

Abstract

Title of Dissertation: THE ROLE OF SELF-DETERMINATION ON QUALITY OF LIFE, STUDENT ENGAGEMENT, AND ENVISIONING A CAREER/LIFE GOAL OR FUTURE FOR STUDENTS PARTICIPATING IN A BEST PRACTICES TRANSITION INTERVENTION

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Self-determination has been identified as a major predictive factor for positive postsecondary outcomes for students with disabilities. The purpose of this study was to determine the role of self-determination in productive student engagement, perceived quality of life, and the ability to envision a career/life goal or future for students with multiple disabilities participating in a promising practices transition intervention. Results indicated significant results in the areas of student engagement and quality of life indicating the importance of self-determination on these factors. The results indicated a negative correlation between two of the self-determination subscales and envisioning a career/life goal which was an interesting and contradictory finding to the existing literature. Implications and recommendations are discussed.

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ENGAGEMENT, AND ENVISIONING A CAREER/LIFE GOAL OR FUTURE FOR
STUDENTS PARTICIPATING IN A BEST PRACTICES TRANSITION
INTERVENTION

By

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Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2012

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Acknowledgements

Thank you to my committee for your flexibility and guidance through this dissertation process. I never thought a dissertation in just over two months would be possible but thanks to your guidance and willingness to work around this crazy timeline, it was possible. I would also like to thank Debra, Monica, and Becca at TransCen, Inc. for your support and help.

A big thank you to Carol, our department's administrative goddess. Without your knowledge, constant support, and compassion, this journey would have been, at the least, much more difficult, if not impossible.

To all my friends, especially Wendy, Necy, Stacey and Roxy, thank you for listening to me when I was feeling overwhelmed and proofreading for me, sometimes without any notice. A special thanks to Ralph for supporting me, hugging me when I cried, and taking care of everything else so I could focus on this dissertation.

Thank you to my family, my Mom, Dad, Aunt Connie, Aunt Flo, Uncle Ronnie, and my cousins Emily, Mike, and Sarah for your continued support and for your continual belief in me even when I didn't anymore.

Finally, a special thanks to my Mom who has always been my sounding board, cheerleader, and biggest supporter. Without you, this wouldn't have been possible.

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THE ROLE OF SELF-DETERMINATION ON QUALITY OF LIFE, STUDENT ENGAGEMENT, AND ENVISIONING A CAREER/LIFE GOAL OR FUTURE FOR STUDENTS PARTICIPATING IN A BEST PRACTICES TRANSITION INTERVENTION

Chapter 1: Introduction

Students with disabilities are a largely overlooked and underserved population in secondary education. Because of this, students with disabilities are less likely to have positive transition outcomes after high school. The National Longitudinal Transition Study which has tracked special education students since who were enrolled in school starting in 2000, reported in 2010 that 57% of special education youth who had exited high school were competitively employed compared to 66% of their peers without disabilities. However, only about 27% of youth with significant disabilities (such as intellectual disabilities or serious emotional disabilities) were employed after school exit (http://www.nlts2.org/reports/2009_04/index.html, 2009). Although legislation such as the Individuals with Disabilities Education Improvement Act of 2004 works to ensure early interventions for the nearly 6.5 million children with disabilities in special education, positive post-school outcomes remain challenging for these students (U.S. Department of Education, 2010).

Self-determination

One characteristic of students with disabilities that has been linked to positive transition outcomes is self-determination. There is a wealth of research that has found a relationship between higher self-determination levels and positive postsecondary outcomes for students with disabilities including employment, participation in postsecondary education, independent living, and community inclusion outcomes (Nota,

Soresi, Ferrari, & Wehmeyer, 2011). Similarly, in the Longitudinal Study of the Federal Vocational Rehabilitation Programs of youth eligible for vocational rehabilitation services, self-determination was found as a significant predictor of employment for people with disabilities (Capella-McDonall & Crudden, 2009).

Self-determination can be defined as “acting as the primary causal agent in one’s life and making choices and decisions regarding one’s quality of life free from undue external influence or interference (Wehmeyer, 1999).” Wehmeyer, explains self-determined behavior not just as an action but an action taken by an individual for a purpose or to achieve an end. Wehmeyer identified four latent constructs of self-determination and indicated that at least some level of all four constructs must be present to consider behavior self-determined. Those four constructs are (1) behavioral autonomy, (2) psychological empowerment, (3) self-regulated behavior, and (4) self-realization (Wehmeyer).

Theoretical Framework. Research has consistently indicated self-determination as an important factor for transition success for students with disabilities (Test & Cease-cook, 2012). Additionally, Ward (1999) reported on the results of ten transition demonstration studies funded by the Department of Education and all found that self-determination was a major factor in transition success for students with disabilities. As a result of research findings supporting the importance of self-determination in transition success, the Department of Education has required student participation in Individualized Education Plan meetings, as stipulated in the Individuals with Disabilities Education Improvement Act of 2004.

The theoretical framework for this study is self-determination, which is a complex construct that has been differentially defined over the years. For the purposes of this study, Wehmeyer's (1999) theoretical framework will be used. Wehmeyer (1997), defined self determination as "acting as the primary causal agent in one's life and making choices and decisions regarding one's quality of life free from undue external influences or interference." In 1999, he further defined self-determination in terms of consisting of the four latent constructs described earlier: behavioral autonomy, self-regulation, psychological empowerment, and self-realization. Wehmeyer (1999) posits that some level of these four latent constructs must be present for self-determined behavior to exist. His model will be discussed in further detail in chapter two.

Purpose of the Study

Although self-determination is empirically linked to positive post school outcomes for students with disabilities, its unique contribution to transition outcomes for students participating in a well defined transition intervention based on promising

practices in the field has not been explored. This study will investigate the extent to which self-determination predicts positive post school outcomes for a sample of secondary students participating in a multi-site transition intervention that embodies the best practices of transition models described in the chapter two literature review. In addition, this study will examine the theoretical validity of self-determination by exploring its relationship to self-reported quality of life, and its relationship to self-reported career and life goals. The overall aim of this study is to explore the relationship between self-determination and various transition outcomes for students participating in a “best practices” multi-site transition intervention. Specifically, the research questions are:

1. Are there differences in self-determination and quality of life based on demographic and disability characteristics for students participating in a promising practices transition intervention?
2. Does self-determination predict productive post-secondary school engagement (either working or participating in post-secondary education) for students participating in a best practices transition intervention?
3. What is the relationship between self-determination and self-reported quality of life for students participating in a promising practices transition intervention?
4. What is the relationship between self-determination and students’ self-reported life or career goal?

There are three contributions that this study makes to the existing literature. One is to see if self-determination is a significant predictor of post-secondary outcomes net of participation in a best practices transition intervention. The second is to explore the construct validity of self-determination by investigating its relationship to self-reported

career or life goals. As one of the major obstacles to career success for youth with disabilities is the inability to articulate a career goal, (Kellems & Morningstar, 2010; Morningstar & Kleinhammer-Tramill, 1999; Savickas, 1990), exploring the relationship between these psychological constructs may assist in the development of appropriate strategies. The third contribution is that it extends the investigation of the relationship of SD to student outcomes beyond youth with intellectual disabilities and severe emotional disabilities to a more diverse disability group.

Need for the Study

Research has consistently highlighted the importance of higher self-determination in post-school success for students with disabilities. This study attempted to corroborate those results for a group of students with disabilities participating in a promising practices transition intervention. Further, this study extended the current research by exploring relationships between self-determination and quality of life based on disability and ethnicity, an area in which there is little research. Additionally, relationships between self-determination and students' ability to envision a career or life goal/future was explored, which is another area in which research is sparse.

Chapter Summary

This chapter introduced the literature on the role of self-determination in transition for students with disabilities, introduced the need for a study on (a) the predictive ability of self-determination for a sample of students participating in a promising practices transition intervention (b) the relationship between self-determination and student engagement, and (c) the relationship between self-determination and student ability to envision a life/career goal or future and introduced Wehmeyer's self-

determination construct as the theoretical framework for this study. Further, the research questions to be explored were introduced.

Definition of Terms

Disability. The Individuals with Disabilities Education Improvement Act of 2004 defines a “child with a disability” as:

- (i) [a child] with mental retardation, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance (referred to in this title as ‘emotional disturbance’), orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities; and
- (ii) who, by reason thereof, needs special education and related services.

For the purpose of this paper, a person with a disability will refer to any participant of the MSTC program who had an Individualized Education Plan (IEP) or 504 plan as defined by and required by the IDEIA of 2004.

Transition. The Individuals with Disabilities Education Improvement Act (IDEIA) 2004 defines transition as a set of coordinated activities that strives to prepare and transition students seamlessly to life after high school. According to IDEIA a transition plan should begin no later than on the first IEP when the child turns 16 years of age. The IEP must include “appropriate measurable postsecondary goals based upon age-appropriate transition assessments related to training, education, employment, and, where appropriate, independent living skills; and transition services (including courses of study) needed to assist the child in reaching those goals (U.S. Department of Education, 2004).”

Self-Determination. Wehmeyer, 2004, defines self-determination as “the right and capacity of individuals to exert control over and direct their lives. Because the theoretical construct of this study is based on Wehmeyer’s self-determination construct, this definition will be used for the purposes of this paper.

Positive Student Engagement. For the purpose of this study, positive post-secondary outcomes will refer to students who were employed in a paid employment setting post high school or went on to post secondary education after high school.

Quality of Life. Quality of Life is defined by the World Health Organization as:

The individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. It is a broad-ranging concept affected in a complex way by the person’s physical health, psychological state, level of independence, social relationships, and their relationship to salient features in their environment (World Health Organization, 1997).

Promising Practices Transition Intervention. For the purposes of this study, a promising practices intervention will refer to an intervention which includes the five components of the Guideposts for Success for Transition developed by the U.S. Office of Disability Employment Policy (described in detail in chapter 3). These five guideposts include school based preparatory experiences, career preparation and work based learning experiences, youth development and leadership, connecting activities, and family involvement and supports.

Chapter II: Literature Review

This chapter is a review of the literature on transition from high school for students with disabilities and self-determination as it applies to these students. The review of this literature will provide the context for the present study on identifying the predictive relationship between self-determination and student engagement, the relationship between self-determination and quality of life, and the relationship between self-determination and envisioning a career/life future or goal.

A comprehensive review of the literature included searching the following databases: EBSCO HOST, ERIC, Academic Search Premier, PsycINFO, Education Research Complete, and ProQuest. The search terms used included students with disabilities and transition, students with disabilities and self-determination, students with disability and quality of life, students with disabilities and envisioning a career or life goal, students with disabilities and employment outcomes, and students with disabilities and postsecondary outcomes. Several websites were also used to collect information for this study including U.S. Census Bureau, U.S. Department of Education, U.S. Department of Justice, and the National Longitudinal Transition Study-2.

Transition for Students with Disabilities

Transition refers to a set of activities meant to prepare a student with a disability to move successfully from high school to either college or career (U.S. Department of Education, 2006). To understand the importance of transition for students with disabilities, it is first imperative to understand disability and the legislation guiding transition processes.

Disability. The term disability encompasses an enormous range of types of impairments, each one of which exists on a spectrum of severity. There have been many different definitions of disability developed over the decades. The definition of disability has evolved from a purely medical perspective, where the problem was located solely in the individual, to one that defines disability as an interaction between person and environment (Szymanski & Parker, 2009).

More modern definitions of disability focus on the “problem” as being in the environment and not in the individual. The “fix” to disability in this model is to remove barriers in the social and physical environment, and provide sufficient accommodations or supports to mitigate the impact of impairments on functioning (Szymanski & Vancollins, 2003). While there is no universally accepted definition of disability, the Social/Environmental theory has been used as the basis of current laws regarding the rights of people with disabilities.

Legislation Regarding Disability and Transition. The 1973 the Rehabilitation Act made disability discrimination by businesses that receive federal funds illegal (U.S. Department of Education, 2006). However, this law did not extend to the private business sector, or to those private enterprises that did not receive any federal funding. It was not until the Americans with Disabilities Act (ADA) of 1990 was enacted that non-discrimination in employment was extended to public and private employers with more than 15 employees. The ADA prohibits discrimination based on disability and requires businesses to provide reasonable accommodations for otherwise qualified individuals with disabilities in order to enable them to perform essential functions of a job (U.S. Department of Justice, 2009).

The purpose of the ADA was to provide a federal mandate to end discrimination against people with disabilities and it includes five titles. Title I addresses employment and prohibits discrimination in hiring of individuals with disabilities based on their ability status (U.S. Department of Justice, 2009). According to Title I, employers with 15 or more employees cannot discriminate against qualified individuals based on their ability status and must provide reasonable accommodations to allow such individuals to perform the essential functions of a job (U.S. Department of Justice). Reasonable accommodations are modifications in workplace, schedule, or job description that do not cause undue financial hardship to the employer (U.S. Department of Justice). Title II requires state and local governments to make all public services, activities, and transportation accessible for people with disabilities (U.S. Department of Justice). For example, this could mean providing sign language interpreters or Braille programs at public events or providing wheel chair lifts on buses, (U.S. Department of Justice). Title

III of the ADA requires that all businesses and public agencies are accessible for people with disabilities. For example, businesses must provide a wheelchair accessible entrance to buildings, Braille on all signs for elevators and restrooms, and provide accessible restrooms. Title IV of the ADA requires all telecommunications companies to provide relay services for individuals with disabilities, specifically for those who are deaf or have hearing impairments (U.S. Department of Justice). Title V covers miscellaneous items such as accessibility to wilderness areas and prohibiting the exclusion of persons with disabilities from receiving medical insurance and medical services (U.S. Department of Justice).

At about the same time the ADA was being passed, the Individuals with Disabilities Education Act (IDEA), was introduced to address the educational and transition needs of students with disabilities. Prior to the IDEA the only legislation that existed to address the needs of students with disabilities was the Education for All Handicapped Children Act of 1975 which mandated that free and accessible public education be provided to all students with disabilities (U.S. Department of Education, 2006). This act was reauthorized several times, and in 2004 was renamed the Individuals with Disabilities Education Improvement Act (IDEIA). According to the IDEIA of 2004, students with disabilities are to be educated in the “least restrictive environment” possible, and transition planning is required to begin for students with disabilities when they are 16 years of age (U.S. Department of Education). The transition requirement of IDEIA states that transition is:

A coordinated set of activities for a student, designed within an outcome oriented process, which promotes movement from school to post-school

activities, including postsecondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation.

The coordinated set of activities shall 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. (20

U.S.C. § 1401 [a][19])

This was the first law that mandated transition planning and services, requiring that each IEP include transition goals, and that students were to provide input into their IEPs and transition goals. Moreover, the law required that transition goals be based on the needs and interests of the student.

There are two ways children are generally identified as needing special education and academic accommodations during the K -12 years. Parents may request the school evaluate their child for a disability if they see their child struggling (U.S. Department of Education, 2006). Alternatively, school systems can identify children who are struggling academically and evaluate them to determine if a disability exists (U.S. Department of Education). Students who are identified by the school system as in need of evaluation are usually identified by teachers through observation or test results (U.S. Department of Education). Parents must consent to student evaluations and be informed of the process (U.S. Department of Education). The evaluation process includes using multiple assessments to determine the intellectual, developmental, and academic needs of the

student. Parental interviews and input are also an important part of the evaluation process. Additionally, the evaluation team must consist of at least one regular education teacher as well as a specialist who is qualified to administer diagnostic assessments, such as a school psychologist or speech therapist (U.S. Department of Education). These issues are important to understanding the context of transition planning.

Transition planning was mandated in IDEIA because of the poor postsecondary outcomes of youth with disabilities described in chapter one. Despite this goal, the statistics show youth with disabilities are still not achieving successful outcomes at the same rate as their peers without disabilities. The Bureau of Labor Statistics (2012) reports that young adults with disabilities have a higher unemployment rate (23%) than their peers without disabilities (13%). In addition, young adults with disabilities earn less than half the hourly wage (\$10.61 per hour) of their peers without disabilities (\$23.19 per hour). Job retention is also a major issue for young adults with disabilities. Newman, et al., (2009) analyzed data from the National Longitudinal Transition Study-2 and found that as of 2009 only 66% of young adults with disabilities who achieved employment after high school were still employed eight years post high school.

Barriers and Facilitators to Transition Success. There are many reasons students with disabilities are less likely to achieve successful post high school outcomes than their peers without disabilities. Several studies have indicated inadequate academic preparation as a major barrier to successful post secondary outcomes (Benz & Halpern, 1993; Wagner & Blackorby, 1996; Wittenburg & Loprest, 2007). Additionally, inconsistent transition planning during high school (Kochhar-Bryant & Greene, 2009; Mason, Field, & Sawilowsky 2004), limited participation in vocational education and career development activities (Benz & Halpern; Wagner & Blackorby, 1996; Wittenburg & Loprest, 2007), and no connections with outside resources and agencies after high school (Certo, Luecking, Brown, Courey, & Belanger, 2008) have also been identified as significant barriers to successful post high school outcomes for students with disabilities.

Some of these barriers to successful post school outcomes persist even after the student exits school. For example, once students with disabilities reach age 22, they are no longer eligible for academic resources and supports mandated under IDEIA. In other words, young adults with disabilities who seek accommodations at the postsecondary level, for example, must apply for and be determined eligible to receive these services at the college or university. A similar burden falls on young adults who request accommodations in the workplace. Gil (2007) indicated that once students reach college, they must be able to advocate for themselves, recommending that students know their responsibilities in obtaining accommodations for a disability in post secondary education. In employment settings, students will need to learn how to disclose their disability in order to request reasonable accommodations under the Americans with Disabilities Act (ADA).

Although there are many barriers to postsecondary outcomes for students with disabilities, there are also many factors that facilitate positive postsecondary outcomes for students with disabilities. These factors fall into three distinct categories which include static factors, acquired skills, and external supports and experiences. Static factors are those that cannot be changed or manipulated and include variables such as race/ethnicity, disability type and gender. Acquired skills include those that can be taught such as social skills, communication skills, and self-determination. Finally, external supports and experiences refer to the things in the environment that facilitate positive post secondary outcomes and include services such as vocational education, transition planning, parental involvement, paid work experiences, and participation in work study programs.

Static factors that facilitate postsecondary success for students with disabilities are student characteristics that are linked to successful outcomes but cannot be changed. For example, youth with disabilities who are White or Asian and male are more likely to have a successful postsecondary outcomes (Entwisle, Alexander, & Olson, 2000; Fabian, 2007; Gardecki, 2001). Furthermore, disability type and severity of disability also impact postsecondary outcomes. Nota, et al. (2007) indicated that students with severe intellectual disabilities were less likely to have high levels of self-determination and positive postsecondary outcome compared to students with less severe disabilities.

Unlike the static factors which cannot be manipulated, there are many skills associated with positive post secondary outcomes that can be taught. Communication and social skills are important factors in postsecondary success for students with disabilities. Salmon and Kinnealey, (2007), in a grounded theory study of nine student parent dyads who described their transition from high school experiences indicated that

being able to communicate effectively was a facilitator to a positive postsecondary outcome. Similarly, Test and Cease-Cook (2012) identified the acquisition of social skills as a significant predictor of postsecondary success.

In addition to communication and social skills, self-determined behavior is an important factor in postsecondary success. Self-determination has been indicated in research as a significant predictor of postsecondary success and includes measurements of constructs such as decision making, problem solving, goal setting, self-regulation, self-advocacy, self-awareness, and self-efficacy (Test & Cease-Cook, 2012; Nota et al., 2011). Self-determination will be discussed in more detail in the next section.

Frequently embodied in self-determination theory is being able to identify a career goal. Students who are self-determined are more aware of their interests, abilities, and goals and are more likely to have life and career goals (Benz, Lindstrom & Yovanoff, 2000; Colley & Jamision, 1998; Entwisle, Alexander, & Olson, 2000; Fabian, 2007; Fabian, Lent, & Willis, 1998; Gardecki, 2001; Hasnain & Balcazar, 2009; Karpur, Clark, Caproni & Sterner, 2005).

Another skill set associated with positive postsecondary outcomes are career skills. Students with disabilities often do not know what career possibilities are available in their community or the skills associated with obtaining work (Wehmeyer, 2003). Including vocational education and career awareness activities in the curriculum for students with disabilities to increase things such as knowledge of what kinds of jobs are available, information on resume writing, interviewing skills, and work habits are pivotal to postsecondary success (El Hessen, 2002; Rehabilitation Services Administration, 1995; Test & Cease-Cook, 2012). It is also important for students with disabilities to

learn some basic skills such as how to use public transportation, mobility training and daily living skills training to be successful in employment or postsecondary settings (Test & Cease-Cook).

While static factors cannot be changed and skills can be taught, there is a third category of facilitative factors to postsecondary success that are present in the environment that may need to be enhanced or expanded. First, students with disabilities who are active in transition planning are more likely to have higher levels of self-determination and are more likely to experience positive postsecondary outcomes (Held, Thoma, & Thomas, 2004; Test, Mason, Hughes, Konrad, Neale, & Wood, 2004; Wehmeyer Shogren, Palmer, Williams-Diehm, Little & Boulton, 2012).

In addition to participation in IEP meetings, prior work experiences have been indicated as significant factors in postsecondary outcomes. Colley and Jamison (1998), and Fabian, (2007) found students with disabilities who had prior work experience during high school were more likely to be employed post high school. Similarly, Test and Cease-Cook (2012) found paid employment experiences and work study experiences were predictive of postsecondary success for students with disabilities.

In addition to work experiences, having a strong support system is necessary for postsecondary success. Strong support from family and friends is essential for postsecondary success (Test & Cease-Cook, 2012). Family support particularly must include participation in the IEP and transition planning process (Held, Thoma, and Thomas, 2004). Moreover, it is also essential to have the support of teachers and others in the educational setting (Salmon & Kinnealey, 2007). Held, Thoma, and Thomas point out that no matter how involved a student wants to be in the transition planning process,

if the teachers and school staff are not supportive of the student's preferences and interests, the student may not feel successful and may encounter less positive outcomes than students who are supported by their school team.

Related to having the support of educators, is the academic track students are pursuing during high school. Research has indicated that students who are on an academic track preparing for transition to college or work are more likely to achieve successful transition to one of those outcomes (Test & Cease-Cook, 2012). Moreover, students who are included in a general education classroom also have more positive outcomes (Test & Cease-Cook). Additional research has indicated that students who are on track to earn a diploma rather than a certificate of completion are also more likely to achieve success in transition (Sacks & Kern, 2008). Participation in occupational classes in high school is another factor related to academics that have been found to be a predictive indicator of postsecondary success.

Importance of Self-Determination as a Best Practice in Transition. As previously mentioned, self-determination has been correlated with positive postsecondary outcomes (Held, Thoma, & Thomas, 2004; Nota et al., 2011; Test & Cease-Cook, 2012; Test, et al., 2004; Wehmeyer, 1999; Wehmeyer et al., 2012). Including self-determination training in transition planning has been identified as a best practice in transition of students with disabilities (Wehmeyer, Palmer, Soukup, Garner, & Lawrence, 2007a). IDEIA has embraced the importance of self-determination in transition planning by requiring schools to include students in the planning process (U.S. Department of Education, 2006).

Although there are different approaches to self-determination training for students, most focus on enhancing specific personal aspects, such as self-advocacy, self-

efficacy, decision making skills, and goal setting activities, that will allow students to make decisions for themselves. Wehmeyer (1999; 2004) posits the main role of educators is to promote growth and development and to provide opportunities and support to encourage the development of self-determined behavior. The next section will define self-determination and discuss how self-determination came to be recognized as a key factor in transition success.

Self-Determination

Definition of Self-Determination. In 1988, Ward defined self-determination as “the attitudes which lead people to define goals for themselves and the ability to take the initiative to achieve those goals”. As indicated earlier, Wehmeyer (1997), defined self-determination as “acting as the primary causal agent in one’s life and making choices and decisions regarding one’s quality of life free from undue external influences or interference.” Somewhat later, he (1999) delineated four essential characteristics, or latent constructs, that comprise self-determination. The four latent constructs are behavioral autonomy, self-regulation, psychological empowerment, and self-realization. Definitions for the four latent constructs are as follows:

- (1) Behavioral Autonomy-the individual acts in a way in which they are responsible for their own self-care and direction
- (2) Self-Regulation-the individual is able to examine the environment and make decisions about how to act, evaluate the outcome of their action and change plans as necessary
- (3) Psychological Empowerment-individuals believe in their ability to act in a self-determined way

(4) Self-Realization-individuals know their strengths and limitation and behave accordingly

Wehmeyer (1999) posited that some level of each of these latent constructs must be present for behavior to be considered self-determined. Acquiring these skills allows people to make decisions about their own lives and act based on their own preferences and abilities. The process of acquiring the skills that comprise self-determined behavior is considered a life-long process, and one that evolves as an interaction between the person and the larger social environment (Ankeny & Lehmann, 2010; Wehmeyer, 2011). Similarly, Wehmeyer (2011) posits the development of self-determination begins in childhood and evolves over the lifespan. Held, Thoma, and Thomas (2004) also indicate that self-determination changes over time and requires environmental supports, such as the support of family, friends, teachers, and other school staff.

Significance of Self-Determination in Transition. The emergence of self-determination as a key factor promoting successful transition developed in response to disability literature and legislation, specifically in response to federal initiatives directed at improving the poor postsecondary outcomes of students with disabilities (Stilington, Clark & Kolstoe, 2000).

In 1989, the United States Department of Education (DOE) sponsored a conference to examine how to improve post school outcomes for children and youth with disabilities (Ward, 1999). One result of this conference, was the U.S. DOE funding 10 demonstration studies identifying best practices in improving transition services. One of the key findings of these studies was the importance of student involvement, goal setting and decision making in postsecondary success for students with disabilities. This was the

point that self-determination became a main focus for researchers in determining factors that lead to successful transition for students with disabilities. It became important at this time to thoroughly research and understand the role self-determination plays in student success. The following section will review the literature that offers empirical support for self-determination in producing positive postsecondary outcomes.

Empirical Support for Self-Determination. Wehmeyer, Palmer, Soukup, Garner, & Lawrence (2007), in a study of 180 students with disabilities examined the contribution of self-determination to transition planning knowledge and skills and concluded that self-regulation, psychological empowerment, and self-realization were predictive of participation in IEP meetings. Similarly, Angel, Stoner, and Fulk (2010) conducted interviews of twelve adults with physical disabilities to capture their experiences of transition from high school and self-awareness, which is one of the latent constructs of self-determined behavior in Wehmeyer's (1999) theoretical model, was indicated as a major factor in successful transition to either employment or postsecondary education. Further, Nota et al. (2011), conducted a study of 1400 Italian adolescents to determine the differences in postsecondary outcomes for students with disabilities based on self-determination scores and found students with higher levels of self-determination were more likely to achieve more positive adult outcomes including better employment, independent living and community inclusion. The Longitudinal Study of Vocational Rehabilitation Program (LSVRP), which collected outcomes of adult clients of public state vocational rehabilitation programs nationwide, indicated that higher levels of self-determination were predictive of employment (Capella-McDonnall & Crudden, 2009). Test et al. (2004) in a study of 493 students participating in "Whose Future is it Anyway?", which is an intervention promoting the development of self-determination in students with disabilities, indicated students who participated in this program were more likely to have higher levels of self-determination and better postsecondary outcomes.

Carter and Lunsford (2005) in a theoretical article suggested that self-determination was one of four main factors related to successful postsecondary outcomes

for students with disabilities. Benitez, Lattimore, and Wehmeyer (2005) conducted a study on a proposed career theory that included teaching students self-determination skills and found the five students who participated had higher levels of self-determination skills and positive postsecondary outcomes. The research previously discussed indicates the importance of self-determination and its role in facilitating positive post secondary outcomes for students with disabilities.

Self-Determination and Quality of Life. In addition to affecting postsecondary outcomes, self-determination has been linked to better perceptions of quality of life for individuals with disabilities. As mentioned in chapter one, quality of life refers to a person's perception of the overall goodness of his or her life (World Health Organization, 2007). Odaci, Kalkan, and Karasu (2009) define quality of life as the degree of well-being experienced by an individual.

Quality of life began to emerge in the 1980s as a desirable outcome for students with intellectual disabilities (Turnbull III, Turnbull, Wehmeyer, & Park, 2003). During this time, educational outcomes were becoming the focus of government regulating agencies and quality of life emerged as a way of assessing outcomes for students with disabilities in response to IDEIA mandates (Turnbull, et al.). One of the goals of IDEIA is independent living and as it is defined in IDEIA, individuals are able to make decisions about their own life and therefore, can dictate their own quality of life (Wehmeyer & Schalock, 2001). Researchers and practitioners thought that quality of life represented the broadest desirable outcome of programs and services for people with disabilities, and a variety of scales were proposed to measure it (McIntyre, Kraemer, Blacher, & Simmerman, 2004; Turnbull, et al.; Wehmeyer & Schalock, 2001).

One result of this heightened attention was the finding that students with disabilities often report lower levels of quality of life than their peers without disabilities. Sacks and Kern (2008) examined quality of life differences between students with emotional and behavioral disabilities and their peers without disabilities on four domains. Those domains were general quality of life, self, relationships, and environment. Students with disabilities in this study consistently reported less satisfaction with their life in all four domains than their peers without disabilities (Sacks & Kern). Similarly, Ghaedi, Tavoli, Bakhtiari, Melyani, and Sahragard (2010) conducted a quality of life study on Iranian college students with social phobia and found they reported lower satisfaction with quality of life than their peers without social phobia, particularly in the domains of general health, vitality, social functioning, emotional functioning, and mental health. In addition, Wilgosh, Sobsey, and Cey (2008) found in their study of eight students with disabilities that relationships often suffer or are severed after diagnosis of a disability, which can lead to lower quality of life. Moreover, Kraemer, McIntyre & Blacher (2003) in their study of 188 caregivers with transition age youth with intellectual disabilities found lower levels of quality of life for students who did not have strong support systems such as family and friends. Results from this same study also indicated that individuals working in sheltered workshops or who were unemployed also reported lower quality of life.

Despite the negative effects of disability on quality of life, there are protective factors that increase quality of life for students with disabilities. Mayton (2005) reported in a case study of a student with Asperger's disorder that placement in an inclusive education environment increased the student's perceived quality of life. Research has

indicated that having strong family relationships, being involved in the community, having careers or career opportunities, and employment services are other supportive factors that can increase perceptions of quality of life for students with disabilities (Kraemer, McIntyre, & Blacher; Svraka, Loga, & Brown, 2011; Wilgosh, Sobsey & Cey, 2008).

The Wilgosh et al., study previously discussed also indicated that self-determination was a key factor in having a positive outlook on life. Similarly, Wehmeyer (2005) in his study of 182 adults with mild intellectual disabilities found level of self-determination was predictive of membership in a group that reported a higher quality of life. Further, Wehmeyer (2005) posits that self-determination is the core domain of perceived quality of life. In another study, Nota, et al. (2011) found significant correlations between self-determination and quality of life in 1400 adolescents with disabilities. These results suggest that the relationship between self-determination and quality of life has been investigated in several studies, and that there is a strong positive correlation between them.

Self-Determination and Envisioning a Life or Career Future or Goal. Studies have suggested that many students with disabilities have difficulty articulating a career goal (Kellems & Morningstar, 2010; Kocchar-Bryant & Bassett, 2002). Lack of a career goal or the capacity to envision a vocational future is, in part, due to many students with disabilities not being exposed to career or life experiences that will enable them to envision a future for themselves (Held, Thoma, & Thomas, 2004; Rehabilitation Services Administration, 1995). This occurs largely when families attempt to do too much for students and, as a result, end up sheltering them from experiences necessary to allow them to envision a future based on their preferences and abilities (Denney & Daviso, 2012). In some cases, “helicopter parenting” or not allowing students to learn to advocate for themselves and assert their preferences can also lead to a suppression of the ability for these students to envision a future (Korbel, McGuire, Banerjee, & Saunders, 2011).

The research on factors associated with being able to envision or articulate future goals for students with disabilities is sparse, however, at least one study focused on how to improve it. Radcliffe and Bos (2011) conducted a seven year longitudinal study of 50 students starting in sixth grade. They found that students who developed a strong goal-directed mentoring relationship with their teachers were more likely to be able to envision clear life and career goals for their future. Similarly, Jones (2010) in her report for the Virginia Department of Education indicates that for students to be successful post high school, career counseling should begin in middle school. Regrettably, this does not necessarily happen for general education children this early much less for students with disabilities.

Savickas (1990) introduced a new way of looking at career counseling that focuses on developing an individual's subjective career, which consists of the way a person thinks about their vocational past, present and future. He posits that individuals must learn how their society and culture define the concept of time. Societies define time in ways to structure and coordinate existence (Savickas). He posits that those who are not thinking about their vocational future are less likely to be successful because they are not able to see and label their future. Therefore, career interventions for people with disabilities should focus on a future orientation. During this process, individuals should focus on labeling the events and aspirations for the future. Emphasizing a future orientation provides people with disabilities the opportunity to envision and act on their dreams, and is consistent with the empowerment and self-realization constructs of self-determination.

One factor that does recur in the literature on developing life and career goals in adolescents is self-determination. Goal driven interventions that increase self-efficacy, self-advocacy, and self-determination have been indicated as necessary for adolescents to be able to envision their futures (Eryilmaz, 2011; Radcliffe & Bos, 2011; Rehabilitation Services Administration, 1995, Savickas, 1990). Transition success and goal setting is dependent on developing work related skills, being exposed to different life and career experiences and being encouraged to participate in the community (Rehabilitation Services Administration), all activities which facilitate the development of self-determination.

Chapter Summary

This chapter summarized the literature on the importance of self-determination in achieving successful postsecondary outcomes for students with disabilities. In addition, facilitators and barriers to the positive post secondary outcomes were reviewed. One of the most significant factors discussed in the literature for positive transition outcomes is self-determination. Therefore, the purpose of the current study is to replicate the findings on factors related to self-determination. Specifically, this study will attempt to replicate the ability of level of self-determination to predict three specific variables, postsecondary outcomes, envisioning a career or life goal, and quality of life for a sample of students who participated in a similar transition program.

Chapter III: Methodology

Background

The Maryland Division of Rehabilitation Services (DORS) received a grant from the U.S. Department of Education in 2007 to develop and implement a multi-site demonstration transition program. In conjunction with TransCen, Inc., DORS developed a best practices transition program called the Maryland Seamless Transition Collaborative (MSTC). MSTC is primarily funded through the DOE grant to improve transition outcomes for high school special education students in Maryland (Maryland Seamless Transition Collaborative, 2012). The MSTC program focuses on enhancing student career decision making, building links to appropriate community resources, and increasing student awareness of career opportunities and resources. These objectives are met through activities such as paid job internships, job shadowing, career planning and development activities, family inclusion, and student empowerment.

The MSTC model of service delivery is based on the Guideposts for Success for Transition, developed by the Office of Disability Employment Policy (ODEP) in collaboration with the National Collaborative for Workforce Disability for Youth (National Collaborative on Workforce and Disability/Youth (NCWDY, 2005). The five guideposts were based on an extensive research review, examination of demonstration projects, and synthesis of best practices in this area (NCWDY). The five guideposts are: (1) School based preparatory experiences, (2) Career Preparation and Work-Based Learning Experiences, (3) Youth Development and Leadership, (4) Connecting Activities, and (5) Family Involvement and Supports. These guideposts are designed to

benefit all students, with additional resources provided to ensure post school success for students with disabilities.

Students participating in MSTC were selected by each participating school district based on the followed criteria: 1) eligibility for vocational rehabilitation services (DORS); 2) had an IEP or a 504 plan; 3) needed transition services in order to successfully transition from school to adult life; and 4) consented to participate.

Eleven of the 24 school districts in the state of Maryland were selected to participate in the MSTC program. Initial site selection was made by DORS in conjunction with the Maryland State Department of Education based on the school districts written plan for implementation, a memorandum of understanding signed by the superintendent, and agreement to sustain it after federal funding was not available (generally after two years). Sites were selected and rolled out on a staggered basis starting with one site in 2007. Each selected site received two years of funding for start-up, planning and implementation. It is important to note that each site was able to present a unique implementation plan for the MSTC intervention, as long as they included the five key elements: 1) work-based experiences and job development, 2) youth empowerment and self-determination, 3) family supports, 4) connecting activities and system linkages, and 5) social and health services.

In order to assure appropriate planning, implementation, and monitoring, each site was required to establish a local transition coordinating MSTC team, consisting at a minimum of: school-based transition and special education staff, DORS counselor and local supervisor, family members, post-secondary education representative, adult service representatives, and representatives from the local business community. These teams

were tasked with planning, initiating, implementing, and devising strategies for sustaining the MSTC intervention over time. In order to assist them with this task, TransCen assigned at least one expert consultant to each team to provide training, support, and evaluation. Teams also benefitted from peer learning and support through a variety of state-wide MSTC team conferences, workshops and leadership events throughout the five years of the grant.

Research Questions

The research questions that guided this study are:

- 1) Are there differences in self-determination and quality of life based on ethnicity and disability type for students participating in a promising practices transition intervention?
- 2) Does self-determination predict productive post-secondary school engagement (either working or participating in post-secondary education) for students participating in a best practices transition intervention?
- 3) What is the relationship between self-determination and self-reported quality of life for students participating in a promising practices transition intervention?
- 4) What is the relationship between self-determination and students' self-reported life or career goal?

Participants

The participants for this study are the 342 students who were enrolled in MSTC from October 2008-November 2011. Students were either self-nominated or nominated

by parents to participate in the MSTC intervention. Table 1 shows the breakdown of number of students by school district.

Although demographic and background data is available for all 342 of the MSTC student participants (see Table 2 for a breakdown of enrolled participant characteristics), only 87 (25%) of the students completed individual staff administered interviews that included assessment of self-determination, career goals, and quality of life. While the MSTC team initially anticipated conducting interviews with at least 50% of enrolled students, scheduling and other difficulties, such as inaccurate contact information, attrition, and student relocation reduced the eventual sample size.

Table 1

Students Enrolled in MSTC by School District (N=342)

<i>School District</i>	<i>Number of Students (n=342)</i>
District 1	25
District 2	40
District 3	10
District 4	12
District 5	74
District 6	67
District 7	22
District 8	6
District 9	24
District 10	40

District 11	21
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Table 2

Demographics of Students Enrolled in MSTC (N=342)

Item	n=	%
<i>Ethnicity</i>		
Asian	2	0.6%
African American/Black	147	43%
Hispanic	2	0.6%
Multiracial	2	0.6%
Not Reported	1	0.3%
Other	1	0.3%
White	187	55%
<i>Gender</i>		
Male	240	70%
Female	102	30%
<i>Primary Disability</i>		
Acquired Brain Injury	4	1%
ADHD/ADD	13	4%
Autism	58	17%
Cerebral Palsy	1	0.3%
Cognitive/Intellectual Disabilities	86	25%
Deaf/Hearing Impairments	3	0.9%

Mobility/Orthopedic/Physical	3	0.9%
Multiple Disabilities	4	1%
Other	1	0.3%
Other Health Impairments	33	9.6%
Psychiatric/Serious Emotional Disturbance	65	18.7%
Specific Learning Disability	57	16.7%
Speech/Language Impairment	12	3.5%

The study sample consisted of 69 males and 18 females, ranging in age from 14-20, with the average age of 16.8. There were a range of disabilities represented in this sample including acquired brain injury, ADHD/ADD, autism, cognitive/intellectual disability, deaf/hearing impairments, health impairments, psychiatric/serious emotional disturbances, specific learning disabilities, speech impairments, and multiple disabilities. See Table 3 for a specific breakdown of the demographics of the 87 participants.

Table 3

Demographics of Participants (N=87)

Item	N=	%
<i>Age</i>		
14	1	1%
15	13	14.9%
16	30	35.6%
17	18	20.7%
18	11	12.6%

19	9	10.3%
20	5	5.7%
<i>Gender</i>		
Female	18	21%
Male	69	79%
<i>Race/Ethnicity</i>		
Asian	1	1%
African American/Black	36	41%
Hispanic	1	1%
Multiracial	1	1%
White	48	55%
<i>Primary Disability</i>		
Acquired Brain Injury	1	1%
ADHD/ADD	2	2%
Autism	10	11%
Cognitive/Intellectual Disabilities	21	23%
Deaf/Hearing Impairments	1	1%
Multiple Disabilities	4	5%
Other	1	1%
Other Health Impairments	5	6%
Psychiatric/Serious Emotional Disturbance	22	24%
Specific Learning Disability	17	19%
Speech/Language Impairment	3	3%

Procedures

Permission to conduct this study was previously obtained from the University of Maryland Institutional Review Board (IRB) when the research grant was originally obtained. After IRB approval was granted, researchers at the University of Maryland joined the MSTC research team in collecting data. For the purposes of this study, two of the data collection instruments used by MSTC staff are relevant. One is a demographic and service tracking information form (see Appendix A) which is updated quarterly and includes detailed information as to the types of MSTC activities students participated in during the quarter, as well as outcome information, such as whether students exited school, diploma status, what job experiences the student participated in during school, what other services the student is linked with, and post-secondary outcomes for students who have exited school. The second form used was a structured interview and was one of three interviews administered to MSTC participants: students, parents and teachers. The 45 minute staff administered structured interview elicits information on the following: (see Appendix B) (a) transition planning including information on the student's interests, (b) employment including information on jobs the student would like to obtain, (c) self-determination, (d) family involvement, (e) transportation, and (f) quality of life.

Instruments

The data for this study is derived from the student demographic and tracking sheet in Appendix A and the student interview in Appendix B. The interview is administered to students on enrollment in MSTC by a MSTC staff member. The instrument includes 76 items and takes about 45 minutes to administer. It taps into three individual domains including: self-determination, career goals, and quality of life. For this study, 18 items

that comprise a self-determination scale score will be used. The 18 items elicit yes/no responses and include items such as “do you ask for help when you need it?”, “do you set long term and short term goals for yourself?”, and “do you work with your teacher on writing goals for your IEP?”

Originally, the items on the self-determination scale included in the MSTC Student Interview guide were organized into categories by a MSTC research team member. Those categories were choice, goal-setting, self-advocacy, and self-management. For the purposes of this study, each item was reviewed by the research team and a content analysis was conducted. The 18 items used for this study were re-categorized based on Wehmeyer’s self-determination construct. Items fit into three of Wehmeyer’s latent constructs including self-regulation, self-realization and psychological empowerment. A complete list of the questions and categories they were placed in is reported in chapter four.

MSTC Student Interview. Two of the scales included on the MSTC student interview will be used for the purposes of this study. The first is the self-determination scale. This scale (See Appendix B) includes 18 items designed to measure self-determination by asking yes/no questions based on four latent constructs of self-determination re-categorized into Psychological Empowerment, Self-Regulation, and Self-Realization subscales. There were seven items in the Psychological Empowerment scale with a maximum score of seven, Self-Regulation was comprised of six items with a maximum score of six, and the Self-Realization subscale had five items with a maximum score of five.

A Pearson r correlation was conducted on the Self-Determination composite score and each of the three subscales. Self-determination composite score and the Psychological Empowerment scale were significantly correlated, $r(56) = .850$, $p < .001$. Composite score and the Self-Regulation scale was significantly correlated $r(56) = .677$, $p < .001$). Similarly, composite score and the Self-Realization subscale were significantly correlated $r(56) = .826$, $p < .001$. All scales were positively correlated, meaning that as each of the subscale scores increases, composite score also increases. Appendix C contains the correlation matrix for Self-Determination composite score and all three subscales.

The second scale that will be used for this study is the Quality of Life Scale (See Appendix B). The Quality of Life Scale consists of 14 items and was based on the Quality of Life Changes Scale (Conley, 2001). Ratings are given on three-point Likert scale (with 1 as Very Bad, 2 as OK, and 3 as Very Good) across the 14 quality of life

indicators. Once the scale was completed, a total score was calculated with higher scores correlating with higher ratings of quality of life.

Data on life goals and career goals was collected from the MSTC student interview. Question 4 on the protocol asks students, “What do you want to do after you leave high school?” and question 5 asks students, “What kind of job would you like to pursue?” This information was entered into SPSS as string variables and then coded into three categories: Clear Goal, Vague Goal, and No Goal. A clear goal was considered when a student identified a specific life goal or career they would like to have after high school. For example, indicating “police officer” as the job they want to pursue would be a clear goal. A vague goal was indicated when a student knew some aspects of a job or life goal they would like. For example, a student might indicate they want to work with children but not know exactly what profession they want to pursue or indicate they want to live alone but not really know how or where they will live. And, the no goal category was used when a student did not answer the question or indicated they did not know what kind of job they might want to pursue or indicated they had no career goal.

Student Data Tracking Sheet. Demographic, disability, service and outcome data is reported by each of the sites and aggregated in the TransCen office (See appendix A). Outcome employment data includes whether the student obtained a job, type of job and wages earned. Outcome data on postsecondary education includes whether the student is enrolled in some type of postsecondary vocational or academic training program. For this study, the outcome variable is defined as productive engagement in postsecondary activities, either employment or postsecondary education. This outcome variable is the same used in follow-up studies based on the National Longitudinal Transition Study (NLTS-2) described in chapter two. Table 4 describes the variables and their source.

Table 4

Research Variables

Variable	Description
<i>Independent Variable</i>	<p><i>Self-determination</i> as identified by a score on a self-determination scale embedded in the individually administered student interview</p> <p><i>Quality of life</i> as identified by a score on a Quality of Life scale embedded in the individually administered student interview.</p> <p>Demographic, disability and other background information derived from the Student Tracking Report aggregated by TransCen staff.</p>
<i>Dependent Variables</i>	<p><i>Student Engagement</i> as measured by either having or not having a job after high school or</p>

enrolling in post secondary education and derived from the Student Tracking Form as reported by MSTC sites.

Career or Life Goal-having a career and/or life goal as indicated by interview responses embedded in the individually administered student interview

Data Analysis

Sample Size. The intended number of participants in the MSTC program at the onset of the project was 400. However, due to delays in implementation, difficulties scheduling interviews, and attrition, there were only 87 students with completed MSTC interviews. Using an online sample size calculator, a sample of 181 was considered adequate for this analysis using a 95% confidence level (Creative Research Systems, 2012).

Unfortunately, there was no way to increase the number of completed interviews at the conclusion of the school year. While this study is under-powered, descriptive analyses can still be used to explore relationships among variables in this study, and to investigate patterns. However, any results will have to be viewed with caution.

Data Analysis Procedures. *Research Question One: Are there differences in self-determination and quality of life based on ethnicity and disability type for students participating in a promising practices transition intervention?*

To answer research question one, a comparison of means was used to test each of the demographic variables to see if any differences exist in Self-Determination composite

score, the self-determination subscales, and Quality of Life score based on disability type and ethnicity.

Research Question Two: Does self-determination predict productive post-secondary school engagement (either working or participating in post-secondary education) for students participating in a best practices transition intervention?

Logistic regression analysis was used to determine the effect of self-determination on student engagement. Because of the small sample size for this study, results from this analysis should be viewed cautiously. Therefore, descriptive statistics were also used to report on the frequencies of student engagement by site, ethnicity, and disability type.

Research Questions Three and Four: (3) What is the relationship between self-determination and self-reported quality of life for students participating in a promising practices transition intervention? And, (4) What is the relationship between self-determination and students' self-reported life or career goal?

Finally, Pearson r correlations and Spearman's rank ordered correlations were used to determine relationships between self-determination score and perceived quality of life and students envisioning a career or life goal or future. Pearson r correlations indicate if relationships exist and the direction of the relationship between self-determination scores and quality of life scores. This type of correlation is most appropriate for question 3 because the variables are on an interval scale. In contrast, only one of the variables for question 4 is on an interval scale (self-determination) and the other variable (envisioning a career or life goal) is ordinal. Therefore, Spearman's rank ordered correlation was the most appropriate statistical test to determine if a relationship

existed between these variables. In addition, descriptive statistics were conducted to create a whole picture of how self-determination relates to envisioning a career or life goal.

See Table 5 for a summary of analytical procedures.

Table 5

Summary of Analytic Procedures

Research Question	Analytic Procedure	Purpose
Question 1	Descriptive Statistics ANOVA	To determine if there are any significant relationships between disability type and ethnicity and self-determination score.
Question 2	Logistic Regression Descriptive Statistics	To report on self-determination as it related to student engagement
Question 3	Pearson r Correlation	To determine magnitude and direction of the relationship between self-determination and perceived quality of life
Question 4	Spearman's Rank Order Correlation	To determine magnitude and direction of the relationship between self-determination and envisioning a career/life goal/future.

Chapter Summary

This chapter reviewed the sampling procedure, a description of the participants, and the analytical procedures that were used to determine predictive relationships.

Chapter IV: Results

This chapter begins with descriptive statistics of each of the subscales of the self-determination scale. Following the description of those subscales is a breakdown of the statistics conducted for each of the research questions. Finally, the chapter ends with a summary of the chapter results.

Self-Determination Subscales

As mentioned in chapter three, a content analysis resulted in recoding of the 18 items on the Self-Determination scale. See Table 6 below for a list of each of the categories, questions in those categories, and the number of yes and no answers from participants.

Table 6

Self-Determination Subscales (N=87)

<i>Wehmeyer's Construct</i>	<i>Questions Included</i>	<i>Yes (%)</i>	<i>No (%=)</i>	<i>Total n=</i>
<i>Psychological Empowerment</i>	21. Do you inform your teacher how you learn best?	48 (55%)	37 (42%)	86
	23. Do you ask for help when you need it?	71 (82%)	13 (15%)	84
	24. Do you tell your teachers/guidance counselors what job(s) you would like to try?	60 (69%)	25 (29%)	85
	32. Do you work with your	53 (61%)	33 (38%)	86

	teacher on writing goals for your IEP?			
	33. Do you go to your annual review meetings for your IEP or 504?	78 (90%)	6 (7%)	84
	35. Are these meetings helpful to you?	64 (74%)	21 (24%)	85
	47. Do you know about your rights as a person with a disability?	8 (9%)	24 (28%)	32
<i>Self-Realization</i>	37. Do you know what disability is?	66 (76%)	16 (18%)	82
	38. Do you know if you have a disability?	66 (76%)	17 (20%)	83
	39. Can you tell me what disability appears on your IEP or 504?	72 (83%)	10 (12%)	82
	40. Does your disability affect your schoolwork and school activities?	68 (78%)	14 (16%)	82
	44. Do you ever talk about your disability to others?	29 (33%)	54 (62%)	83
<i>Self-Regulation</i>	27. Do you create lists for	21 (24%)	66 (76%)	87

yourself to help you achieve what you want?			
28. Do you set long-term and short-term goals for yourself?	54 (62%)	32 (37%)	87
29. Do you regularly keep track of how you are doing on your goals?	44 (51%)	40 (46%)	84
30. Do you keep track of your grades and homework?	64 (74%)	23 (26%)	87
31. Do you have an IEP?	53 (61%)	33 (38%)	86
36. Do you think these meetings allow you to express your thoughts about what kind of job you want to have or training you would like to receive when you leave high school?	61 (70%)	25 (29%)	86

Note: The number of participants for each of the questions may not equal the total (87) due to missing data.

Research Question 1

Are there differences in self-determination and quality of life based on ethnicity and disability type for students participating in a promising practices transition intervention?

For this question, mean comparisons were used to gain an understanding of the overall characteristics of Self-Determination score, Self-Determination score subscales, and Quality of Life by ethnicity and disability type. In addition, further analyses included a description of participants' Self-Determination scores, subscale scores, and Quality of Life by their educational track (diploma bound and certificate bound). Table 7 presents the findings of Self-Determination score and the subscales by ethnicity.

Table 7

Self-Determination Mean Scores by Ethnicity (N=87)

<i>Item</i>	<i>White (n=51)</i>	<i>Non-White (n=36)</i>	<i>p-value</i>
<i>Self-determination</i>			
Composite score	11.83 (3.32)	11.26 (3.77)	0.450
<i>Subscales</i>			
Psychological Empowerment	4.38 (1.44)	4.41 (1.85)	0.920
Self-Regulation	3.54 (1.85)	3.36 (1.16)	0.503
Self-Realization	3.92 (1.56)	3.49 (1.54)	0.201

Note: Range of Scores: Composite Score 1-18, Psychological Empowerment 1-7, Self-Regulation: 1-6, and Self-Realization: 1-5; Standard Deviation is included in parenthesis next to the mean score.

Table 7 presents the mean scores for the total Self-Determination score and for each of the subscales by ethnicity. Ethnicity was collapsed into two categories, White and Non-White, because there were very few participants represented in minority groups besides African-Americans. Therefore, this group consists of 36 people who reported being African American, one person who reported their ethnicity as Hispanic, one person who reported being Asian, and one person who reported their ethnicity as Multi-racial. An ANOVA table was used to determine level of significance. No significant differences were found for level of self-determination or for any of the separate subscales by ethnicity.

Table 8

Self-Determination by Disability Type (N=87)

<i>Item</i>	<i>DD</i> <i>(n=33)</i>	<i>PD &</i> <i>ED</i> <i>(n=22)</i>	<i>LD</i> <i>(n=19)</i>	<i>SD</i> <i>(n=4)</i>	<i>Other</i> <i>(n=9)</i>	<i>p-value</i>
<i>Self-Determination</i>						
Composite	11.55 (3.68)	12.22 (2.88)	10.89 (3.63)	12.75 (2.22)	11.00 (4.72)	0.716
<i>Subscales</i>						
Psych Emp	4.45 (1.58)	4.50 (1.65)	4.11 (1.52)	5.25 (.96)	4.11 (2.20)	0.722
Self-Regulation	3.24 (1.30)	3.95 (1.13)	3.37 (1.16)	4.00 (.82)	3.00 (1.50)	0.167
Self-Realization	3.81 (1.65)	3.77 (1.57)	3.47 (1.47)	3.50 (1.29)	3.89 (1.55)	0.939

Note: DD=Developmental Disabilities, PD & ED= Psychiatric and Emotional Disabilities, LD=Learning Disabilities, SD=Sensory Disabilities; Psych Emp= Psychological Empowerment; Standard Deviation is included in parenthesis under the mean score.

Table 8 presents the mean scores and significance levels for self-determination and it's subscales by disability type. The disability types were: Developmental Disability (DD), Psychiatric and Emotional Disabilities (PD & ED), Learning Disability (LD), Sensory disability (SD) and other, which included physical disabilities, health disorders, and multiple disabilities. No significant differences were found between these variables for this sample. However, it is worth noting that the highest scores were consistently reported for the PD/ED and SD groups.

Table 9

Self-Determination by Educational Track (N=87)

<i>Item</i>	<i>Certificate Bound</i> <i>(n=26)</i>	<i>Diploma Bound</i> <i>(n=61)</i>	<i>p-value</i>
<i>Self-determination</i>			
Composite score	11.96 (3.67)	11.33 (3.44)	0.340
<i>Subscales</i>			
Psych Emp	4.88 (1.50)	4.15 (1.63)	0.094
Self-Regulation	3.03 (1.24)	3.62 (1.22)	0.067
Self-Realization	4.00 (1.62)	3.58 (1.52)	0.374

Note: Standard Deviation is included in parenthesis next to the mean score.

Table 9 shows the mean scores and significance level for self-determination and it's subscales by educational track. Educational track was defined by either being on

track to earn a diploma or a certificate of completion. Although none of the differences were significant, it is worth noting that the certificate bound group scored higher on all scales except for the Self-Regulation scale.

Table 10

Quality of Life by Ethnicity, Disability Type, and Educational Track (N=87)

<i>Item</i>	<i>Quality of Life Score</i>	<i>p-value</i>
<i>Ethnicity</i>		0.842
White (n=48)	33.96 (5.73)	
Non-white (n=39)	34.18 (4.26)	
<i>Disability Type</i>		0.631
DD (n=33)	34.67 (4.23)	
PD & ED (n=22)	32.91 (6.13)	
LD (n=19)	33.58 (5.34)	
SD (n=4)	36.25 (4.03)	
Other (n=9)	34.67 (5.50)	
<i>Educational Track</i>		0.141
Certificate Bound (n=26)	35.69 (4.53)	
Diploma Bound (n=61)	33.33 (5.24)	

Note: Maximum Quality of Life Score is 42; Standard Deviation is included in parenthesis next to the mean score.

Table 10 presents the mean scores for the Quality of Life scale by ethnicity, disability type and educational track. The maximum score for this scale was 42. Again, the results indicate there were no significant differences between groups. However, while the results were not statistically significant, it is interesting to note that the non-white and certificate bound groups scored higher than the white and diploma bound groups, which contradicts the literature (Entwisle, Alexander, & Olson, 2000; Gardecki, 2001).

Research Question 2

Does self-determination predict productive post-secondary school engagement (either working or participating in post-secondary education) for students participating in a best practices transition intervention?

Research question two was focused on productive student engagement defined as either working or enrolling in post-secondary education after high school. Because some of the 87 participants for this study had not exited high school at the time of this study, there were only 58 students with valid data for analysis for this question. This question explored the predictive relationship between self-determination and productive student engagement. Further, descriptive statistics are presented for post school engagement by gender, ethnicity, disability type, educational track, and school district. Then, mean comparisons are presented for the Quality of Life Scale, the Self-Determination Scale, and the subscales of Self-Determination by student engagement. Worthy of note is the fact that three of the students who exited were both employed and enrolled in postsecondary education.

Table 11

Logistic Regression of Competitive Employment by Self-Determination (N=58)

<i>Item</i>	<i>B (S.E.)</i>	<i>Wald</i>	<i>Odds Ratio Exp (B)</i>	<i>p-value</i>
<i>Self-Determination</i>				
Composite	-.157(.249)	0.395	0.855	.530
<i>Subscales</i>				
Psych Emp	.238(.382)	0.389	1.269	.533
Self-Regulation	.057(.567)	0.010	1.059	.919
Self-Realization	.172(.373)	0.211	1.187	.646

Table 11 presents the results of the logistic regression analysis showing the relationship between self-determination score, scores on the self-determination subscales and the likelihood of being competitively employed at the time of exit for this sample. No statistically significant results were indicated but there does appear to be a positive relationship between the three subscales of self-determination and being competitively employed at the time of exit. However, the results indicate that as the composite score increases the likelihood of being competitively employed at the time of exit from high school decreases.

Table 12

Logistic Regression of Enrollment in Postsecondary Education by Self-Determination

(N=58)

<i>Item</i>	<i>B (S.E.)</i>	<i>Wald</i>	<i>Odds Ratio Exp (B)</i>	<i>p-value</i>
<i>Self-Determination</i>				
Composite	.568(.363)	2.450	1.764	.118

<i>Subscales</i>				
Psych Emp	-.745(.612)	1.480	0.475	.224
Self-Regulation	,057(.567)	0.010	1.059	.919
Self-Realization	-.057(.567)	0.211	0.944	.919

Table 12 presents the results of the logistic regression for students' self-determination by the likelihood of enrolling in postsecondary education at the time of exit from high school. The results indicate a positive relationship between Self-Determination Composite score and for the Self-Regulation subscale. While this relationship is not statistically significant, it does still indicate that as the Self-Determination Composite score and the score on the Self-Regulation subscales increases, so does the likelihood of enrolling in postsecondary education. However, the relationships on the Psychological Empowerment and Self-Empowerment subscales were negative, indicating that as scores increase on those scales the likelihood of being enrolled in postsecondary education decreases.

Table 13 presents the descriptive statistics for student engagement by gender, ethnicity and educational track.

Table 13

Student Engagement by Gender, Ethnicity, & Educational Track (N=58)

<i>Item</i>	<i>Employed at Exit</i>	<i>PSE at Exit</i>	<i>Not employed or enrolled in PSE</i>	<i>Total N=</i>
<i>Gender</i>				
Female	5 (31%)	1 (6%)	10 (63%)	16

Male	10 (24%)	9 (21%)	23 (55%)	42
<i>Ethnicity</i>				
White	8 (22%)	5 (14%)	24 (64%)	37
Not White	7 (33%)	5 (24%)	9 (43%)	21
<i>Educational Track</i>				
Certificate Bound	5 (31%)	0	11 (69%)	16
Diploma Bound	10 (24%)	10 (24%)	22 (52%)	42

Table 13 shows student outcomes by gender, ethnicity and educational track. While no significant relationships existed between gender, ethnicity, educational track and student engagement based on chi square analyses, it is interesting to note that the females and white students had more positive outcomes than the non-white and male groups, which contradicts the existing literature indicating better outcomes for students who are white males (Fabian, 2007). Table 14

Student Engagement by Disability Type (N=58)

<i>Disability Type</i>	<i>Employed at Exit</i>	<i>PSE at Exit</i>	<i>Not employed or enrolled in PSE</i>	<i>Total n=</i>
DD	6 (28%)	4 (19%)	11 (52%)	21
PD & ED	3 (20%)	1 (6%)	11 (74%)	15
Learning Disorders	2 (18%)	2 (18%)	7 (74%)	11
Sensory Disabilities	2 (50%)	1 (25%)	1 (25%)	4
Other	2 (29%)	2 (29%)	3 (42%)	7

Table 14 shows student outcomes by disability type. Consistent with literature was the more negative post school outcomes exhibited by the psychiatric/emotional disability group.

Table 15

Student Engagement by School District (N=58)

<i>School District</i>	<i>Employed at Exit</i>	<i>PSE at Exit</i>	<i>Not employed or enrolled in PSE</i>	<i>Total n=</i>
1	2 (22%)	1 (11%)	6 (66%)	9
3	2 (29%)	0	5 (71%)	7
4	7 (50%)	3 (21%)	4 (29%)	14
5	2 (17%)	6 (50%)	4 (33%)	12
6	0	0	1 (100%)	1
7	1 (14%)	0	6 (86%)	7
8	1 (17%)	0	5 (83%)	6
9	0	0	2 (100%)	2

Table 15 above represents both urban and rural school districts in Maryland. A Chi-Square was run on Student Engagement by School District. There was a significant relationship between school district and employment at exit, $\chi^2(1, N=58) = 13.52, p < .001$, and enrollment in postsecondary education at exit, $\chi^2(1, N=58) = 24.89, p < .001$.

Table 16

Mean Scores for Quality of Life and Self-Determination by Employment at Exit (N=58)

<i>Item</i>	<i>Employed at Exit (n=15)</i>	<i>Not Employed at Exit (n=43)</i>	<i>p-value</i>
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Quality of Life	34.80 (4.49)	34.12 (4.94)	0.639
<i>Self-Determination</i>			
Composite	11.67 (3.04)	11.74 (3.65)	0.942
<i>Subscales</i>			
Psych Emp	4.47 (1.46)	4.37 (1.62)	0.842
Self-Regulation	3.27 (1.09)	3.47 (1.39)	0.618
Self-Realization	3.93 (1.62)	3.90 (1.56)	0.956

Note: Standard Deviation is included in parenthesis next to the mean score.

This table indicated the mean scores for Quality of Life and Self-Determination were similar for students who were employed and those who were not employed at the time of exit from high school. An ANOVA indicated no significant relationships between the Self-Determination composite score, the three subscales, or Quality of Life and students being employed at the time of exit.

Table 17

Mean Scores for Quality of Life and Self-Determination by Enrollment in Postsecondary Education at Exit (N=58)

<i>Item</i>	<i>Enrolled in PSE at Exit (n=10)</i>	<i>Not Enrolled in PSE at Exit (n=48)</i>	<i>PSE p-value</i>
Quality of Life	35.30 (3.34)	34.08 (5.06)	0.471
<i>Self-Determination</i>			
Composite*	14.00 (3.27)	11.25 (3.36)	0.022
<i>Subscales</i>			
Psychological Empowerment	4.90 (1.52)	4.29 (1.57)	0.268

Self-Regulation*	4.20 (1.14)	3.25 (1.30)	0.036
Self-Realization*	4.90 (1.10)	3.70 (1.57)	0.027

Note: * $p < 0.05$; Standard Deviation is included in parenthesis next to the mean score.

Table 17 indicates there were three significant differences for scores on the self-determination scales and enrollment in post secondary education. In each of the cases, the differences were in the anticipated direction – that is lower mean scores for those not enrolling in post secondary education. These results are consistent with existing literature supporting the strength of self-determination to predict youth with disabilities enrollment in college.

Research Question 3

What is the relationship between self-determination and self-reported quality of life for students participating in a promising practices transition intervention?

Research question three explores the relationship between self-reported quality of life and self-determination. A bivariate correlation was used to test the strength and direction of the relationship. Table 18 presents the results of this correlation.

Table 18

Bivariate Correlation of the Relationship between Self-Determination and Quality of Life

($N=87$)

<i>Item</i>	<i>Quality of Life Pearson r (SD)</i>	<i>p-value</i>
<i>Self-Determination</i>		
Composite*	0.212 (3.52)	0.049
<i>Subscales</i>		

Psychological Empowerment	0.104 (1.62)	0.337
Self-Regulation	0.003 (1.26)	0.977
Self-Realization***	0.375 (1.55)	< 0.001

*Note: *p < 0.05, **p < 0.01*

The results of the Pearson r bivariate correlation indicated there was a significant relationship between Self-Determination composite score and Quality of Life and the Self-Realization subscale and Quality of Life score. Both relationships were positive which indicates that as the Self-Determination composite score and the Self-Realization subscale score increased, so did the score on the self-reported Quality of Life scale. However, no significant relationship was found between the Psychological Empowerment and Self-Regulation subscales and Quality of Life.

Research Question 4

What is the relationship between self-determination and students' self-reported life or career goal?

Similar to question three, a bivariate correlation was used to determine if a relationship exists between self-determination and having a career or life goal for research question four. However, because one of the variables was ordinal (having a career/life goal or not) the Pearson r correlation could not be used. Therefore, Spearman's Rank Order Correlation was used to determine relationships for research question four. Table 19 presents the results of the test of correlation.

Table 19

Relationship Between Self-Determination and Having a Career or Life Goal (N=87)

<i>Life or Career Goal</i>	<i>p-value</i>
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<i>Item</i>	<i>Spearman's rho</i>	
<i>Self-Determination</i>		
Composite	-.204	0.058
<i>Subscales</i>		
Psychological Empowerment*	-.265	0.013
Self-Regulation	.128	0.239
Self-Realization*	-.247	0.021

*Note: *p < .05*

The results for this correlation indicate there is not a significant relationship between envisioning a career or life goal and Self-Determination composite score. However, the correlation did indicate two significant negative relationships between envisioning a career or life goal and two of the Self-Determination subscales (Psychological Empowerment and Self-Realization). This would indicate that as scores on the Psychological Empowerment and Self-Realization scales increased, the likelihood of having a clear career or life goal decreased.

Chapter V: Discussion

Introduction

This chapter begins by linking the study findings to the research questions. Following that discussion, the limitations and implications of this study will be presented. Finally, recommendations for future research will be presented.

Findings by Research Question

Research Question 1. Research question one explored the relationship between demographic variables (ethnicity, disability type and educational track) and self-determination and quality of life scores. While none of the results were significant, there were some differences worth discussing. First, the mean scores showed that students who were White had higher scores on Self-Determination than their non-White counterparts. This finding is consistent with the literature which indicates that White students with disabilities score higher in self-determination than students of other ethnicities (Gardecki, 2001). Second, the mean scores for self-determination based on disability type produced no significant results either. However, it is worth noting that students with sensory and psychological and emotional disorders had higher composite mean scores and on all three of the subscales. Interestingly, the literature usually indicates better outcomes for individuals with sensory and learning disabilities (Newman et al., 2009). Those with psychiatric disabilities generally have lower scores and less positive outcomes (Newman, et al.). Finally, students who were certificate bound reported higher scores on both quality of life and self-determination. While there were no statistically significant results, the mean scores were higher for the certificate bound group, which, again, contradicts the existing literature which indicate that students who

are on a diploma bound educational track report higher levels on both quality of life and self-determination (Wehmeyer, 2004).

The comparison of demographic variables to Quality of Life scores produced some interesting results. First, students who were in the Not White category scored higher on Quality of Life than their White peers. While the difference was not statistically significant, it is still interesting to note as this is contradictory to other research findings that indicate students who are white are more likely to report higher quality of life scores (Gardecki, 2001). Similarly, Quality of Life scores were higher for students with developmental disabilities and sensory disabilities, again contradicting research findings which generally indicate higher scores on quality of life scales for students with learning disabilities (Odaci, Kalkan, & Karasu, 2009). Lastly, the students on the certificate bound track reported higher scores on Quality of Life as well, which again, contradicts the literature that indicates students on a diploma bound track tend to report higher levels of Quality of Life (Salmon & Kinnealey, 2007). However, the statistics on postsecondary outcomes from research question two, indicates students who are diploma bound have more successful outcomes than students who are certificate bound. This finding is consistent with the literature which indicates students who are diploma bound are more likely to have successful outcomes than students who are on a certificate bound educational track (Wehmeyer, 2004).

These results are surprising as most seem to contradict the findings from other studies. The small sample size for this study could be affecting this result, particularly considering there were very few participants in several of the categories that produced significant results. For example, results indicated better outcomes on both self-

determination and quality of life for students with sensory disabilities. However, there were only four participants in that category and it is possible the experiences of these four are not representative of the typical experience of students with sensory disabilities.

Research Question 2. Research question two explored the predictive relationship between self-determination and productive student engagement. As mentioned previously, productive student engagement is defined as either having a job or being enrolled in postsecondary employment at the time of exit from high school. The results of the logistic regression indicated a positive relationship between the Self-Determination subscales and the likelihood of being employed at the time of exit from high school. The results indicated that as scores on those scales increased the likelihood of being productively engaged post high school increased as well. Additionally, there were findings indicating a negative relationship, meaning that as scores on those scales decreased, the likelihood of being productively engaged post high school increased. The first finding is consistent with the literature indicating that students with higher levels of self-determination are more likely to be productively engaged post high school. However, the second finding is contradictory to the literature. It is counter intuitive to think that students with lower levels of self-determination are more likely to be productively engaged in post high school. There are several things that can affect the results of the logistic regression. First, because the sample size was small, it is possible that the results may not be indicating the whole and true experiences of the students participating in this study. In addition, the subscales of the self-determination scale have only up to seven questions. Missing data from any of these scales can adversely affect the results on the logistic regression.

This question was further explored using descriptive statistics and a Chi-Square analysis, which produced one significant finding.

For this sample, females had better outcomes for employment than males but males had better outcomes for enrollment in postsecondary education. The first of these findings contradicts literature which indicates that being male is a predictive factor for better student employment outcomes (Test & Cease-Cook, 2012). However, the sample was largely skewed with only 10 females and 48 males. Therefore, the results may also be skewed by the successes of a few females increasing the percentage of success by a greater interval than the successes of the males.

The second test explored student engagement based on disability type. The results of this test produced no significant results but students with sensory disabilities had more positive outcomes in both employment and enrollment in postsecondary education than students with other disabilities. This finding is consistent with the literature which indicates individuals with sensory disabilities are more likely to have successful outcomes (Capella-McDonall & Crudden, 2009). This finding should be viewed with caution, however, because there were only four people in the sensory disability category which could lead to skewed results.

The next comparison was based on student engagement by school district. The school districts represent both predominantly urban and predominantly rural areas. Two school districts reported no successes, however, these two districts joined the MSTC program later and each have only two students who had exited at the time of the study. A Chi-Square analysis was used to analyze these differences between school districts and student engagement for students enrolling in postsecondary education and employment. The results of the Chi-Square analysis indicated there was a significant relationship

between school district and student engagement. Again, however, because of the small sample size this finding should be viewed with caution as it is possible that it is skewed.

Additionally, a comparison was conducted between Self-Determination score and Quality of Life score and student engagement. There were no significant differences in means for either self-determination scores or Quality of Life scores for students who exited in employment. While this is contradictory to the literature that suggests students who are employed have higher levels of self-determination and quality of life (Powers et al., 2005; Sacks & Kern, 2008; Wehmeyer, 2011), the finding is not surprising considering the small sample size. Additionally, because the sample was not necessarily a random sample but a targeted sample of students, the results are likely skewed.

There was a significant difference found between enrollment in postsecondary education and Self-Determination composite score and on the Self-Regulation and Self-Realization scores. This indicates that students with disabilities who exit into postsecondary education tend to have higher levels of self-determination. As is indicated by Gil (2007), this outcome is expected as students must have high levels of self-determination to succeed in postsecondary education because students must know how to seek necessary services and accommodations themselves and learn how to self-advocate.

Surprisingly, there were few significant findings for research question two. After reviewing the literature on self-determination and student outcomes, one would expect those with positive outcomes (that is, securing a job or enrolling in post secondary education after high school) to score significantly higher on the Self-Determination scale than was represented by this sample (Wehmeyer, 2011, Wehmeyer et al., 2012). This could be attributable to the small sample size which increases the odds of a Type II error,

and also suggests the sample is biased and not representative of the population. Also, as mentioned earlier, the sample was not a random sample but a targeted sample. Students were enrolled based on student and family self-nomination. Because students were self-nominating in many cases, they may already have similar self-determination characteristics as they had made the decision to participate in the transition intervention. Additionally, students would need to have some level of self-realization to recognize they need help with transitioning.

Another possible reason for the poor results in terms of the employment outcome was the severe U.S. recession starting in 2008. This intervention was initially started in the 2007-2008 school year which is about the same time the Maryland state economy rapidly declined. The Bureau of Labor Statistics (2012) reports on the national and state unemployment rates by month and year. In October 2007, the national unemployment rate was 4.4% and for Maryland it was 3.9%. This skyrocketed to 10% nationally, and 7.8% for Maryland by October of 2009. This would clearly impact the number of students who exit into employment and may help explain the lack of significant findings for the outcome variable based on self-determination scores. In addition, more of these students may have exited into employment if there were more job opportunities available.

Research Question 3. The third research question explored the relationship between self-determination and quality of life. The literature indicates that students with higher levels of self-determination also report higher levels of quality of life and vice versa (McIntyre, et al, 2004; Nota et al., 2007; Sacks & Kern, 2008). Similarly, for this sample there was a positive relationship between Quality of Life score and Self-Determination composite score, and for the Self-Realization and Self-Regulation subscale. This result

indicated that as quality of life increases so does self-determination score and vice versa. While the sample is not large enough to determine if a predictive relationship exists, the positive relationship indicated between the two variables supports the existing literature (Kraemer et al., 2003).

Research Question 4. Research question four explored the relationship between students envisioning a career or life goal and self-determination score. The existing literature on this subject, which is sparse, indicates that students with higher self-determination scores are better able to envision a career or life goal (Savickas, 1990). For this study sample, no significant relationships were found between envisioning a career or life goal and the composite Self-Determination score or the Self-Regulation subscale. However, a statistically significant relationship did exist between envisioning a career or life goal and the Psychological Empowerment and Self-Realization subscales. Interestingly, this relationship was negative, indicating that as the scores on the two subscales decreases, students were more likely to have a career or life goal. This contradicts the literature which suggests self-determination is a supporting factor for envisioning a career or life goal (Morningstar & Kleinhammer, 1999; Savickas, 1990).

The results to this question were surprising considering the existing literature, while sparse, supports the theory that self-determination is a supporting factor for envisioning a career or life goal. There are several possible reasons for this result. First, this could again be attributed to the sample size being so small and unrepresentative of the population. Second, the self-determination scale was forced choice (yes/no) self-report and the life/career goal question was open ended self-report. This could have skewed results by students perhaps not understanding some of the questions or answering

the career/life goal question with what they think the interviewer wants to hear. Third, again the economy could impact this finding. It is possible that because there are fewer career opportunities available, students may have a more difficult time envisioning their future. As previously discussed, research has indicated that students with disabilities often make career decisions based on the opportunities they perceive to be available (Hasnain & Balcazar, 2009; Korbel et al., 2011). Fourth, students who enrolled in the first phase of this study may not have received the full “dose” of the intervention or may have received the intervention prior to the service delivery being refined and perfected. Finally, the results could just be totally invalid because of the small sample size and possibly because of differences in the way the interview was delivered by research team members.

Limitations and Implications

Limitations. Before discussing the implications of this study, it is necessary to address the limitations. The first limitation of this study was the small sample size. The sample size was greatly limited by difficulties with scheduling student interviews, student's dropping out, or moving out of the school district after enrollment. Unfortunately, the small sample size severely caused this study to be underpowered (power=24%). Additionally, it is possible that Type II error may be present because of the size of the sample. Type II errors occur when the null hypothesis (no difference in means or no relationships) is accepted when in fact there is a difference in the means or a relationship does exist. Therefore, results of this study cannot be generalized to the larger population of students with disabilities.

The next limitation of the study is related to the sampling procedure. Students were not randomly selected for participation in this study. Participants either self-nominated or their families nominated the student for the study. Consequently, participants may already have had a similar level of self-determination or higher levels of family involvement than other students. Self-nominating to participate in an intervention requires students already be somewhat aware of their need for transition services. Similarly, as family involvement has been identified in the literature as a facilitative factor for successful transition, having families who are actively involved in the transition process at the start could impact the student's scores and outcomes in two ways. Either these students will have more positive outcomes because they have positive family support that was facilitating their development of self-determination and independence or they could have more negative outcomes if the family was impeding the development of

those factors by making decisions for their children and not allowing them to learn to make life decisions themselves.

Another limitation of this study has to do with the types of interviews obtained from students. The MSTC Student Interview is based on the student's self-reported perceptions. This could affect the answers to the scales in a few ways. First, students may be answering the questions the way they feel the interviewer wants them to answer. Second, it is likely that students did not necessarily understand some of the questions which is present in skipped questions or answers of "I don't know". Third, as research has indicated (Svraka, Loga, & Brown, 2011; Trainor, 2007), students often rank their levels of self-determination based on what they feel like they want, rather than the reality of what they are actually doing. For example, a student may indicate they make clear goals for themselves but those goals may be unrealistic or the student may make goals without understanding the steps necessary to achieve those goals. Fourth, the self-determination scale on the MSTC Student interview was developed by the MSTC research team by team consensus. While the team determined the scale had face validity, construct validity and content validity were not determined prior to administration. For the current study, a content analysis of the questions was conducted which resulted in the recoding of questions into Wehmeyer's construct of self-determination. While this type of content analysis lends to construct validity, the questions only fit into three of four of Wehmeyer's latent constructs of self-determination. This brings the content validity of the scale into question as it does not represent all four areas of Wehmeyer's construct of self-determination. Further, with the particular scale used for this study for self-determination, it is a forced choice of "yes" or "no". This leaves no room for a

developing skill that may exist on some level but is forced into one of two categories.

This could skew actual levels of self-determination.

The Quality of Life scale had previously been tested for validity by the TransCen research team for a previous study. However, the scale is still self-report which could lead to many of the same issues discussed above. There may have been some bias present by the students answering the way they believe the interviewer expects.

Additionally, the students may not have fully understood the questions or how to answer them. It is also possible there was some bias by the interviewer. In some cases, when asking the Quality of Life questions, students may not have answered 1, 2, or 3 but may have given a more descriptive answer that required the interviewer to prompt again for a numeric categorization or interpret the descriptive answer themselves. Moreover, the Quality of Life scale only allows for one of three choices, which were “1=bad”, “2=ok”, and “3=good”. The answer choices are vague and left to the interpretation of the student which could lead to inconsistency in answers.

Implications. While this study was admittedly underpowered, the results still provide some implications for the stakeholders in transition, such as schools, service providers, youth with disabilities and their families. First, only 25% of the students who had exited high school were productively engaged. The results from the NLTS-2 indicate that for students with disabilities, who may or may not have had access to a transition intervention similar to MSTC, about 50% should be productively engaged at exit from high school (http://www.nlts2.org/reports/2009_04/index.html, 2009). Therefore, participation in a promising practices transition intervention, such as MSTC, should at least replicate those findings if not surpass them. The MSTC team conducts fidelity

assessments to measure implementation; however, this information had not been fully collected and analyzed at the time of this study. This information would be useful to determine the differences between sites in service delivery and the fidelity of the intervention at specific sites. However, it is beyond the scope of this study to analyze these differences. Assuming that differences in service delivery were accounted for, one implication of this finding is to determine what other factors are affecting productive student engagement. Some factors that should be considered are the impacts of socioeconomic status, level of family involvement, the effectiveness of the specific interventions, and the state of the economy. As previously discussed, the unemployment rate in the nation and the state of Maryland are high and could possibly be affecting the ability of students with disabilities to find a job after high school.. The unfortunate reality is that there are thousands of people in Maryland who are unable to find jobs despite our being in an area rich with federal government jobs. In addition, the one district (district 2) that had zero successes, was an urban district and has an unemployment rate of 11% as of June 2012, nearly 4% higher than the average for the state of Maryland. Clearly, the lack of opportunity to procure a job could be affecting the outcomes for that district.(Bureau of Labor Statistics, 2012). The other school districts were either rural or mixed, meaning they had some areas considered urban and other areas that were rural in the district. Districts two, seven, and eight all have unemployment rates, as of June 2012, higher than the average for the state of Maryland, with District two being the most extreme. All other districts were at or below the state average for unemployment (Bureau of Labor Statistics).

In addition to issues with the economy affecting the postsecondary results for students in this study, service delivery could have had an impact. The school districts were given some flexibility in the emphasis put on specific interventions based on the needs of the students. They only had to be sure to include interventions based on all five of the Guideposts for Success for Transition, but they were able to determine which interventions to emphasize and how to deliver the interventions. Therefore, it is possible there were differences in the ways services were delivered that may be impacting student engagement. It would be worth investigating the differences in service delivery beyond the fidelity review to determine what else is impacting successful student engagement.

In addition to the poor student engagement results, this study found very few significant results in self-determination based on ethnicity, disability type, and educational track. This could have been due to the small sample size but some of the mean scores were surprising. For example, the certificate bound group had higher mean scores on quality of life than the diploma bound students and, percentagewise, the certificate bound group had better employment outcomes at exit. This finding contradicts the literature which indicates diploma bound students generally have better employment outcomes (Entwisle, Alexander, & Olson, 2000; Gardecki, 2001, Sacks & Kern, 2008). The certificate bound group also reported higher mean scores on the Self-Determination Scale than the diploma bound group. Again, these results were not statistically significant but it still contradicts the existent literature. The implication of this finding is that there may be other factors affecting the development of self-determination that should be investigated and identified such as socioeconomic status, duration of

intervention and the state of the economy. It may be that the effects of this intervention just take longer to emerge.

In addition to the small sample size and educational track findings in the previous paragraph, there are other factors that may have impacted the lack of significant results for this study. First, all the students in this sample exhibit a high level of family involvement. Students were either self-nominated or nominated by family members, which means it is likely that only students whose parents are actively involved in their education and transition planning would be involved in this study. Additionally, students and parents had to consent to the student participating in this study, which indicates not only a higher level of parental involvement but a higher level of student awareness of their disability and needs. Students who chose to participate most likely have higher levels of acceptance of their disability and higher awareness of their needs because they chose to participate in a study focusing on their disabilities. Student awareness and acceptance of disability and higher levels of student involvement are identified in the literature as factors leading to higher levels of self-determination (Wehmeyer, 2003). And, finally, students and parents began the study with the informed consent which primed the students and parents about the study and the goals for the study. Therefore, the implication is that these students already had similar facilitative factors to self-determination, which could have lead to similar self-determination and quality of life scores despite the other factors (ethnicity, disability type, and educational track).

Another implication of this finding is linked with disability type. After further review of the school districts that had the lowest success rates, a theme emerged. The three districts that had zero successful outcomes had similarities in the students who were

enrolled. For all three of these sites, all participants had either a developmental disability or a learning disability. District two had six participants with developmental disabilities, five with a learning disability and one student listed as “other”. District six had only two participants enrolled but both had developmental disabilities. District nine had four students with development disabilities and three students with learning disabilities. This seems to suggest that there may be a link between positive outcomes and disability type. This suggests that perhaps the interventions selected as part of MSTC were not as effective for students with learning disabilities and developmental disabilities as it is for students with other disabilities. This implies that interventions for students in those two groups should be more refined to fit the needs of students with developmental disabilities or learning disabilities.

The findings related to students having a career/life goal and self-determination are also worth discussing. The findings suggest a negative correlation between two of the subscales of self-determination and having a career or life goal. This suggests that as self-determination goes down the likelihood of students having career or life goal goes up. While the research is sparse in this area, the studies that have been conducted indicate a positive relationship between self-determination and student’s having a career or life goal. This finding could, again, be due to a small sample size and a non-random sample. It could also be related to the way this was measured for this study. It was measured by two open ended questions and in many cases, these were not answered. This could be due to either student’s not having a goal, not knowing what the questions meant, or the interviewer may have even skipped the question or just summarized the goal. Summary of the goal may have lead to a mislabeling of “vague goal” as opposed to

“clear goal” which would have skewed the results. Therefore, it is possible that mislabeling may have lead to invalid results.

Finally, practitioners should use scales like the self-reported scales used for this study with caution. The chance of type II error and biases are increased with these types of scales. Because students often want to please the interviewer, they may not answer truthfully. Additionally, because in some cases, answers are left to interviewer interpretation, the results could be biased. Students often overestimate their level of self-determination which could lead to a type II error, specifically not seeing a pattern when one does exist because students who may have lower self-determination may overestimate when answering questions. Further, with the particular scale used for this study for self-determination, it is a forced choice of “yes” or “no”. This leaves no room for a developing skill that may exist on some level but is forced into one of two categories. This could skew actual levels of self-determination. Similarly, the quality of life scale only allows for one of three choices, which were “1=bad”, “2=ok”, and “3=good”. The answer choices are vague and left to the interpretation of the student which could lead to inconsistency in answers.

Future Research

The current study demonstrated a number of contradictory results to existing literature for this sample of MSTC participants. Consequently, the first recommendation for future research is to collect data from more participants and replicate the current study. Ideally, this study would be a mixed methods study with a matched pairs design. Students would be matched based on demographic and disability characteristics, there would be at least 200 students per group, and a pre/post test design would be used.

Additionally, the data collection procedures would be modified to include more qualitative and quantitative data collection, including observations, fidelity assessments, and a revision of the self-determination scale to include questions that fit into all four of Wehmeyer's self-determination construct. It would also include a more objective measure of self-determination based on actual observation. In addition, in the ideal study, the intervention procedures and training would be standardized. This would provide insight into the actual characteristics of MSTC participants, the role of self-determination in successful student engagement for MSTC participants, and provide insight on the effects of the limited sample size used for this study. This would also allow for some controlling and reporting other things that affect self-determination and student engagement such as economy, SES, service delivery issues, level of family involvement, and self-determination and quality of life prior to exposure to interventions. In addition, the extra qualitative component would allow researchers to investigate deeper into the actual experiences of the students, the school climate, teacher and service provider attitudes and perceptions, and systemic and policy related issues. All of these factors can affect not only level of self-determination but postsecondary engagement as well. This study could inform the field of better ways of delivering transition services to increase the chances of student success after high school.

Another useful study would be to investigate the impact of other static factors not available for this study. Factors such as socioeconomic status of the students families and urban versus rural school district outcomes could provide beneficial information for the field in general. Analyzing these factors in relation to outcomes and how services are

delivered would provide insight on which interventions work best for different settings. It is likely that students living in a rural area and those living in an urban area have different needs and may need different types of interventions, such as transportation to and from work. This type of study could inform the field on better ways to deliver transition services for students in different settings.

Finally, there is little research on what factors facilitate the ability of a student to envision a career or life goal for themselves. A study that investigates what factors affect this ability, including but also beyond self-determination, would be beneficial to the field. This would give counselors, teachers, families, and community service providers information necessary to develop interventions to enhance this ability in students with disabilities.

Research on self-determination, quality of life, and student outcomes remains important. As self-determination has emerged as one of the most significant factors of postsecondary success for students with disabilities, this area must continue to be explored in more detail. Of particular importance is investigating in more detail the factors that facilitate the development of self-determination and incorporating those in transition interventions.

Conclusion

This dissertation examined the role of self-determination on quality of life, productive student engagement and ability to envision a career or life goal. The purpose of this study was to corroborate findings that higher levels of self-determination lead to productive student engagement for students participating in a “best practice” multi-site transition intervention. The second focus of this study was to further the research

between self-determination and quality of life based on disability type and ethnicity. And finally, the relationship between self-determination and student ability to envision a career or life goal was explored in hopes of extending the research in this emerging area.

The participants for this study were 87 students with disabilities in nine school districts in Maryland who participated in a promising practices transition intervention which collected data on student engagement, disability type, ethnicity, educational track, self-reported self-determination, self-reported quality of life, and student's career/life goal. These students were self-nominated or nominated by family members for participation in this transition. Because of the way the school districts were staggered in beginning the intervention, some students in this study had longer exposure to the interventions than others.

Overall, this study produced few statistically significant results, however, some of the results were still note worthy. Specifically, the findings that contradict the current literature on self-determination, quality of life, and student engagement are worth further investigation to determine if the results are due to a small sample size, a non-random sampling procedure, or if they hold true for a larger group of students with disabilities. Additionally, the findings on self-determination and students having a career or life goal produced results that indicated students with lower levels of self-determination were more likely to have a career or life goal. This area certainly needs further research to determine the reason for these contradictory results.

In summary, individuals involved in the transition process for students with disabilities need to be informed of the factors that facilitate successful post secondary

outcomes for students with disabilities including self-determination. Finally, limitations, implications and future research recommendations are presented.

APPENDIX A:**STUDENT DATA TRACKING SHEET**



MSTC Student Data Report

CAR

Student Data Code: CAR1

Inactive:

Inactive

Inactive Date:

Inactive Reason:

Inactive Type:

Student Notes:

Inactive Detail:

Quarter Additional Info:

MSTC:

Date of Entry into MSTC: **12/30/2008**

Education Level At Entry: **12th Grade**

Anticipated Exit Year: **2009**

Education Track: **Diploma bound**

Type of Document Received: (Empl) **regular diploma**

MONTH/YEAR of exited MSTC services for other reasons:(Empl)

MONTH/YEAR Document Received:(Empl) **6/1/2009**

Exited MSTC services for other reasons: (Empl)

Demographics:

Age at Entry:

20

Racial/Ethnic Background:

White

Gender:

Female

Disability Categories:*

Specific Learning Disability (P)

*(P) Indicates Primary Disability

Public Assistance:

At Entry:

None

At Follow Up:

SSI recipient:

Food Stamp recipient:

SSDI recipient:

Other Benefits:

TANF recipient:

Benefits Planning/ Services:

SSI/SSDI information provided:

SSA work incentives used:

Linked to WIPA for benefits planning:

PASS Developed:

Linkages:

At Entry:

Linkages at entry:

Vocational Rehabilitation

At Follow up:

Vocational Rehabilitation:

During MSTC:

VR Referral Made/ VR Counselor Assigned:

Yes

Mental Health:

VR opens Case:

Yes

Developmental disability:

Applications made for post school supports to MH:

One-stop Career Center:

Applications made for post-school supports: Other:

Other Services:

Linked to Community Rehabilitation Provider (CRP):

Yes

Received work-related supports from community rehabilitation

Applications made for post-school supports (DORS, DDA, etc):

Yes

Received non-work related supports from community

Linked to DDA:

No

Type of services to be received from DDA:

Linked to MH:

No

Types of services to be received from MH:



MSTC Student Data Report

Student Data Code: CAR1

Services:

Development/Use of person-centered support team:	Yes	Pre-employment Activities (resume development/interview skills):	Yes
Assessment/Discovery of an individuals needs, skills:	Yes	Job Development Negotiations:	Yes
Self-Determination/Self-Advocacy Instruction:	Yes	Assistive Technology Acquisition:	No
Client Assistance Program Information:	Yes	Individual Participant Budget/Resource Development Coordination:	No
Positive Personal Career Profile Development:	Yes	Supportive Services and Accommodations:	Yes
Career Exploration through work-based experiences:		Support Entrepreneurship Services:	No
Student-led IEP Facilitation:	No	Other:	

Summer Youth Employment:

MONTH/ YEAR	SYEP (Svcs)	Enrolled	Company	Industry	Position Title	Wage	Hrs/ Wk	Supports
2009	Yes	yes	Summerville Retirement Community	Customer Service	Dietary Aide	7.25	18	job coaching

Employment:

Employment Status at Entry:	Currently working part-time < 35 hours
\$/ hr at Entry:	
Paid Employment (Services provided during MSTC):	
Workplace Supports (Services)	Yes
Placed in Competitive Employment: (Empl at Exit)	Supported Employment
Exited to Non-competitive Employment: (Empl at Exit)	No
Placed in apprenticeships: (Empl at Exit)	
Placed Student in Employment after dropped out of MSTC Services:	

Positions During MSTC:

Company: Summerville Retirement Community			
Position:	Assistant	Health Insur:	No
Industry:	Assisted Living	Paid Internship:	<input type="checkbox"/>
Supports:	drop in job coaching	Previously SYEP:	<input checked="" type="checkbox"/>
Start Date:	6/29/09	Job Development Days:	
End Date:		Change In Hourly Wage:	
Dlrs Hr:	\$7.25	Retention Period:	1 MONTH
Avg Hrs Wk:	18		
Employment Notes:	was SYEP that became paid employment		

Employment Outcomes:

Company: Summerville Retirement Community			
Position:	Assistant	Start Date:	6/29/09
Industry:	Assisted Living	End Date:	
Dlrs Hr:	\$7.25		
Avg Hrs Wk:	18		
Employment Notes:	was SYEP that became paid employment		



MSTC Student Data Report

Student Data Code: CAR1

Post Secondary Education:

Linked to post-secondary education (Services): **No**
 Type of post-secondary education setting (Services):
 Exited to Post-Secondary Education Program (Empl): **No**
 Type of Post-secondary Education (Empl):
 Post-secondary Education Status(Outcomes):
 Post-secondary Education Outcome (Outcomes):
 Received disability services while attending trade school, college:

Outcomes:

High School Exit Goals: **Competitively Employed**
 Other Placement Exit Outcomes:
 Date of Follow up: **6/30/2010**
 Status of Follow up: **Paid Inclusive Employment - did not return phone call. As far as I know this student is still working at this placement.**

Student Notes:

APPENDIX B:

MSTC STUDENT INTERVIEW



Multi-part
tools/parts via
phone

Pract Skn
Leaving Skn
pre

MSTC Student Interview Guide

Access Database
Code

Student ID/Cohort Year: _____ Interviewed by: _____
 Date of Interview: _____
 High School: _____ Local Education Agency: _____
 Certificate Track Diploma Track Completer Program: _____
 Pre-Interview (Grade 10 (3yrs. from exit)) Post-Interview (Grade 12 (Exit Yr.))
 E-Mail: _____
 Address: _____
 Student Cell Phone: _____ Home Phone: _____
 Parent/Guardian Name: _____
 Parent/Guardian Work Phone: _____ Cell Phone: _____

TransCen, Inc is conducting a study on how your school and its partners are preparing you and supporting you as you think about employment or going to college after you graduate from school. We are inviting you to participate in this study because you have been identified by school staff as someone who is interested in being a part of the program at your school.

We would like to study if the instruction that is provided will assist you in going to work or going to college. Our purpose today is to find out some information about you and what you like. We'll ask you questions about things that interest you now and what you would like to do after high school. You can ask questions about our program during the interview.

We will do our best to keep your personal information confidential. If we write a report or article about this study, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the Maryland Division of Rehabilitation Services, your school system, and of TransCen, Inc. There are no risks from participating in this research study. This study is designed to determine if you are benefiting by participating in the Transition Model. Also, if the results may help the investigator learn more about how the Transition Model might benefit other students through improved understanding of the important activities that lead to successful transition.

Your participation in this interview is completely voluntary. You may choose not to take part at all. If you decide to participate in this study, you may stop participating at any time.

Thank you for your commitment to the Maryland Seamless Transition Collaborative!

Directions for the Interviewer: Enter interviewees' authentic responses into the white space that follows each question. In some instances response categories are listed to assist the interviewer in eliciting a response from the interviewee. Interviewer may enter the response in appropriate response box, if it matches the interviewers' response, or circle the appropriate rating.

Part I: Transition Planning*Pre Items Only*

1.SD.C. What are you interested in? What do you like to do?

2.SD.C. What do you do in your free time?

- Watch TV
- Listen to music/iPod
- Spend time on computer (i.e. surfing the net, IM)
- Talk to friends
- Exercise
- Hang out with friends
- Spend time with girl/boyfriend
- Play video games
- Other _____

3.SD.C. What do you think you are good at doing?

4.SD.G. What do you want to do after you leave high school?

5.SD.G. What kind of job would you like to pursue?

6.SD.G. Would you like to pursue post-secondary education (go to college, to university, to trade school)?

 Yes No

(If YES go to 7 if NO go to 8).

7.SD.G. If so, what kind of Postsecondary Education would you like to pursue?

- | | |
|---|---|
| <input type="checkbox"/> 4 year college or university | <input type="checkbox"/> Apprenticeship program |
| <input type="checkbox"/> 2 year college/community college | <input type="checkbox"/> Internship |
| <input type="checkbox"/> Trade/Technical school | <input type="checkbox"/> None |
| <input type="checkbox"/> College Inclusion program for students 18-21 | <input type="checkbox"/> Other _____ |

8.SD.G. Where would you like to live when you leave high school?

- With my family
- In the dorm (if college bound)
- In an apartment with roommates
- In an apartment without roommates

9.SD.SA. Who could help you meet your after school goals?

- | | | |
|--|---|---------------------------------------|
| <input type="checkbox"/> Parents/Caregivers | <input type="checkbox"/> Friends | <input type="checkbox"/> Roommate |
| <input type="checkbox"/> Community Service Providers | <input type="checkbox"/> Rehabilitation counselor | <input type="checkbox"/> I don't know |
| | <input type="checkbox"/> Neighbors | <input type="checkbox"/> Other _____ |

Part II: Employment

10.SD.C. What kinds of jobs interest you?

- | | | |
|--|--|--|
| <input type="checkbox"/> Taking things apart and putting them together | <input type="checkbox"/> Being creative | <input type="checkbox"/> Working by myself |
| <input type="checkbox"/> Working outdoors | <input type="checkbox"/> Working with animals | <input type="checkbox"/> I don't know |
| <input type="checkbox"/> Helping people | <input type="checkbox"/> Working with food | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Fixing things | <input type="checkbox"/> Working with lots of people | |

11.SD.C. Why do those jobs interest you?

- | | |
|--|--|
| <input type="checkbox"/> Sound interesting | <input type="checkbox"/> I think I would be good at it |
| <input type="checkbox"/> I have always wanted to do them | <input type="checkbox"/> I don't know |
| <input type="checkbox"/> My family thinks it would be a good job | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> I have had a work-based experience at that job and I liked it | |

12.SD.SA. What kind of training do you think you will need for these jobs?

13.WBE. What types of work related activities have you participated in during school?

- Career Fair
- Job Shadowing
- Mock Interviewing
- Interest Inventory
- Career and Technology Assessment
- Career and Technology Completer Program
- Service Learning
- None
- I don't know
- Other: _____

14.WBE. How did these activities help you learn about jobs you might want to do?

15.WBE. Tell me what jobs you have had before, including paid jobs, volunteer jobs, or even service learning (see chart below)

Place	When	What did you do?	Did you like it?	Paid?
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

16.SD.SM ^{self-management} In these jobs, how did you know if you were doing a good job?

- Teacher/job coach would tell me
- Used a checklist
- My boss would tell me
- I don't know
- Other _____

Self-determination *self-advocacy*

17.SD.SA. What kinds of support did you need on the jobs you had before?

- Someone to assist me in starting the job
- A list of daily tasks that needs to be completed
- Someone to assist in reading difficult materials (i.e., manuals)
- Extra time to complete some assigned tasks
- Some tasks broken down into smaller steps
- Someone to remind me to stay on task
- Transportation to get to the job/home
- A place to go and take a break
- Someone to show me how to do new things
- Someone to assist me in using my Augmentative Communication Device
- I don't know
- I have not had a job
- Other _____

18.SD.SA. If you got a new job, what supports do you think you might need?

- Someone to assist me in starting the job
- A list of daily tasks that needs to be completed
- Someone to assist in reading difficult materials (i.e., manuals)
- Extra time to complete some assigned tasks
- Some tasks broken down into smaller steps
- Someone to remind me to stay on task
- Transportation to get to the job/home
- A place to go and take a break
- Someone to show me how to do new things
- Someone to show me how to use my Augmentative Communication Device
- I don't know
- Other _____

19.SD.SA. What kinds of support do you think you need if you go to a post-secondary setting (college, university, trade school)?

Go to next section, Q-20 if not going onto postsecondary education

- | | |
|---|---|
| <input type="checkbox"/> How to use Disability Support Services | <input type="checkbox"/> Someone to remind me to stay on task |
| <input type="checkbox"/> Someone to assist me in getting to classes (i.e., transitions) | <input type="checkbox"/> Transportation to get to campus/around campus |
| <input type="checkbox"/> A list of daily assignments to be completed | <input type="checkbox"/> Someone to show me how to get to the commons or other place to socialize |
| <input type="checkbox"/> Modified work that I can complete independently | <input type="checkbox"/> Someone to show me how to use my Augmentative Communication Device |
| <input type="checkbox"/> Someone to assist in reading difficult materials | <input type="checkbox"/> I will not attend postsecondary education |
| <input type="checkbox"/> Extra time to complete some assignments | <input type="checkbox"/> I don't know |
| <input type="checkbox"/> Some assignments broken down into smaller steps | <input type="checkbox"/> Other _____ |

Part III: Self-Determination (Choice, Self-Advocacy, Goal Setting, and Self-Management)

20.SD.SA. How do you learn best?

- | | |
|--------------------------------------|---------------------------------------|
| <input type="checkbox"/> By seeing? | <input type="checkbox"/> By doing? |
| <input type="checkbox"/> By hearing? | <input type="checkbox"/> I don't know |

21.SD.SA. Do you inform your teacher how you learn best? Yes No

22.SD.SA. Do you or did you inform your employer how you learn best? Yes No

23.SD.SA. Do you ask for help when you need it? Yes No

24.SD.SA. Do you tell your teachers/guidance counselors what job(s) you would like to try? Yes No

25.SD.SA. Do you take medication? Yes No

26.SD.SA. If Yes, can you take it on your own? Yes No

27.SD.G. Do you create lists for yourself to help you achieve what you want? Yes No

28.SD.G. Do you set long-term and short-term goals for yourself? Yes No

29.SD.SM. Do you regularly keep track of how you are doing on your goals? Yes No

30.SD.SM. Do you keep track of your grades and homework? Yes No

31.SD.C. Do you have an IEP? Yes No

32.SD.SA. Do you work with your teacher on writing goals for your IEP? Yes No

33.SD.SA. Do you go to your annual review meetings for your IEP or 504? Yes No

34.SD.SA. If yes, how do you participate in these meetings? Yes No

35.SD.SA. Are these meetings helpful to you? Yes No

36.SD.SA. Do you think these meetings allow you to express your thoughts about what kind of job you want to have or training you would like to receive when you leave high school? Yes No

37.SD.C. Do you know what disability is?
Please explain Yes No

38.SD.C. Do you know if you have a disability? Yes No

39.SD.C. Can you tell me what disability is listed on your IEP or 504 Plan?

40.SD.SA. Does your disability affect your schoolwork and school activities? Yes No

41.SD.SA. If Yes, In what way?

- | | |
|--|---|
| <input type="checkbox"/> Sometimes I don't have good grades | <input type="checkbox"/> Sometimes I get angry when people don't understand what I am trying to say |
| <input type="checkbox"/> It's hard for me to make/keep friends | <input type="checkbox"/> I need extra time to complete tests/quizzes |
| <input type="checkbox"/> Sometimes I don't understand assignments/projects | <input type="checkbox"/> I have difficulty walking/getting around |
| <input type="checkbox"/> Sometimes I need extra help to complete assignments/projects | <input type="checkbox"/> It is hard for me to participate in after-school activities without someone to help me |
| <input type="checkbox"/> Sometimes the teacher needs to change part of the assignment/project for me to complete it successfully | <input type="checkbox"/> At assemblies or after-school activities sometimes the loud noises bother me |
| <input type="checkbox"/> It is very difficult for me to communicate | <input type="checkbox"/> I don't know |
| | <input type="checkbox"/> Other _____ |

42.SD.SA. What kinds of supports do you get from teachers or others because you have an IEP?

- | | |
|---|---------------------------------------|
| <input type="checkbox"/> Someone to assist me in getting to classes (i.e., transitions) | <input type="checkbox"/> I don't know |
| <input type="checkbox"/> A list of daily assignments to be completed | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Modified work that I can complete independently | |
| <input type="checkbox"/> Someone to assist in reading difficult materials | |
| <input type="checkbox"/> Extra time to complete some tasks | |
| <input type="checkbox"/> Some assignments broken down into smaller steps | |
| <input type="checkbox"/> Someone to remind me to stay on task | |
| <input type="checkbox"/> Extra time to complete tests/quizzes | |
| <input type="checkbox"/> Use of Augmentative Communication Device | |

43.SD.SA. How do you let other people know you need help or that you should receive accommodations in class or on a test?

44.SD.SA. Do you ever talk about your disability to others? Yes No

45.SD.SA. If so, who?

- Employers
- Teachers
- Family
- Friends

46.SD.SA. Are there times when you chose not to tell someone about your disability? Yes No

47.SD.SA. Do you know about your rights as a person with a disability?
Please explain: Yes No

Part IV: Family Involvement

48.F. How does your family support you with your school work?

49. How does your family support you with your job?

50.F. Does your family come with you to your planning meetings? Yes No

- a. IEP meetings? Yes No
- b. Meetings with your rehabilitation counselor? Yes No
- c. Meetings about social security? Yes No
- d. Meetings with new post-school providers? Yes No

Part V: Transportation

59.T. Do you use public transportation? Yes No

60.T. Have you received travel training so you know how to get around? Yes No

61.T. Do you have a driver's license? Yes No

62.T. Do you plan on getting a driver's license? Yes No

Part VI: Quality of Life

We would like to know what you think about your life today. I will read several items to you. Please tell me how you would rate them... from 1 – very bad to 3 – very good.

How would you rate?

		Bad	OK	Good
63.Q	My health	1	2	3
64.Q	Running my own life, making choices	1	2	3
65.Q	Getting along with family	1	2	3
66.Q	Getting out and getting around	1	2	3
67.Q	What I do all day	1	2	3
68.Q	Speaking up for myself	1	2	3
69.Q	Making decisions	1	2	3
70.Q	Asking for help when I need it	1	2	3
71.Q	Doing a job I'm good at	1	2	3
72.Q	Getting along with teachers, staff	1	2	3
73.Q	My happiness	1	2	3
74.Q	Working through problems	1	2	3
75.SD.SM	<i>Keeping track of my schedule</i>	1	2	3
76.SD.SM	<i>Keeping track of my personal items</i>	1	2	3
Total Score		<hr/>		

Post-Items Only

Interviewers: attempts have been made to describe the MSTC program in student language (as suggested) . Please record what you actually say so that we can use it in the future!!

Part VII: Satisfaction

77.S Do you think participating in the MSTC Program (extra contact with staff; and a job) helped you learn about what the world of work is about?

Yes No

Please explain:

78.S. How would you rate the following components of the MSTC program (your experiences)?

	<i>Bad</i>	<i>Ok</i>	<i>Good</i>
<i>Discovery</i>	1	2	3
<i>Work-Based Experiences</i>	1	2	3
<i>Paid Employment</i>	1	2	3
<i>Interagency Linkages</i>	1	2	3

79.S. Would you recommend (experiencing employment as a part of high school) the MSTC program to a friend? Yes No

Thank you for your commitment to the MSTC project. The information you have provided will be important in providing information to your school, school system, and the state of Maryland about Transitioning Youth!

APPENDIX C:

SELF-DETERMINATION SUBSCALE CORRELATION MATRIX

Correlations

		SD Composite	Psych Empowerment	Self- Regulation	Self-Realization
SD Composite	Pearson Correlation	1	.850**	.677**	.826**
	Sig. (2-tailed)		.000	.000	.000
	N	87	87	87	87
Psych Empowerment	Pearson Correlation	.850**	1	.379**	.574**
	Sig. (2-tailed)	.000		.000	.000
	N	87	87	87	87
Self-Regulation	Pearson Correlation	.677**	.379**	1	.334**
	Sig. (2-tailed)	.000	.000		.002
	N	87	87	87	87
Self-Realization	Pearson Correlation	.826**	.574**	.334**	1
	Sig. (2-tailed)	.000	.000	.002	
	N	87	87	87	87

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

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