.B. (2003). Adult outcomes for students with cognitive disabilities three years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131–144.
- Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Garner, N. W., & Lawrence, M. (2007). Self-determination and student transition planning knowledge and skills: Predicting involvement. *Exceptionality, 15*(1), 31–44.

- Wehmeyer, M. L., Palmer, S. B., Williams-Diehm, K., Shogren, K. A., Davies, D. K., & Stock, S. (2011) Technology and self-determination in transition planning: The impact of technology use in transition planning on student self-determination. *Journal of Special Education Technology*. 26(1), 13-24.
- Wehmeyer, M. L., & Parent, W. (2001, September). National gateway: To self-determination. *Research to Practice in Self-Determination*, 2, 1–32.
- Whitman, T. (1990). Self-regulation and mental retardation. *American Journal on Mental Retardation*, 94, 347–362.
- Will, M. (1984). OSERS programming for the transition of youth with disabilities: Bridges from school to working life. Washington, DC: Office of Special Education and Rehabilitative Services.
- Williams, P., & Schoultz, B. (1982). *We can speak for ourselves*. Boston: Brookline Books.
- Williams, R. R. (1989). Creating a new world of opportunity: Expanding choice and self-determination in lives of Americans with severe disability by 1992 and beyond. In R. Perske (Ed.), *Proceedings from the National Conference on Self-Determination, Institute on Community Integration* (pp. 16–17). Minneapolis, MN.
- Wolfensberger, W. (1972). *The principle of normalization in human services*. Canada: National Institute on Mental Retardation.
- Wolfensberger, W. (1980). The definition of normalization: Update, problems, disagreements, and misunderstandings. In R. J. Flynn & K. E. Nitsch (Eds.), *Normalization, social integration, and community services*. Baltimore: University Park Press.
- Wolfensberger, W. (2002). Social role valorization and or versus, “empowerment.” *Mental Retardation*, 40, 252–258.

- Wolfensberger, W., & Tullman, S. (1982). A brief outline of the principle of normalization. *Rehabilitation Psychology, 27*(3), 131–145.
- Wood, W., Fowler, C., Uphold, N., & Test, D. (2005). A review of self-determination interventions with individuals with severe disabilities. *Research and Practice for Persons with Severe Disabilities (RPSD), 30*(3), 121–146.
- Zhang, D. (2001). The effect of Next S.T.E.P. instruction on the self-determination skills of high school students with learning disabilities. *Career Development for Exceptional Individuals, 24*, 121–132.
- Zimmerman, M. A. (1990). Toward a theory of learned hopefulness: A structural model analysis of participation and empowerment. *Journal of Research in Personality, 24*, 71–86.

Appendix A

Institutional Review Board Approval Letter

**AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS
RESEARCH PROTOCOL REVIEW FORM**

For Information or help contact **THE OFFICE OF RESEARCH COMPLIANCE**, 115 Ramsay Hall, Auburn University
Phone: 334-844-5966 e-mail: hsubjec@auburn.edu Web Address: <http://www.auburn.edu/research/vpr/ohs/>

Revised 03.26.11 – **DO NOT STAPLE, CLIP TOGETHER ONLY.**

Save a Copy

1. **PROPOSED START DATE of STUDY:** Oct 1, 2011

PROPOSED REVIEW CATEGORY (Check one): FULL BOARD EXPEDITED EXEMPT

2. **PROJECT TITLE:** Promoting Self-Determination in People with Disabilities within Vocational Rehabilitation

3. Jane Turnbull-Humphries Doctoral Student Rehabilitation (334) 740-1390 turnbjw@auburn.edu
PRINCIPAL INVESTIGATOR **TITLE** **DEPT** **PHONE** **AU E-MAIL**

532 Coleman Ct. Auburn, AL 36830 janewallis78@yahoo.com
MAILING ADDRESS **FAX** **ALTERNATE E-MAIL**

4. **SOURCE OF FUNDING SUPPORT:** Not Applicable Internal External Agency: _____ Pending Received

5. **LIST ANY CONTRACTORS, SUB-CONTRACTORS, OTHER ENTITIES OR IRBs ASSOCIATED WITH THIS PROJECT:**
Alabama, Georgia, and Mississippi State Departments of Rehabilitation Services

6. **GENERAL RESEARCH PROJECT CHARACTERISTICS**

6A. Mandatory CITI Training	6B. Research Methodology
<p>Names of key personnel who have completed CITI: Jane Turnbull-Humphries <input checked="" type="checkbox"/> Dr. Karen Rabren <input checked="" type="checkbox"/></p> <p>CITI group completed for this study: <input checked="" type="checkbox"/> Social/Behavioral <input type="checkbox"/> Biomedical</p> <p align="center">PLEASE ATTACH TO HARD COPY ALL CITI CERTIFICATES FOR EACH KEY PERSONNEL</p>	<p>Please check all descriptors that best apply to the research methodology:</p> <p>Data Source(s): <input checked="" type="checkbox"/> New Data Existing Data</p> <p>Will recorded data directly or indirectly identify participants? Yes <input checked="" type="checkbox"/> No</p> <p>Data collection will involve the use of:</p> <p>_____ Educational Tests (cognitive diagnostic, aptitude, etc.) _____ Interview / Observation <input checked="" type="checkbox"/> Physical / Physiological Measures or Specimens (see Section 6B) <input checked="" type="checkbox"/> Surveys / Questionnaires <input checked="" type="checkbox"/> Internet / Electronic _____ Audio / Video / Photos _____ Private records or files</p>
6C. Participant Information	6D. Risks to Participants
<p>Please check all descriptors that apply to the participant population.</p> <p><input checked="" type="checkbox"/> Males <input checked="" type="checkbox"/> Females <input type="checkbox"/> AU students</p> <p>Vulnerable Populations</p> <p>_____ Pregnant Women/Fetuses _____ Prisoners _____ Children and/or Adolescents (under age 19 in AL)</p> <p>Persons with:</p> <p>_____ Economic Disadvantages _____ Physical Disabilities _____ Educational Disadvantages _____ Intellectual Disabilities</p> <p>Do you plan to compensate your participants? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>Please identify all risks that participants might encounter in this research.</p> <p><input checked="" type="checkbox"/> Breach of Confidentiality* _____ Coercion _____ Deception _____ Physical <input checked="" type="checkbox"/> Psychological _____ Social _____ None _____ Other:</p> <p align="center">RECEIVED AUG 24 2011</p> <p><small>*Note that if the investigator is using or accessing confidential or identifiable data, breach of confidentiality is always a risk.</small></p>
<p>Do you need IBC Approval for this study? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - BUA # _____ Expiration date _____</p>	

The Auburn University Institutional Review Board has approved this document for use from 8/14/11 to 9/13/15
Protocol # 11-271 EX 1109

FOR OHSR OFFICE USE ONLY			
DATE RECEIVED IN OHSR: 8/24/11	by: GB	PROTOCOL #	11-271 EX 1109
DATE OF IRB REVIEW: 3/9/11/11	by: KJE	APPROVAL CATEGORY:	45 CFR 46.101(b)
DATE OF IRB APPROVAL: _____	by: _____	INTERVAL FOR CONTINUING REVIEW:	1yr.
COMMENTS:			

Appendix B

Initial and Reminder Emails



AUBURN UNIVERSITY

DEPARTMENT OF
SPECIAL EDUCATION,
REHABILITATION, AND COUNSELING

Dear Rehabilitation Professional,

I am a doctoral student in the Department of Rehabilitation at Auburn University. I would like to invite you to participate in my research study to help expand the understanding of self-determination practices within vocational rehabilitation. You may participate (*or may not participate*) if you are an Alabama, Georgia or Mississippi Vocational Rehabilitation Counselor or Job Coaches.

Participants will be asked to complete an online survey that will take approximately 15 minutes to complete. This online survey should cause no more discomfort than you would experience in your everyday life. Any information obtained in connection with this study will remain confidential. Your name will not be associated in any way with the research findings.

Information obtained through your participation may be used to fulfill an educational requirement, published in a professional journal, and presented at a professional meeting.

If you would like more information about this study, an information letter can be obtained by clicking on the (**link to survey below**) and reading the first page of the online survey and or by sending me an email (turnbjw@auburn.edu) for a request of information. If you decide to participate after reading the letter, you can click on the next button on the first page of the online survey.

If you have any questions, please contact Jane Turnbull-Humphries at turnbjw@auburn.edu or my advisor, Dr. Karen Rabren at rabreks@auburn.edu.

Thank you for your consideration,

Jane Turnbull-Humphries, ABD, LAPC, NCC, MEd
Principal Investigator

[LINK TO SURVEY](#)

2084 Haley Center, Auburn, AL 36849-5222; Telephone: 334-844-7676; Fax: 334-844-7677

w w w . a u b u r n . e d u / s e r c



AUBURN UNIVERSITY

**DEPARTMENT OF
SPECIAL EDUCATION,
REHABILITATION, AND COUNSELING**

Dear Rehabilitation Professional,

This is a friendly reminder that in one month the *Self-Determination within Vocational Rehabilitation Survey* that was emailed to you on _____ will be closed. This survey takes approximately 15 minutes to complete and requires no calculations. If you have any questions please contact Jane Turnbull-Humphries at turnbjw@auburn.edu or Dr. Karen Rabren at rabreks@auburn.edu. Thank you so much for your time and for what you do.

[LINK TO SURVEY](#)

Thank you again,

Jane Turnbull-Humphries, ABD, LAPC, NCC, MEd

Principal Investigator

(334) 740-1390

turnbjw@auburn.edu

2084 Haley Center, Auburn, AL 36849-5222; Telephone: 334-844-7676; Fax: 334-844-7677

w w w . a u b u r n . e d u / s c r c

Appendix C
Information Letter



AUBURN UNIVERSITY

DEPARTMENT OF
SPECIAL EDUCATION,
REHABILITATION, AND COUNSELING

After reading the Information letter click NEXT below if you decide to continue.

INFORMATION LETTER

for a Research Study entitled

“Promoting Self-Determination in People with Disabilities within Vocational Rehabilitation”

You are invited to participate in a research study to investigate the current status of self-determination practices in this field the vocational rehabilitation. The study is being conducted by Jane Turnbull-Humphries, Doctoral Student in Rehabilitation, under the direction of Dr. Karen Rabren, Chair, in the Auburn University Department of Rehabilitation.

You were selected as a possible participant because you are an Alabama, Georgia, or Mississippi Vocational Rehabilitation Counselor or Job Coaches and are age 19 or older.

What will be involved if you participate?

Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete an online survey. Your total time commitment will be approximately 15 minutes.

Are there any risks or discomforts?

The risks associated with participating in this study should cause no more discomfort to you than you would experience in your everyday life. As in any internet survey there is the possibility that someone other than the intended recipient may see your responses through intent or accident. The researcher will utilize all privacy protections provided by survey host. Although completing this survey may not benefit you directly, we believe the information gained from this study will help us gain a better understanding of self-determination practices within the vocational rehabilitation process.

Are there any benefits to yourself or others?

If you participate in this study, you can expect to receive educational information about the importance of self-determination in a future presentation. I cannot promise you that you will receive any or all of the benefits described.

Will you receive compensation for participating?

No, however the researcher is offering to present about self-determination within the vocational rehabilitation process after the study is complete.

If you change your mind about participating, you can withdraw at any time by closing your browser window. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Once you've submitted anonymous data, it cannot be withdrawn since it will be unidentifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University or the Department of Rehabilitation Services.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by not collecting any identifiable information from you that would connect you to the survey. Information collected through your participation may be used to fulfill an educational requirement, published in a professional journal, and/or presented at a professional meeting, etc.

If you have questions about this study, please contact Jane Turnbull-Humphries at turnbjw@auburn.edu or Dr. Karen Rabren at rabreks@auburn.edu.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT.
IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK NEXT BELOW.
YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

The Auburn University Institutional Review Board has approved this document for use from September 14, 2011 to September 13, 2012. Protocol #11-271

NEXT

2084 Haley Center, Auburn, AL 36849-5222; Telephone: 334-844-7676; Fax: 334-844-7677

w w w . a u b u r n . e d u / s c r c

Appendix D

The Self-Determination within Vocational Rehabilitation Survey (SDVRS)

Self-Determination within Vocational Rehabilitation Survey

After reading the Information letter click **NEXT** below if you decide ...

INFORMATION LETTER

For a Research Study entitled "Promoting Self-Determination in People with Disabilities within Vocational Rehabilitation"

You are invited to participate in a research study to investigate the current status of self-determination practices in the field of vocational rehabilitation. The study is being conducted by Jane Turnbull-Humphries, Doctoral Student in Rehabilitation, under the direction of Dr. Karen Rabren, Chair, in the Auburn University Department of Rehabilitation.

You were selected as a possible participant because you are an Alabama, Georgia, or Mississippi Vocational Rehabilitation Counselor or Job Coach and are age 19 or older.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete an online survey. Your total time commitment will be approximately 15 minutes.

Are there any risks or discomforts? The risks associated with participating in this study should cause no more discomfort to you than you would experience in your everyday life. As in any internet survey there is the possibility that someone other than the intended recipient may see your responses through intent or accident. The researcher will utilize all privacy protections provided by survey host. Although completing this survey may not benefit you directly, we believe the information gained from this study will help us gain a better understanding of self-determination practices within the vocational rehabilitation process.

Are there any benefits to yourself or others? If you participate in this study, you can expect to receive educational information about the importance of self-determination in a future presentation. I cannot promise you that you will receive any or all of the benefits described.

Will you receive compensation for participating? No, however the researcher is offering to present about self-determination within the vocational rehabilitation process after the study is complete.

If you change your mind about participating, you can withdraw at any time by closing your browser window. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Once you've submitted anonymous data, it cannot be withdrawn since it will be unidentifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University or the State Department of Rehabilitation Services.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by not collecting any identifiable information from you that would connect you to the survey. Information collected through your participation may be used to fulfill an educational requirement, published in a professional journal, and/or presented at a professional meeting.

If you have questions about this study, please contact Jane Turnbull-Humphries at turnbjw@auburn.edu or Dr. Karen Rabren at rabreks@auburn.edu.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK **NEXT** BELOW. YOU MAY PRINT A COPY OF THIS LETTER TO KEEP. Thank You for Your Time!

The Auburn University Institutional Review Board has approved this document for use from September 14, 2011 to September 13, 2012. Protocol #11-271

Self-Determination within Vocational Rehabilitation Survey

Please respond to each question as completely as possible.

***1. What is your current job title?**

- Rehabilitation Counselor
- Job Coach

***2. In which state do you currently work?**

- Alabama
- Georgia
- Mississippi

***3. What caseload do you currently work with? (Click all that apply)**

- Blind
- Deaf
- General
- Mental Health
- Substance Abuse
- Transition

***4. What is the most common age of your consumers within your caseload?**

- 14-23
- 24 or above

***5. The number of years that you have been working as a vocational rehabilitation counselor or job coach?**

(Type in your answer)

Self-Determination within Vocational Rehabilitation Survey

***6. Please identify the disability categories of the consumers you support. (Click all that apply)**

- Blindness
- Other Visual Impairments
- Deafness
- Hearing Loss
- Other Hearing Impairments
- Deaf-Blindness
- Communicative Impairment(expressive/receptive)
- Mobility Orthopedic/Neurological Impairments
- Manipulation /Dexterity Orthopedic/ Neurological Impairments
- Other Orthopedic Impairments (e.g., limited range of motion)
- Respiratory Impairments
- General Physical Debilitation (fatigue, weakness, pain, etc)
- Other Physical Impairments (not listed above)
- Cognitive Impairments
- Psychosocial Impairments
- Other Mental Impairments

Other (please specify)

Self-Determination within Vocational Rehabilitation Survey

***7. Low = Not familiar | Medium = Somewhat familiar | High = Very familiar**

Are you familiar with the term 'self-determination'?

	1 Low	2	3 Medium	4	5 High
How Familiar	<input type="radio"/>				

***8. From what source have you heard of the term self-determination?**

(Click all that apply).

- Undergraduate Training
- Graduate Training
- Agency Inservice Training
- Conference or Workshop
- Education Text
- Professional Journal
- Colleagues
- None of the Above
- Other (please specify)

***9. Low = Not important | Medium = Somewhat important | High = Very important**

Do you find self-determination development important to support within the rehabilitation process?

	1 Low	2	3 Medium	4	5 High
How Important	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Identifying Interests

The following 21 questions will ask you about how important and how often you think supporting certain self-determination skills are.

(Click only one response for each item).

Example: During the Individualized Plans for Employment (IPE) process, asking the consumer what jobs they prefer instead of what jobs you or others think they should apply for.

***10. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: ASKING CONSUMERS TO IDENTIFY INTERESTS?

	1 Low	2	3 Medium	4	5 High
ASKING CONSUMERS TO IDENTIFY INTERESTS?	<input type="radio"/>				

***11. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: ASKING CONSUMERS TO IDENTIFY INTERESTS?

	1 Never	2	3 Sometimes	4	5 Often
Asking Consumers to Identify Interests	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Expressing Preferences

Example: Based on the consumer's skill level providing them more than one employment training opportunity instead of only one option you think would be best for them.

***12. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: ENCOURAGING CONSUMERS TO EXPRESS PREFERENCES BETWEEN TWO OR MORE OPTIONS?

	1 Low	2	3 Medium	4	5 High
Encouraging consumers to express preferences between two or more options	<input type="radio"/>				

***13. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: ENCOURAGING CONSUMERS TO EXPRESS PREFERENCES BETWEEN TWO OR MORE OPTIONS?

	1 Never	2	3 Sometimes	4	5 Often
Encouraging consumers to express preferences between two or more options	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Opportunity to Select Preferences

Example: Giving the consumer the choice of what job skill they want to work on first (interview, resume building, computer skills).

***14. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: PROVIDING CONSUMERS THE OPPORTUNITY TO SELECT PREFERENCES IN SOCIALLY AND AGE-APPROPRIATE WAYS?

	1 Low	2	3 Medium	4	5 High
Providing consumers the opportunity to select preferences in socially and age-appropriate ways	<input type="radio"/>				

***15. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: PROVIDING CONSUMERS THE OPPORTUNITY TO SELECT PREFERENCES IN SOCIALLY AND AGE-APPROPRIATE WAYS?

	1 Never	2	3 Sometimes	4	5 Often
Providing consumers the opportunity to select preferences in socially and age-appropriate ways	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Making Effective Decisions

Example: A consumer has two job offers and one requires evenings and weekends. This consumer has children and no evening childcare therefore the professional would encourage the consumer to make decisions that fits into their everyday life.

***16. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: ASSISTING CONSUMERS IN MAKING EFFECTIVE DECISIONS?

	1 Low	2	3 Medium	4	5 High
Assisting consumers in making effective decisions	<input type="radio"/>				

***17. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: ASSISTING CONSUMERS IN MAKING EFFECTIVE DECISIONS?

	1 Never	2	3 Sometimes	4	5 Often
Assisting consumers in making effective decisions	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Opportunities to Make Decisions

Example: During the rehabilitation process providing opportunities for the consumer to make a decision about which job training classes would be the most beneficial for them in relation to their needed employment skills.

***18. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: FACILITATING OPPORTUNITIES TO PARTICIPATE IN MAKING DECISIONS ABOUT THEIR EMPLOYMENT AND EXTRACURRICULAR ACTIVITIES?

	1 Low	2	3 Medium	4	5 High
Facilitating opportunities to participate in making decisions about their employment and extracurricular activities	<input type="radio"/>				

***19. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: FACILITATING OPPORTUNITIES TO PARTICIPATE IN MAKING DECISIONS ABOUT THEIR EMPLOYMENT AND EXTRACURRICULAR ACTIVITIES?

	1 Never	2	3 Sometimes	4	5 Often
Facilitating opportunities to participate in making decisions about their employment and extracurricular activities	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Providing Support

Example: When a consumer is unable to make a decision between two job opportunities the professional would provide support and suggestions however not make the decision for them. One way to provide this support is through creating a pro and con list of the two jobs with the consumer.

***20. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: WHEN UNABLE TO MAKE A DECISION PROVIDING SUPPORT AND HELPFUL SUGGESTIONS?

	1 Low	2	3 Medium	4	5 High
When unable to make a decision providing support and helpful suggestions	<input type="radio"/>				

***21. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: WHEN UNABLE TO MAKE A DECISION PROVIDING SUPPORT AND HELPFUL SUGGESTIONS?

	1 Never	2	3 Sometimes	4	5 Often
When unable to make a decision providing support and helpful suggestions	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Identifying Causes of Problems

Example: If a consumer has had difficulty getting a second interview asking them what interview skills they think they need first before forming your own professional opinion.

***22. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: ASKING CONSUMERS TO IDENTIFY CAUSES OF PROBLEMS?

	1 Low	2	3 Medium	4	5 High
Asking consumers to identify causes of problems	<input type="radio"/>				

***23. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: ASKING CONSUMERS TO IDENTIFY CAUSES OF PROBLEMS?

	1 Never	2	3 Sometimes	4	5 Often
Asking consumers to identify causes of problems	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

How To Solve Problems

Example: This same consumer admits they have issues with arriving to the interviews on time. The professional would ask them how they think they could begin to correct this skill first and what has not worked in the past, before interjecting their opinion.

***24. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: ENCOURAGING CONSUMERS TO THINK ABOUT HOW TO SOLVE A PROBLEM?

	1 Low	2	3 Medium	4	5 High
Encouraging consumers to think about how to solve a problem	<input type="radio"/>				

***25. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: ENCOURAGING CONSUMERS TO THINK ABOUT HOW TO SOLVE A PROBLEM?

	1 Never	2	3 Sometimes	4	5 Often
Encouraging consumers to think about how to solve a problem	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Strategies To Solve Problems

Example: Once the consumer has identified the interview skills needed, supporting the consumer in coming up with their own solutions based on their skill level.

***26. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: SUGGESTING STRATEGIES THAT CONSUMERS CAN USE TO SOLVE PROBLEMS IN SOCIALLY APPROPRIATE WAYS?

	1 Low	2	3 Medium	4	5 High
Suggesting strategies that consumers can use to solve problems in socially appropriate ways	<input type="radio"/>				

***27. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: SUGGESTING STRATEGIES THAT CONSUMERS CAN USE TO SOLVE PROBLEMS IN SOCIALLY APPROPRIATE WAYS?

	1 Never	2	3 Sometimes	4	5 Often
Suggesting strategies that consumers can use to solve problems in socially appropriate ways	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Setting Their Own Goals

Example: Sometimes the consumer may have the motivation however lack clear goals. Encouraging the consumer to list clear achievable consumer identified goals.

***28. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: SUPPORTING CONSUMERS IN SETTING THEIR OWN GOALS?

	1 Low	2	3 Medium	4	5 High
Supporting consumers in setting their own goals	<input type="radio"/>				

***29. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: SUPPORTING CONSUMERS IN SETTING THEIR OWN GOALS?

	1 Never	2	3 Sometimes	4	5 Often
Supporting consumers in setting their own goals	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Developing Objectives

Example: Once this consumer lists goals then assisting this consumer to identify what they think the steps will need to be to achieve these goals.

***30. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: HELPING CONSUMERS DEVELOP A SERIES OF OBJECTIVES TO ACHIEVE THE GOAL?

	1 Low	2	3 Medium	4	5 High
Helping consumers develop a series of objectives to achieve the goal	<input type="radio"/>				

***31. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: HELPING CONSUMERS DEVELOP A SERIES OF OBJECTIVES TO ACHIEVE THE GOAL?

	1 Never	2	3 Sometimes	4	5 Often
Helping consumers develop a series of objectives to achieve the goal	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Acting On Steps

Example: Once this same consumer identifies the steps they feel they need to take to achieve their employment goal then supporting the consumer in acting on these consumer identified steps.

***32. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: URGING CONSUMERS TO MOVE TOWARDS ACTING ON THE NECESSARY STEPS TO ACHIEVE THE DESIRED OUTCOME?

	1 Low	2	3 Medium	4	5 High
Urging consumers to move towards acting on the necessary steps to achieve the desired outcome	<input type="radio"/>				

***33. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: URGING CONSUMERS TO MOVE TOWARDS ACTING ON THE NECESSARY STEPS TO ACHIEVE THE DESIRED OUTCOME?

	1 Never	2	3 Sometimes	4	5 Often
Urging consumers to move towards acting on the necessary steps to achieve the desired outcome	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Knowledge Of Rights

Example: If a consumer feels they have been unfairly fired due to their disability in previous jobs encouraging the consumer to learn and understand their rights and how to apply these appropriately in future.

***34. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: EMPOWERING CONSUMERS TO KNOW AND STAND UP FOR THEIR (AND OTHERS') RIGHTS IN SOCIALLY APPROPRIATE WAYS?

	1 Low	2	3 Medium	4	5 High
Empowering consumers to know and stand up for their (and others') rights in socially appropriate ways	<input type="radio"/>				

***35. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: EMPOWERING CONSUMERS TO KNOW AND STAND UP FOR THEIR (AND OTHERS') RIGHTS IN SOCIALLY APPROPRIATE WAYS?

	1 Never	2	3 Sometimes	4	5 Often
Empowering consumers to know and stand up for their (and others') rights in socially appropriate ways	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Negotiate Effectively and Assertively

Example: Encouraging consumers to advocate for themselves. If a consumer wants to ask an employer why they were fired supporting them in asserting themselves in an appropriate and professional manner

***36. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: ADVISING CONSUMERS TO NEGOTIATE EFFECTIVELY AND ASSERTIVELY?

	1 Low	2	3 Medium	4	5 High
Advising consumers to negotiate effectively and assertively	<input type="radio"/>				

***37. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: ADVISING CONSUMERS TO NEGOTIATE EFFECTIVELY AND ASSERTIVELY?

	1 Never	2	3 Sometimes	4	5 Often
Advising consumers to negotiate effectively and assertively	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Leadership and Teamwork

Example: Reinforcing consumers to go above and beyond their job tasks and demonstrate leadership and teamwork abilities. One way to support this would be when a consumer completes their task for the day encouraging them to ask their supervisor or co-workers if they can help them with any other tasks.

***38. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: URGING CONSUMERS TO BE AN EFFECTIVE LEADER OR TEAM MEMBER?

	1 Low	2	3 Medium	4	5 High
Urging consumers to be an effective leader or team member	<input type="radio"/>				

***39. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: URGING CONSUMERS TO BE AN EFFECTIVE LEADER OR TEAM MEMBER?

	1 Never	2	3 Sometimes	4	5 Often
Urging consumers to be an effective leader or team member	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Evaluating Their Own Behavior

Example: Once the consumer is in a job training setting asking the consumer to assess their own improvements or continued limitations.

***40. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: FACILITATING CONSUMERS IN MONITORING AND EVALUATING THEIR OWN BEHAVIOR?

	1 Low	2	3 Medium	4	5 High
Facilitating consumers in monitoring and evaluating their own behavior	<input type="radio"/>				

***41. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: FACILITATING CONSUMERS IN MONITORING AND EVALUATING THEIR OWN BEHAVIOR?

	1 Never	2	3 Sometimes	4	5 Often
Facilitating consumers in monitoring and evaluating their own behavior	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Development of Intrinsic Motivation

Example: While earning an income is important, intrinsic motivation would be the added benefit of developing co-worker friendships.

***42. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: FOSTERING THE DEVELOPMENT OF INTRINSIC MOTIVATION?

	1 Low	2	3 Medium	4	5 High
Fostering the development of intrinsic motivation	<input type="radio"/>				

***43. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: FOSTERING THE DEVELOPMENT OF INTRINSIC MOTIVATION?

	1 Never	2	3 Sometimes	4	5 Often
Fostering the development of intrinsic motivation	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Setting Their Own Schedule

Example: Whether through job training or completing tasks, the professional can ask consumers to set their own schedule.

***44. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: HAVING CONSUMERS SET THEIR OWN SCHEDULE?

1 Low 2 3 Medium 4 5 High

Having consumers set
their own schedule

***45. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: HAVING CONSUMERS SET THEIR OWN SCHEDULE?

1 Never 2 3 Sometimes 4 5 Often

Having consumers set
their own schedule

Self-Determination within Vocational Rehabilitation Survey

Identifying Strengths and Limitations

Example: Asking consumers to identify multiple strengths and limitations while completing their IPEs and other documents.

***46. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: GIVING CONSUMERS VARIOUS OPPORTUNITIES TO IDENTIFY THEIR OWN STRENGTHS AND LIMITATIONS?

	1 Low	2	3 Medium	4	5 High
Giving consumers various opportunities to identify their own strengths and limitations	<input type="radio"/>				

***47. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: GIVING CONSUMERS VARIOUS OPPORTUNITIES TO IDENTIFY THEIR OWN STRENGTHS AND LIMITATIONS?

	1 Never	2	3 Sometimes	4	5 Often
Giving consumers various opportunities to identify their own strengths and limitations	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Applying Knowledge of Strengths and Limitations

Example: Empowering consumers by explaining that everyone has strengths and limitations and how being aware of these can help them gain and maintain employment.

***48. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: ONCE A CONSUMER IS ABLE TO IDENTIFY THEIR OWN STRENGTHS AND LIMITATIONS THEN GUIDING THEM TO APPLY THAT KNOWLEDGE TO THEIR ADVANTAGE?

	1 Low	2	3 Medium	4	5 High
Once a consumer is able to identify their own strengths and limitations then guiding them to apply that knowledge to their advantage	<input type="radio"/>				

***49. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: ONCE A CONSUMER IS ABLE TO IDENTIFY THEIR OWN STRENGTHS AND LIMITATIONS THEN GUIDING THEM TO APPLY THAT KNOWLEDGE TO THEIR ADVANTAGE?

	1 Never	2	3 Sometimes	4	5 Often
Once a consumer is able to identify their own strengths and limitations then guiding them to apply that knowledge to their advantage	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

Identifying Learning and Support Needs

Example: Disability awareness is important to any successful employment outcome. Encouraging consumers to become aware of what learning and supports they will need during their new job and how to appropriately ask and receive these supports.

***50. Low = Not important | Medium = Somewhat important | High = Very important**

How important is the skill: SUPPORTING CONSUMER'S IN IDENTIFYING THEIR UNIQUE LEARNING AND SUPPORT NEEDS?

	1 Low	2	3 Medium	4	5 High
Supporting consumer's in identifying their unique learning and support needs	<input type="radio"/>				

***51. Never = Zero times a year | Sometimes = On average once a month | Often = On average once a week**

How often do you implement the skill area of: SUPPORTING CONSUMER'S IN IDENTIFYING THEIR UNIQUE LEARNING AND SUPPORT NEEDS?

	1 Never	2	3 Sometimes	4	5 Often
Supporting consumer's in identifying their unique learning and support needs	<input type="radio"/>				

Self-Determination within Vocational Rehabilitation Survey

***52. How much will promoting self-determination with your consumers help them to improve their academic, employment, and/or social behaviors?**

	1 Not Helpful	2	3 Somewhat Helpful	4	5 Very Helpful
How Helpful?	<input type="radio"/>				

Thank You for Your Time and for What You Do!

Appendix E

Privacy Policy from SurveyMonkey.com
<http://www.surveymonkey.com/privacypolicy.aspx>

Privacy Policy

Last updated: June 27, 2011

This privacy policy explains how SurveyMonkey handles your personal information and data. We value your trust, so we've strived to present this policy in clear, plain language instead of legalese. The policy is structured so you can quickly find answers to the questions which interest you the most.

This privacy policy applies to all the products, services and websites offered by SurveyMonkey.com, LLC, SurveyMonkey Spain, Sucursal em Portugal, and their affiliates, except where otherwise noted. We refer to those products, services and websites collectively as the "services" in this policy. Some services have supplementary privacy statements that explain in more detail our specific privacy practices in relation to them. Unless otherwise noted, our services are provided by SurveyMonkey.com, LLC inside of the United States and by SurveyMonkey Spain, Sucursal em Portugal outside of the United States.

<http://www.truste.org/ivalidate.php?url=www.surveymonkey.com&sealid=102>

TRUSTe. SurveyMonkey is certified by TRUSTe under its Privacy Seal program. TRUSTe is an independent third party which has reviewed our privacy policies and practices for compliance with its [program requirements](#).

US-EU Safe Harbor. TRUSTe also certifies SurveyMonkey.com, LLC's compliance with the [EU-US Safe Harbor Framework for data protection](#) concerning the collection, use and retention of data from the European Union. We are listed on the U.S. Department of Commerce's [Safe Harbor website](#) as being certified.

Questions? For questions regarding our privacy policy or practices, contact SurveyMonkey by mail at 285 Hamilton Avenue, Suite 500, Palo Alto, CA 94301, USA, or [electronically through this form](#). You may [contact TRUSTe](#) if feel your question has not been satisfactorily addressed.

Key Privacy Points: The Stuff You Really Care About

If you create surveys:

- **Your survey data is owned by you.** Not only that, but SurveyMonkey treats your surveys as if they were private. We don't sell them to anyone and we don't use the survey responses you collect for our own purposes, except in a limited set of circumstances (e.g. if we are compelled by a subpoena, or if you've made your survey responses public).
- **We safeguard respondents' email addresses.** To make it easier for you to invite people to take your surveys via email, you may [upload lists of email addresses](#), in which case SurveyMonkey acts as a mere custodian of that data. We don't sell these email addresses and we use them only as directed by you and in accordance with this policy. The same goes for any email addresses collected by your surveys.
- **We keep your data securely.** Read our [Security Statement](#) for more information.
- **Survey data is stored on servers located in the United States.** More information about this is available if you are located in [Canada](#) or [Europe](#).

Appendix F

Letters Seeking Permission



AUBURN UNIVERSITY

**DEPARTMENT OF
SPECIAL EDUCATION,
REHABILITATION, AND COUNSELING**

Cary F. Boswell, Commissioner
Alabama Department of Rehabilitation Services
602 S. Lawrence St.
Montgomery, AL 36104

Dear Dr. Boswell:

I am a doctoral student in the Department of Rehabilitation at Auburn University under the direction of Dr. Karen Rabren. I am asking permission from the Alabama Department of Rehabilitation Services to conduct research for my study, "Promoting Self-Determination in People with Disabilities within Vocational Rehabilitation".

Alabama Vocational Rehabilitation Counselors and Job Coaches will be asked to complete an online survey that will take approximately 15 minutes to complete. This online survey should cause no more discomfort than they would experience in their everyday life. Any information obtained in connection with this study will remain confidential. The participants' names will not be associated in any way with the research findings. My plan is for the research activities to be finished by July 01, 2012.

Information obtained from the participants may be used to fulfill an educational requirement, published in a professional journal, and presented at a professional meeting. Employees will not be asked to take time from their work duties to complete the surveys.

I will provide a copy of the Auburn University IRB-approved, stamped consent document before I email participants and will also provide a copy of any aggregate results. Once results are collected, I would be available to conduct a presentation upon request for your staff about self-determination within the vocational rehabilitation process which would include results from this study. Also, attached are the information letter, consent form, and a copy of the survey. If you have any questions, please contact Jane Turnbull-Humphries at turnbjw@auburn.edu or my advisor, Dr. Karen Rabren at rabreks@auburn.edu.

Thank you for your consideration,
Jane Turnbull-Humphries, ABD, LAPC, NCC, MEd
Principal Investigator
(334) 740-1390

See Survey Attached

2084 Haley Center, Auburn, AL 36849-5222; Telephone: 334-844-7676; Fax: 334-844-7677

w w w . a u b u r n . e d u / s c r c



AUBURN UNIVERSITY

**DEPARTMENT OF
SPECIAL EDUCATION,
REHABILITATION, AND COUNSELING**

Christine Fleming, MS, CRC
Manager Performance Improvement and Technical Assistance
Vocational Rehabilitation Program
Georgia Department of Labor
1700 Century Circle, Suite 300
Atlanta, GA 30345

Dear Ms. Fleming,

I am a doctoral student in the Department of Rehabilitation at Auburn University under the direction of Dr. Karen Rabren. I am asking permission from the Georgia Department of Rehabilitation Services to conduct research for my study, "Promoting Self-Determination in People with Disabilities within Vocational Rehabilitation".

Georgia Vocational Rehabilitation Counselors and Job Coaches will be asked to complete an online survey that will take approximately 15 minutes to complete. This online survey should cause no more discomfort than they would experience in their everyday life. Any information obtained in connection with this study will remain confidential. The participants' names will not be associated in any way with the research findings. My plan is for the research activities to be finished by July 01, 2012.

Information obtained from the participants may be used to fulfill an educational requirement, published in a professional journal, and presented at a professional meeting. Employees will not be asked to take time from their work duties to complete the surveys.

I will provide a copy of the Auburn University IRB-approved, stamped consent document before I email participants and will also provide a copy of any aggregate results. Once results are collected, I would be available to conduct a presentation upon request for your staff about self-determination within the vocational rehabilitation process which would include results from this study. Also, attached are the information letter, consent form, and a copy of the survey. If you have any questions, please contact Jane Turnbull-Humphries at turnbjw@auburn.edu or my advisor, Dr. Karen Rabren at rabreks@auburn.edu.

Thank you for your consideration,
Jane Turnbull-Humphries, ABD, LAPC, NCC, MEd
Principal Investigator
(334) 740-1390

See Survey Attached

2084 Haley Center, Auburn, AL 36849-5222; Telephone: 334-844-7676; Fax: 334-844-7677

w w w . a u b u r n . e d u / s c r c



AUBURN UNIVERSITY

**DEPARTMENT OF
SPECIAL EDUCATION,
REHABILITATION, AND COUNSELING**

Joyce White, Program Coordinator
Mississippi Department of Rehabilitation Services
P.O. Box 1698
Jackson, MS 39215-1698

Dear Ms. White:

I am a doctoral student in the Department of Rehabilitation at Auburn University under the direction of Dr. Karen Rabren. I am asking permission from the Mississippi Department of Rehabilitation Services to conduct research for my study, "Promoting Self-Determination in People with Disabilities within Vocational Rehabilitation".

Mississippi Vocational Rehabilitation Counselors and Job Coaches will be asked to complete an online survey that will take approximately 15 minutes to complete. This online survey should cause no more discomfort than they would experience in their everyday life. Any information obtained in connection with this study will remain confidential. The participants' names will not be associated in any way with the research findings. My plan is for the research activities to be finished by July 01, 2012.

Information obtained from the participants may be used to fulfill an educational requirement, published in a professional journal, and presented at a professional meeting. Employees will not be asked to take time from their work duties to complete the surveys.

I will provide a copy of the Auburn University IRB-approved, stamped consent document before I email participants and will also provide a copy of any aggregate results. Once results are collected, I would be available to conduct a presentation upon request for your staff about self-determination within the vocational rehabilitation process which would include results from this study. Also, attached are the information letter, consent form, and a copy of the survey. If you have any questions, please contact Jane Turnbull-Humphries at turnbjw@auburn.edu or my advisor, Dr. Karen Rabren at rabreks@auburn.edu.

Thank you for your consideration,
Jane Turnbull-Humphries, ABD, LAPC, NCC, MEd
Principal Investigator
(334) 740-1390

See Survey Attached

2084 Haley Center, Auburn, AL 36849-5222; Telephone: 334-844-7676; Fax: 334-844-7677

w w w . a u b u r n . e d u / s e r c

Appendix G
Letters of Authorization/Cooperation



**Mississippi Department of
Rehabilitation Services**

Providing the freedom to live

August 2, 2011

Auburn University Institutional Review Board
c/o Office of Human Subjects
307 Samford Hall
Auburn, AL 36849

Dear Board Members:

Please note that Jane Turnbull-Humphries, AU Graduate Student, has the permission of the Mississippi Department of Rehabilitation Services (MDRS) to conduct research with our agency for her study, "Promoting Self-Determination in People with Disabilities within Vocational Rehabilitation". She will contact MDRS employees by emailing a link to the survey and by sending email reminders. Her plans are for research activities to be completed by July 01, 2012.

Please note that employees will not be required to take time from their work duties to complete the surveys. Mrs. Turnbull-Humphries has agreed to provide MDRS a copy of the Auburn University IRB-approved, stamped consent document before she emails participants and will also provide a copy of any aggregate results.

If there are any questions, please contact me at (601) 853-5312.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joyce White".

Joyce White, MS/CRC



Robert Bentley
GOVERNOR

Alabama Department of
REHABILITATION SERVICES



Cary F. Boswell
COMMISSIONER

August 9, 2011

Auburn University Institutional Review Board
c/o Office of Human Subjects
307 Samford Hall
Auburn, AL 36849

Dear Board Members:

Please note that Mrs. Jane Turnbull-Humphries, AU Graduate Student, has the permission of the Alabama Department of Rehabilitation Services to conduct research with our agency for her study, "Promoting Self-Determination in People with Disabilities within Vocational Rehabilitation".

The survey will be emailed to employees by ADRS division directors. Mrs. Turnbull-Humphries plans for research activities to be finished by July 01, 2012.

Mrs. Turnbull-Humphries has agreed to provide to my office a copy of the Auburn University IRB-approved, stamped consent document before she emails participants and will also provide a copy of any aggregate results.

If there are any questions, please contact my office.

Signed,

Cary F. Boswell, Commissioner
Alabama Department of Rehabilitation Services

PROVIDING SERVICES TO ALABAMIANS WITH DISABILITIES

602 S. Lawrence Street ■ Montgomery, AL 36104 ■ 334-293-7500 ■ 1-800-441-7607
Fax: 334-293-7383 ■ www.rehab.alabama.gov



Serving... Living... Learning... Leading...

MEMORANDUM
Georgia Department of Labor Institutional Review Board
Roosevelt Warm Springs Institute for Rehabilitation
Warm Springs, Georgia 31830
706-655-5000

August, 17 2011

DOL IRB Control # DOL_IRB_2011_001

TO: Jane Turnbull-Humphries
Principal Investigator
Auburn University Rehabilitation
532 Coleman Court
Auburn, AL 36830

FROM: Chairman
Georgia Department of Labor Rehabilitation Services
Institutional Review Board

RE: **Promoting Self-Determination in People with Disabilities within Vocational Rehabilitation**

The Georgia Department of Labor Rehabilitation Services Institutional Review Board has reviewed and **approved** your research entitled "**Promoting Self-Determination in People with Disabilities within Vocational Rehabilitation.**" The approval period is one year from date listed above.

Approval periods are one (1) year in length. This protocol **must be renewed at least 30 days** before **08/17/2012**. Renewal proposals may be resubmitted in abbreviated form using the format in the IRB Guide for Researchers. If you complete data gathering before the renewal date, please notify the board and send a copy of your final report when it is complete.

Any adverse reactions or problems resulting from this investigation must be reported immediately to the Georgia Department of Labor Rehabilitation Services Institutional



GEORGIA DEPARTMENT OF LABOR
MARK BUTLER, COMMISSIONER

Providing Medical and Vocational Rehabilitation Services to Individuals with Disabilities

Post Office Box 1000 • Warm Springs, Georgia 31830-1000 • 706-655-5000 • Fax 706-655-5011 • www.rooseveltrehab.org

Medical Rehabilitation Services accredited by JCARO, Vocational Rehabilitation Services accredited by CARF

Appendix H

Wehmeyer and Field (2007) Essential Components of Self-Determination

Essential Component	Definition
Choice-Making Skills	The expression of a preference between two or more options.
Decision-Making Skills	Coming to a judgment about which solution is best at a given time.
Problem-Solving Skills	Identifying and defining the problem, listing possible solutions, identifying the impact of each solution, making a judgment about a preferred solution, and evaluating the efficacy of the judgment
Goal-Setting and Attainment Skills	Identifying and defining a goal clearly, developing a series of objectives to achieve the goal, and specifying the actions necessary to achieve the desired outcome
Self-Management and Self-Regulation Skills	The process of setting goals, developing action plans to achieve those goals, supporting the action plans, evaluating the outcomes of the action and changing action plans if the goal was not achieved
Self-Awareness and Self-Knowledge	Possessing a reasonably accurate understanding of their strengths, abilities, unique learning and support needs, and limitations
Self-Advocacy and Leadership	Advocating on one's own behalf, knowing how to advocate and what to advocate for, and having effective assertiveness and communication skills