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# The Impact of a School-to-Work Transition Program on Self-Determination of Young Adults with a Diagnosis of Autism Spectrum Disorder

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The Impact of a School-to-Work Transition Program on Self-Determination of Young Adults with a  
Diagnosis of Autism Spectrum Disorder

By

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Advisory Committee

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### **Abstract**

The purpose of this study was to examine the impact of participation in a school-to-work transition program on self-determination of young adults diagnosed with autism spectrum disorders (ASD). Five young adults between the ages of 18 and 22 with a diagnosis of ASD were the focus of the study. The young adults participated in a university-based Project SEARCH (PS) school-to-work transition program. The program provided the students with internship opportunities in custodial service, food service, laundry service, computer and technology lab, and office administration.

A basic qualitative research design was used to examine the experiences of the five students in PS. Field observations, interviews, and archival program documents were used as data sources for the study. PS staff members, internship supervisors and mentors, and parents/guardians of the young adults and the students were interviewed. Grounded theory techniques were employed to develop four major categories from the data. The categories covered the data in exhaustive ways that describe and explain changes in self-determination and factors that influence it.

Results of the study showed evidence of positive changes in specific aspects of self-determination. Self-determination was supported by environmental contexts and deliberate efforts that aimed to enhance student capacity to act self-determined. Self-determination was undermined by factors that hindered opportunities for students to maximize learning of new skills. Unique to this study, findings suggest that, changes in routines and setting undermined the students' capacity to demonstrate autonomy or behavior and emotional regulation. Limitations and suggestions for future research are also presented.

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## **Chapter 1: Introduction**

### **Background and Overview**

The past two decades have seen a sudden surge in the prevalence of Autism Spectrum diagnoses to where one in every 68 children has the disorder (Center for Disease Control and Prevention, 2014). Autism Spectrum Disorder (ASD) is a life-long neurological impairment that typically affects the diagnosed individual in the areas of communication, social relationships, and restricted, repetitive, stereotyped patterns of behavior, interests, and activities (APA, 2013; Wehman, Smith, & Schall, 2009). This study examined factors that impact positive changes in self-determination of young adults with ASD who participate in a school-to-work transition program.

The study was conducted during a transition of the diagnostic criteria of ASD. APA (2000) described the disorder as a heterogeneous group of conditions that includes Autistic Disorder, Asperger's Disorder, Rett's Syndrome, Childhood Disintegrative Disorder, and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS). The five disorders classified under the ASD umbrella shared the core characteristics of a typical ASD diagnosis and differed in how the core characteristics were observed, as influenced by age of manifestation, gender, severity, and level of skill deficits.

The current diagnostic criterion removes Rett's Syndrome and the Childhood Disintegrative Disorder; it merges the Autistic Disorder, Asperger's Disorder and PDD-NOS as a single diagnosis of ASD (APA, 2013). This study defines ASD based on the current (APA, 2013) diagnostic criterion.

Individuals experience ASD on a continuum from mild to severe (APA, 2000; 2013; Piarangelo & Giuliani, 2007; Volkmar, State, & Klin, 2009). Additionally, ASD affects

individuals regardless of culture, ethnicity, and socioeconomic status (Kopetz, 2012). Any person diagnosed with ASD may be profoundly affected, because all conditions of the Spectrum may be debilitating (Hendricks, 2010). The school-age diagnosis of ASD includes all the disorders described above (Piarangelo & Giuliani, 2007), and for the purpose of this dissertation, ASD refers to the broader definition of the term.

In a meta-analysis scrutinizing the global growth of ASD, Kopetz (2012) identified an estimated increase in the ASD prevalence rate, from 50% to over 2000%, occurring within the past decade (p.196). Chiang and Cheung (2012) further reported that, “Students with ASD constitute the 6<sup>th</sup> largest population among students receiving special education and related services in the United States” (p. 685). As of 2010, the United States of America (U.S.) alone spent nearly \$90 billion supporting the needs of individuals and families affected by ASD (Kopetz, 2012, p.197). Despite the monetary investments provided to support and accommodate individuals and families affected by ASD, the graduation rates and employment outcomes of youths diagnosed with the disorder and exiting secondary education are unfavorable. The population of individuals with ASD continues to face challenges that significantly impede realization of age-appropriate, self-determination, which is a critical factor in achieving opportunities for independent living, acquisition of competitive jobs, and overall general quality of life (Chiang & Cheung, 2012; Shattuck et al., 2012).

**Postsecondary outcomes of young adults diagnosed with ASD.** Current research provides evidence that during the first two years following secondary education, young adults diagnosed with ASD experience difficulties transitioning to adult life (Shattuck et al., 2012). Research further indicates that fewer than 40% of individuals diagnosed with ASD

attend post-secondary education, and less than 50% experience some type of employment. In addition, a majority of those individuals who are employed are underemployed. Those who secure jobs are engaged in work below their skill levels and earn below the minimum wage (Certo & Luecking, 2006; Shattuck et al., 2012; Wehman et al., 2009).

When compared to the lives of peers without a disability diagnosis, the general picture of education outcomes and quality of life of youths with developmental disabilities like ASD are disconcerting. The discouraging employment outcomes place these youth at greater risk of poverty and poor quality of life (Certo & Luecking, 2006; Condon & Callahan, 2008; Daston, Riehle, & Rutkowski, 2012; Fabian, 2007).

**Self-determination that improves the quality of life for young adults with ASD.** Sacks and Kern (2008) described “quality of life” in terms of the objective and subjective life conditions that lead to self-reliance and self-determination. Self-determination is widely understood as a psychological construct (Wehmeyer, Abery, Mithuag, & Stancliffe, 2003). Deci and Ryan (1985) explained it as “the capacity to choose and to have choices, other than reinforcement contingencies, drives or any other forces or pressures; to be the determinants of one’s actions” (p. 38). Carter (2010) defined self-determination as the individual’s ability to make critical life choices and “steer one’s own life in ways and directions that improve one’s quality of life” (p. 24). Applying the construct to the field of special education, Wehmeyer and Smith (2012) defined self-determination as “a sense of personal empowerment, which involves both knowing and having what it takes to achieve one’s goals” (p. 228). Thus, when a person is self-determined, actions are performed based on choice, rather than out of obligation or as a result of coercion.

According to Deci and Ryan (1985), self-determined action may entail taking up or relinquishing control of one's environment. Young adults with ASD often do not achieve acceptable levels of age-appropriate self-determination behavior (Wehmeyer & Smith, 2012). Most are not able to live independently, and are in constant need of support to navigate their challenging behavior, medical care, personal care, and other areas of their lives (Blacher, Kraemer, & Howell, 2010). When the prevalence rates of the disorder indicate what Kopetz (2012) called "a global health crisis" (p. 30) and the monetary investments do not translate to successful postsecondary education outcomes, a careful audit of the current services provided becomes necessary, and methods of promoting self-determination require exploration (Carter, Austin, & Trainor, 2012; Fabian, 2007; Lindstrom, Doren, & Miesch, 2011; Migliore, Timmons, Butterworth, & Lugas, 2012).

Research suggests that self-determination status strongly correlates with positive education and employment outcomes for adolescents with disabilities (Wehmeyer & Smith, 2012). A self-determined individual's behavior reflects a sense of autonomy, self-reliance, self-direction, and responsibility (Carter, 2010; Wehmeyer & Smith, 2012). Additionally, individuals with disabilities who achieve age-appropriate self-determination are more equipped with skills to transition to adulthood with fewer difficulties (Carter, 2010; Wehmeyer & Smith, 2012). Every person may be affected by their own sense of self-determination, but for individuals diagnosed with ASD, achievement of age-appropriate self-determination is critical for their successful participation in competitive employment (Wehman et al., 2009; Wehmeyer & Smith, 2012). Development and achievement of self-determination may, therefore, be challenged by limitations

experienced by individuals with ASD, due to the nature of the disability. Individuals with ASD may experience difficulties in forming relationships, in communication, and in conducting socially-appropriate behavior. This disability impacts achievement of age-appropriate self-determination skills that may be vital to their daily lives as they transition from secondary education to adulthood (Colombi, Kim, Schreier, & Lord, 2012; Wehman et al., 2009).

The federal government of the United States offers a framework for its citizens' legal rights in the areas of education and employment. The Individuals with Disabilities Education Improvement Act (IDEA) and the Americans with Disabilities Act (ADA) offer American citizens, regardless of their disability, the opportunity to access quality education and prohibit discrimination in employment, respectively (Yell, 2012). As stipulated by IDEA, the goal of transition services is to ensure that individuals with disabilities achieve their optimum level of independence and self-determination (Yell, 2012). However, the trajectories of educational outcomes of young adults with disabilities, including those with ASD who exit secondary education, demonstrate unacceptable levels of age-appropriate, self-determined behavior (Wehmeyer & Smith, 2012; Wehmeyer, Shogren, Zager, Smith, & Simpson, 2010). When contacted regarding the dissertation topic on self-determination of individuals with ASD, Dr. Michael Wehmeyer, lead author of *Theory in Self-determination: Foundations for Educational Practice* (2003), claimed: "There is too little information about self-determination and students with autism, so having that as a topic would make a positive contribution to the knowledge base in the field" (M. Wehmeyer, personal communication, August 29, 2012). Lack of research regarding young adults with ASD and their self-determination skills

justified the need for further investigation, particularly as populations of individuals impacted by the disorder continue to grow to epidemic proportions (Kopetz, 2012).

### **Statement of the Problem**

Statistics show discouraging employment outcomes and sub-average quality of life among individuals diagnosed with developmental disabilities such as ASD. Such results have been attributed to specific deficits in coordination of services and support, family income levels, race, gender, and work experience (Carter et al., 2012; Hendricks, 2010; Shandra & Hogan, 2008). Since the re-authorization of IDEA in 2004, studies continue to identify discouraging employment outcomes and poor quality of life for these individuals. While research shows strong correlations between levels of self-determination and post-secondary education outcomes (Wehmeyer & Smith, 2012), it was critical to identify specific practices and factors that contribute to acquisition and improvement of self-determination skills specifically for young adults with ASD.

### **Project SEARCH school-to-work transition program**

Project SEARCH (PS) is a franchised program that targets young adults between 18 and 21 with intellectual and developmental disabilities such as ASD. The young adults are students with individualized education programs (IEP) who have completed the minimum academic requirements for graduation. PS participants defer their graduation status in order to complete one year of job skills training. PS utilizes collaborative partnership with applied systems that support transition of young adults exiting secondary education, such as Vocational Rehabilitation (Daston et al., 2012).

Young adults participating in PS have access to a well-coordinated, comprehensive, resource-intensive program with a central purpose of providing on-the-job training and

support (Rutkowski, Daston, VanKuiken, & Riehle, 2006; Daston et al., 2012). PS is designed to demonstrate that students succeed when supports are provided and individualized (Daston et al., 2012; Wehman et al., 2009). Daston et al. (2012) further explained that PS supports its student interns to achieve meaningful employment in a fully integrated workplace setting for a minimum of 20 hours, with earnings of minimum wage or higher plus added work benefits.

The PS school-to-work transition program incorporates many facets of support that create a climate conducive to the development of participants' self-determination behavior. The program incorporates daily assessments that are reinforced with home-PS program collaboration and opportunities for meaningful and authentic internship experiences for participants (Daston et al., 2012).

### **Research Questions**

Guided by Wehmeyer's (1999) conceptualization of self-determination as it applies to individuals with disabilities, this study examined factors that impact positive changes in self-determination as a result of participating in a school-to-work transition program. The study focused on young adults with a diagnosis of ASD participating in a PS school-to-work transition program. Specifically, the study sought to examine the following research questions:

1. What aspects of the school-to-work transition program contribute to positive changes in self-determination?
2. What aspects of the school-to work transition program impede positive changes in self-determination?

The assumption of the study was that there would be positive changes in the level of self-determination of young adults diagnosed with ASD as a result of their participation in the PS school-to-work transition program.

### **Significance of the Study**

The condition of ASD has grown to epidemic proportions worldwide. Kopetz (2012) asserted that autism has become a “global health crisis that knows no borders – it does not discriminate based on nationality, ethnicity or social status” (p. 196). Further, there is evidence of consistent, disconcerting employment trends and quality of life outcomes for young adults with ASD who are exiting secondary education programs (Hendricks, 2010; Wehmeyer & Smith, 2012; Wehman et al., 2009). This called for a focused effort to address the challenges faced by this growing population. Therefore, a study examining factors that support or impede positive changes in self-determination of this population was deemed appropriate. The study was intended to provide a broader and deeper understanding of the impact of such programs on young adults diagnosed with ASD.

### **Delimitations of the Study**

This study focused on examining factors that impact positive changes in self-determination of young adults diagnosed with ASD during their participation in a school-to-work transition program. The study was not designed to provide an assessment of the young adults, or to evaluate the effectiveness or appropriateness of PS.

### **Limitations of the Study**

The study included young adults with a diagnosis of ASD who were known to present unique sets of ASD-related characteristics (Wehman et al., 2009). The unique



characteristics of individuals diagnosed with ASD, dissimilar to those of individuals with other disability categories, indicated that norming of the inquiry approaches was difficult, if not impossible (Cardon & Azuma, 2011). Therefore, generalization of the study results to a greater extent is limited to populations of individuals with similar unique diagnostic characteristics.

Additionally, the study focused on only five young adults, limiting the extent of generalization of the results to similarly diagnosed young adults participating in school-to-work transition programs. A larger study may, however, be developed based on the findings of this small study.

### **Definition of Terms**

The following terms are operationally defined as follows:

**The Arc's Self-Determination Scale (ASDS).** This assessment is a self-report measure that was designed with the intention to help students and educators identify strengths and limitations in the area of self-determination. The instrument was also developed to assist researchers to examine self-determination and factors that promote or inhibit its realization (Wehmeyer & Kelchner, 1995). The ASDS contains 72 items that are divided into four sub-scales: Autonomy, Self-Regulation, Psychological Empowerment, and Self-Realization. Although the transition program assessed self-determination using the instrument, its application to this study was limited.

**Autism Spectrum Disorders (ASD).** ASDs can be defined as “Pervasive developmental disorders that are characterized by severe deficits in social interaction and communication, by an extremely limited range of activities and interests, and often by the presence of repetitive, stereotyped behaviors” (Wehman et al., 2009, p. 5). The disorder

further manifests in a continuum of conditions ranging from mild to severe (Hendricks & Wehman, 2009).

**Interns.** This term refers to young adults aged 18-21 who have satisfied the minimum requirements for graduation from secondary education, have one more year of high school remaining, and are enrolled in the PS school-to-work transition program, which includes on-the-job training internships (Daston et al., 2012).

**Self-Determination.** This is the ability of individuals with or without verbal skills to utilize the necessary skills that enable them to be “causal agents” of their lives. Self-determination skills allow individuals to be aware of who they are, value themselves, plan and act in regard to self-made choices, and recognize the experiences and outcomes that emanate from informed choices (Wehman et al., 2009).

### **Overview of the Following Chapters**

The following chapters provide a review of the literature, a discussion of the methodological approach for the study, results, and discussion of the findings. Chapter 2 presents a survey of current literature in the field of transition, post-secondary employment, and self-determination as they relate to young adults with ASD. The layout of the study is presented in Chapter 3, which covers the design, data collection procedures, approaches and steps utilized for data analysis, ethical considerations, and quality standards. Chapter 4 presents the results of the study, described as categories. Finally, Chapter 5 offers a discussion of the major findings of the study within the context of the stated research questions.

## Chapter 2: Literature Review

A review of the literature was conducted to provide a foundation upon which to build the present research. Primary data sources were consulted using the online referencing system EBSCOhost, which offers a variety of full-text, peer-reviewed research databases. The following databases were included in the search: Academic Search Complete, Academic Search Elite, Academic Search Premier, ERIC, MEDLINE, PsycARTICLES, PsycINFO, and Education Full Text (H.W. Wilson). Key words and phrases that were used included *self-determination*, *disability*, *autism*, *young adult*, and *transition*. Boolean Operators “and,” “or,” and “not” were used to limit the keyword searches to relevant articles.

### Transition of Young Adults with Disabilities

The time and process of transition from secondary education to adult life is critical and greatly influences achievement of education and employment outcomes for young adults with disabilities. Growing interest in the area is evidenced by policy, legal mandates, and research efforts that support strengthening transition services offered to this population.

**The National Longitudinal Transition Study-2 (NLTS-2).** SRI International, funded by the U.S. Department of Education, conducted two significant longitudinal studies on secondary education outcomes of young adults with disabilities. A more complete picture of transition experiences of young adults with disabilities was clearly illustrated by the NLTS-2, which tracked students for up to eight years following completion of secondary education (Newman et al., 2011). The NLTS-2 analyzed the outcomes of young adults with disabilities following their exit from high school during

2001 through 2009, and included a sample size of 11,500 adolescents from across disability groups. The results of the study showed a wide variation in the level of participation in employment (total hours of work, skill utilization, types of job tasks, and employment benefits) for young adults diagnosed with disabilities. Factors such as race, gender, socioeconomic status, and severity of disability also influenced the levels of employment. From the sample, young adults diagnosed with developmental disabilities (including ASD) were ranked among the least participating in employment, even years after exiting secondary education (Wagner, Newman, Cameto, Levine, & Garza, 2006). This review analyzes transition of young adults with ASD by focusing on the NLTS-2 domains of employment status, preparation for work and productive engagement in work within the stipulated legal frameworks and mandates.

**Legal framework.** Legislation that empowers individuals with disabilities includes the Rehabilitation Act of 1973. When related to postsecondary services for young adults with disabilities, Section 504 of the Rehabilitation Act of 1973 prohibits post-secondary institutions from discriminating against individual with disabilities. Under this law, postsecondary institutions cannot limit the number of students with disabilities they admit to their programs; the law also mandates that vocational and placement services offer programs/activities to students with disabilities without discrimination (Yell, 2012). Later, in 1975, the Education for All Handicapped Children Act (EAHCA) required Least Restrictive Environments (LRE) and education programming that provided meaningful educational benefit for students with disabilities. The EAHCA built on the Rehabilitation Act of 1973 in that participation of individuals with disabilities moved beyond non-discriminatory inclusion to participation with meaningful benefit.

The EAHCA was changed to what is currently known as the Individuals with Disabilities Education Act (IDEA) in 1990 (Bowe, 1992; Yell, 2012).

In the same year, the Americans with Disabilities Act (ADA), offering “far-reaching civil rights” (p.7) and benefits for individuals with disabilities in the United States, was enacted (Bowe, 1992). The ADA mandates non-discrimination practices in regard to employment, provision of reasonable employment accommodations, and access to utilization of public facilities such as transportation and communication systems (Bowe, 1992; Yell, 2012).

Offering specific support to young adults transitioning from secondary education to employment, the School-to-Work Opportunities Act (STWOA) was enacted in 1994. Recognizing the importance of employment for quality-of-life improvement for youths exiting secondary education, the STWOA promoted collaborative partnerships among schools, employers, parents, and stakeholders relevant for promoting successful employment outcomes for youths with disabilities (Muthumbi, 2008). The law was later referred to as the Schools-to-Careers Act (Morningstar, Kleinhammer-Tramill, & Lattin, 1999).

The IDEA amendments in 1990 and 1997 included specific requirements for young adults diagnosed with disabilities to receive transition support as part of their special education services (Yell, Katsiyannis, & Bradley, 2011; Yell, 2012). Oertle and Trach (2007) credited the Carl Perkins Vocational and Technical Act of 1998, which was reauthorized in 2006, for holding schools “accountable for graduation, post-secondary, and employment outcomes of students enrolled in career and technical education among federally funded programs and agencies” (p. 36). In the same year, the Workforce

Investment Act (WIA) of 1998 was passed to improve inter-agency partnerships for school-to-work transition of young adults exiting secondary education (Muthumbi, 2008).

The current definition of *transition* regarding individuals with disabilities is guided by IDEA and was reauthorized in 2004 (Yell, 2012):

A coordinated set of activities for a child with a disability that (a) is designed to be a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including postsecondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation; and (b) is based on the individual child's needs, taking into account the child's strengths, preferences, and interest (IDEA Requirements; [34 CFR 300.43 (a)] [20 U.S.C. 1401(34)]).

**Legal mandates on school-to-work transition.** The laws that were passed, beginning with the Rehabilitation Act of 1973, provided quality services for young adults with disabilities to transition from school and increase their access to employment opportunities. Analyzing the impact of the school-to-work related laws on transition outcomes, McMahan and Baer's (2001) survey on IDEA transition policy compliance found that although the procedural mandates were followed, utilization of transition best practices did not occur regularly. The findings of the study identified that inadequate training in development, adoption, and implementation of transition best practices were a major challenge. For instance, the researchers noted that although students participated in transition plans to the Individualized Education Program (IEP) per the IDEA mandate,

they were not offered opportunities to practice the decision-making skills that demonstrate self-determination and self-advocacy.

Muthumbi (2008) evaluated the inter-agency collaboration initiatives on employment outcomes of youths with disabilities in New York. Her study revealed that establishing partnerships among key transition entities, including educators and parents, increased the capacity of different systems to enhance employability of young adults with disabilities. McMahan and Baer (2001) and Muthumbi (2008) emphasized that transition services are required to be based on students' needs and preferences. However, since the laws relating to transition and employment support do not prescribe means for achieving the requirements, schools made inadequate effort to ensure best transition outcomes. The studies indicate a need for schools to translate knowledge learned from research into practice, and needs for additional studies that identify those practices that fulfill the IDEA mandate.

### **Transition to Employment for Young Adults with ASD**

Employment is an important outcome of secondary education for young adults with disabilities, because it is assumed to be a gateway to independence and self-reliance (Test, Aspel, & Everson, 2006). However, Hendricks (2010) observed that most youth with ASD lagged behind in measures of quality of life, independent living, and employment following their exit from secondary education. In a national survey based on community rehabilitation providers, Boeltzig, Timmons, and Butterworth (2008) reported findings consistent with Hendricks (2010). They stated that individuals with developmental disabilities, including ASD, were mostly employed on a part-time basis, with over 50% of the young adults working less than 20 hours a week.

Shattuck et al. (2012) estimated that in 2012 alone, 50,000 adolescents with ASD in the U.S. turned 18 years old, and transitioned from secondary education to adult living. The Shattuck et al. (2012) study collected data from a nationally representative survey of parents, guardians, and young adults with ASD found that two years after exiting from secondary education, more than 50% of young adults did not participate in either employment or post-secondary education. When compared to other individuals with speech and language impairments, learning disabilities, and intellectual disabilities, the young adults with ASD ranked lowest on participation in employment outcomes. The transition from secondary education to adulthood, with specific regards to employment or postsecondary education, is considered to be of utmost importance to the parents and caregivers of these youth. Yet, the importance of the transition process emphasized throughout secondary education years does not translate to positive employment and education outcomes (Lee & Carter, 2012).

**Employment experiences of young adults with ASD.** Studies that specifically focused on young adults diagnosed with ASD offered a more in-depth assessment of the experiences that impede success to post-school employment experiences, and provided recommended strategies for addressing the employment needs of this population. A meta-analysis conducted by Hendricks (2010) revealed the following:

An estimated 50-75% of adults with ASD are unemployed. Even for individuals who are considered to be higher functioning, employment results are appalling. Adults [with ASD] experience underemployment, switch jobs frequently, have difficulty adjusting to new job settings, make less money than their counterparts,



and are much less likely to be employed than their typically developing peers.  
(p.127)

Migliore et al. (2012) observed that between 1995 and 2005, the number of individuals with ASD seeking Vocational Rehabilitation (VR) services tripled. Postsecondary transitional support offered by VR has been found necessary for individuals with ASD due to their unique needs. Newman et al. (2011) provided a report of outcomes of young adults with disabilities up to eight years following their exit from secondary education. The study found that only 63% of young adults with ASD held a job at some point during the eight years following their exit from secondary education. Those who were employed only worked a median of 24.1 hours per week, which is far from full-time employment (40 hours a week). After completing secondary education, individuals with ASD need support to achieve satisfactory employment.

Hendricks (2010) explained that individuals with ASD experience difficulties navigating and managing social interactions. They may have limitations in cognitive functioning, and may experience behavior difficulties such as “tantrums, aggression, self-injury, property destruction, [and] ritualistic behavior” (p.127). Additionally, individuals with ASD may have associated conditions, such as depression and anxiety, which can impede their successful employment. Such challenges render individuals with ASD more likely to be denied services, and providers of such services may consider that their behaviors are too severe to benefit from intervention. With support from agencies such as VR, many individuals with ASD can achieve success in employment (Hendricks, 2010).

Young adults with ASD who have had access to job placement services are four times more likely to be gainfully employed, when compared to their peers who have not

received job placement support (Migliore et al., 2012). Hendricks (2010) stated that the programs designed for individuals with ASD were expensive compared to programs for other disability groups. However, his meta-analysis showed that when provided a vocational program, participants' employment increased by 78%, and income levels increased by 443%. Similarly, Migliore et al. (2012) found that VR job-placement services were a strong predictor of employment.

### **Best Practices in Transition of Young Adults with Disabilities**

According to Lee and Carter (2012), components of school-to-work services that are proven to support young adults with ASD include seven key elements:

- Individualized, strengths-based transition services and supports;
- Positive career development and early work experiences;
- Meaningful collaboration and interagency involvement;
- Family supports and expectations;
- Fostering self-determination and independence;
- Social and employment-related skills instruction; and
- Established job-related supports. (p. 991)

When providers of supported employment were consulted to analyze their perceptions of skills, experiences, and information needs for transitioning youth, Moon, Simonsen, and Neubert (2011) identified self-management, advocacy skills, authentic work experiences, and meaningful assessment information as critical needs that likely enhance employment outcomes. Although using a small sample of only 12 participants, which limited generalization of the study's results, other research identified similar findings. Employment experiences during secondary education were found necessary to improve

employment outcomes for young adults with disabilities (Phelps & Hanley-Maxwell, 1997; Shandra & Hogan, 2008; Hendricks & Wehman, 2009). For individuals with ASD, Hendricks and Wehman (2009) concluded that interventions should include teaching young adults with ASD to develop behavior management strategies that help reduce challenging behavior (e.g., aggression, self-injury, property destruction, and pica), and matching work to individual preferences. This is consistent with the legal mandate of IDEA (2004) regarding the transition of youth with disabilities (Yell, 2012; Scarborough & Gilbride, 2006).

Test and Cease-Cook (2012) found that evidence-based predictors of positive employment outcomes were highly correlated with school-to-work transition programs that included career awareness, community experience, interagency collaboration, paid employment/work experience, work-study, and self-determination. Self-determination skills were identified as “choice-making, problem-solving, decision-making, goal-setting and attainment, self-regulation, self-awareness, and self-advocacy” (p. 35), and their research found that individuals with higher self-determination skills were more likely to be engaged in postsecondary employment than to be unemployed.

Certo and Luecking (2011) provided an added perspective on best practices associated with school-to-work transition services. From their reflective review of 40 years of experience with individuals with severe disabilities and their transition from school-to-work, they contended that students who were provided opportunities for employment prior to graduation from secondary education demonstrated increased evidence of their ability to work. Similarly, Blackorby and Wagner’s (1996) analysis of data from the NLTS-2 study reported that youth who secured early employment

opportunities were successful in the labor market. They also stated a need for research that examines which best practices are effective for youth with specific characteristics.

### **Models of School-to-Work Transition Programs**

This review focused on studies conducted on two program models that addressed self-determination as an outcome of school-to-work transition support: a work-based learning model (Versnel, Hutchison, Munby, & Chin, 2008), and a Project SEARCH (PS) model (Daston et al., 2012; Rutkowski et al., 2006; Wehman et al., 2012). The studies showed a relationship between programs that included opportunities for authentic work training and support for the development of self-determination.

**Work-based learning model.** A study by Versnel et al. (2008) focused on two adolescents, diagnosed with learning disabilities, participating in work-based learning. The adolescents were assessed to identify how authentic employment opportunities impacted the students' success and self-determination. The researchers utilized qualitative approaches (interviews and detailed observations) to assess the students using self-determination, workplace learning, and negotiation of accommodations for workers with disabilities. Based on self-determination analytical framework, the study revealed that learning disabilities created potential challenges for students in their negotiation for accommodations in their work environments, which may impede their job success. The researchers also found that when work opportunities were provided to the students, an authentic context for developing self-determination skills was created. These findings were consistent with Ryan and Deci's (2000), in that supported environments provide a feeling of competence and relatedness for increased potential of developing individuals' self-determination.

**Project SEARCH (PS) model.** Daston et al. (2012) proposed a model of transition that was employer-driven, and a demand-side model of school-to-work transition, where instruction and practice were provided within the employment site. The program was referred to as PS. The researchers explained that PS was designed to realize improved transition outcomes, as compared to the traditional classroom model, the work-study model, the transition-to-community model, and the adapted career and technical model. They suggested that these models lacked alignment to employer needs, because their priorities were guided by the education system's prescriptions of what should be learned. For instance, daily routines and special events were reported to meet schools' needs, but they lacked accommodations for businesses' needs. The authors concluded that most transition programs only offered minimal exposure to the work environment, and career training was deemed irrelevant if, after graduation, students were unable to find jobs to match the skills learned from the program.

In the Rutkowski et al. (2006) study, participants in the PS program received approximately 20 hours of job training and exposure per week, and approaches used positive, systemic changes in workplaces where attitudes changed to accept individuals with disabilities. During program participation, students were provided with two or three employment experiences, enhancing students' employability and ensuring realization of best practices recommended by IDEA. The PS model offered the preferred context and support for the development of self-determination by providing authentic work experiences with real co-workers and job tasks, which are consistent with what Versnel et al. (2008) observed as successful in their school-to-work transition model.

*Young Adults with ASD Served by PS.* Addressing the needs of young adults with ASD within the PS school-to-work transition model, Wehman et al. (2012) examined two students with ASD's participation in a PS program. In addition to the goals stated in their IEPs, the students were provided support for their goals of gaining competitive employment. Components of their support included applied behavior analysis (ABA) and support strategies that were supervised by an ABA specialist. The ABA support provided a collaborative consultation among staff members in the PS, consistent structure, visual supports, self-monitoring strategies, and intensive instruction and monitoring of students' success. By the end of the internship, both students were gainfully employed for 20 hours a week, and receiving US\$9.14 per hour (c.f. p. 152).

A 2013 study by Wehman et al. provided the first randomized clinical study to analyze the employment outcome of youth with ASD using the PS model. The researchers designed a school-to-work transition plan that included ASD supports to the PS model. Forty students were randomly assigned to either a treatment or to a control school-to-work transition program. Students or their representatives were required to complete a detailed application for admission to the program, attend interviews, and meet the general eligibility criteria for PS, and the study did not exclude students with a history of challenging behaviors or with co-morbid medical, developmental, or psychiatric diagnoses. The treatment group received:

- Regular behavioral consultation with a behavior analysis,
- Specialized structure and schedules designed to meet the needs of youth with ASD in internship rotations,

- Enhanced behavioral definition of workplace social communication, idioms, and behavioral expectations,
- Use of ASD specific visual supports,
- Use of self-monitoring reinforcement programs,
- Intensive social skills instruction through role play and behavioral practice, and
- Use of applied behavioral analysis instructional techniques to ensure student success (p. 489).

By the end of the nine months of participation in the program, 87% of the students in the treatment group had obtained meaningful employment. None of the students employed in the program were placed in entry-level service jobs; 12 to 24 months into their employment the students maintained competitive employment and had increased earnings (c.f. 497). The authors attribute the program's success to interagency collaboration and shared funding that allowed the students in the treatment group to receive "intensive immersion in the workplace," monthly and daily team meetings, continued training for staff members who worked with the students, monitoring of fidelity of implementation by an independent team, as well as vested interest from the business site. Additionally, each student participant in the treatment group had individualized instructional and behavioral plans. Specific job skills were taught to ensure mastery, fluency, and generalization of the skills.

It was demonstrated from the four studies (Wehman et al., 2012; Wehman et al., 2013; Rutkowski et al., 2006; Vesnel et al., 2008) discussed that students with disabilities, including ASD, can have an increased potential to become self-determined.

The studies by Wehman et al. (2012), Wehman et al. (2013), and Rutkowski et al. (2006) indicated the benefits of the PS program on young adults with developmental disabilities, despite reports that only 6% of individuals with ASD participate in competitive employment (Wehman et al., 2012). The study by Wehman et al. (2013) revealed that young adults diagnosed with ASD can achieve gainful employment when provided appropriate support within PS context. In summary, when employment outcomes strongly associate with self-determination (Wehmeyer & Smith, 2012), it is appropriate to examine how participation in PS impacts changes in self-determination of young adults with ASD. The PS model allows participating students to receive appropriate support relevant for the workplace, thereby increasing the opportunities for positive changes in self-determination.

***Benefits of Project SEARCH in supporting Self-Determination.*** In order for school-to-work transition programs to achieve positive employment outcomes, Doren et al. (2012) suggested that such programs should have key features, including “a youth-centered approach, [engagement] in professional collaborations, and [establishment of] a relationship between youth and a close, caring professional” (p. 11). PS offers these features by including the school system, employers, and a vocational rehabilitation system to bring resources together. When students are enrolled in the program, job coaches, program instructors, employment supervisors, and vocational rehabilitation counselors work together to develop a program that is based on the young adults’ interests, strengths, and needs. Muller and VanGilder (2014) further support that the PS model offers best practices in the field of transition. The transition model allows students to acquire appropriate work skills (also referred to as soft skills) within the relevant



context, thereby making learning meaningful. The work opportunities received are authentic and provide solid foundations for building work skills that support long-term employment of young adults with significant developmental disabilities (Rutkowski et al., 2006). In their study, Muller and VanGilder (2014) observed that students (with learning disabilities, cognitive impairments, or ASD) participating in a PS model had demonstrated increased job readiness and employment rates. Among the benefits of their participation, the qualitative data collected from the study indicated that the students had shown evidence of increased independence and self-advocacy skills. When students are supported to be independent and experience success in varied internship settings, there is increased opportunity for enhancing the capacity to be self-determined.

The studies explored indicate a gap in existing literature regarding best practices that support self-determination of young adults with ASD during school-to-work transition. There is need for more evidence-based support of the benefits of PS, specifically in the areas of quality of life and employment (Rutkowski et al., 2006, p.93) and the teaching of self-management and self-determination to young adults with ASD (Wehman et al., 2012, p. 145).

### **Self-Determination Skills as Necessary to Employment Success**

A student's participation in educational planning and post-school goal setting at a level consistent with his/her interest and capabilities requires the development of a strong sense of self-determination. In 1993, the U.S. Office of Special Education Programs described self-determination as "choosing and enacting choices to control one's own needs, interests and values" (Kochhar-Bryant and Greene, 2009, p. 12). Extending the definition of self-determination, Martin, Marshall, and Maxson (1993) explained that

self-determination skills also included problem solving, adaptability, choice and decision making, self-awareness, self-regulation, self-efficacy expectations, and clarity of personal vision. Young adults with disabilities experience challenges in exercising self-determination skills (Kochhar-Bryant & Greene, 2009). Wehmeyer (2005) explained that when acting on the basis of these skills and attitudes, individuals demonstrate greater ability to control their lives and assume the roles of successful adults. In the context of students with disabilities, self-determination and self-advocacy often relate to the decision-making roles regarding education, support services, and short- and long-term transition goals.

Increased self-determination and self-advocacy are directly correlated with positive school-to-work transition outcomes and improved quality of life (McDougall, Evans, & Baldwin, 2010). Whitney-Thomas and Moloney (2001) conducted a comparative analysis of adolescents with and without disabilities to show how contextual factors influenced their development of self-determination. They considered self-determination as a cognitive process that develops on a continuum, as individuals gain the ability to think and plan for future events, form a sense of personal identity, and develop cognitive capacities that support decision making and introspection. They stated that development of self-determination was dependent on contextual factors present within individuals' environments, and identified family and schools as factors that may foster or challenge individuals' identity formation. Drawing from a sample of 1,414 students in grades 9-12, their study included a series of interviews and observations of 11 students, seeking to understand the students' self-definitions and struggles. The findings of the study grouped students into two categories: those with a low sense of self-

definition and those with a high sense of self-definition. Students with low senses of self-definition had difficulties describing themselves, reported to have learned about themselves through difficult situations, had no concrete plans or visions for their future, and had all been diagnosed with disabilities. Comparatively, students with high senses of self-definition, of which 33% had disabilities, eloquently reported to have learned about themselves through self-reflection, worldly experiences, opportunities for independence, decisions made via conversations with parents during early adolescence, and watching and talking to peers. Additionally, they expressed long-term visions and concrete plans for their immediate and long-term future, and reported having strong family networks, positive relationships, and satisfaction with school and work (if they were employed). The students' social contexts facilitated their ability to become self-determined. The findings from the study argued that young adults, regardless of ability, have the potential to become self-determined, if provided appropriate contextual support.

### **Theories of Self-Determination**

Deci and Ryan (1985) proposed a theory of self-determination that explained self-determination in the context of intrinsic and extrinsic motivational theory. Building upon their theory were Wehmeyer et al. (2003), who applied its principles to individuals with severe disabilities by proposing a theory and model applicable particularly to individuals with intellectual disabilities. Both perspectives stipulated that self-determined behavior was regulated by choice, rather than by actions resulting from control or external coercion (Deci & Ryan, 1985; Wehmeyer et al., 2003).

**Self-determination as a motivational theory.** Supported by Deci, Vallerand, Palletier, and Ryan (1991), essential elements of self-determined behavior include both

intrinsic and extrinsic motivation. Human motivation, as described by Althof and Berkowitz (2013) and Ryan and Deci (2000), is driven by the need to experience autonomy, competence, and relatedness. While intrinsic motivation may be observed to have a direct impact on self-determination, the authors emphasized that varying levels of extrinsic motivation and human motivation impact self-determination.

Ryan and Deci (2000) identified four types of extrinsic motivation, each having different impacts on self-determination: *external* regulation, *introjected* regulation, *identified* regulation, and *integrated* regulation. External regulation had the least impact on self-determination, because it was dependent on behavior happening as a result of external contingencies. Introjected regulation was determined to regulate behavior through coercion, and not reflect true choice. Identified regulation was determined to motivate an individual to act in response to personal values, and hence represents some self-determination. Integrated regulation, similar to intrinsic motivation, was determined as motivating one to act when placing high priority or value of an action. Integrated regulation was determined to direct behavior deemed fully self-determined. The authors summarized that self-determination behavior is volitional and autonomous in nature.

**Self-determination as a functional theory.** According to Wehmeyer et al. (2003) and Wehmeyer (1999), self-determination develops across a person's lifespan, and is reflected in an individual's attitudes as a causal agent and to act volitionally. Wehmeyer (1999) described self-determined behavior as intentional and purposeful, aimed at achieving an end, and influencing the future and destiny of the one taking action. Related to one's quality of life, the core dimensions of which are "(a) emotional well-being, (b) interpersonal relations, (c) material well-being, (d) personal development, (e) physical

well-being, (f) self-determination, (g) social inclusion, and (h) rights” (p. 56), self-determined behavior is realized through autonomous means, excluding external influence. Both studies concur on the four essential characteristics of self-determined behavior: *behavior autonomy*, *self-regulation*, *psychological empowerment*, and *self-realization*. Wehmeyer (1999) defined each of the four essential characteristics of self-determination as follows:

- Behavior autonomy related to the “the degree to which an individual uses personal preferences and interests to choose to engage in such activities;”
- Self-regulated behavior involved “a complex response system that enables individuals to examine their environments and their repertoires of responses for coping...to make decisions about how to act, to act, to evaluate the desirability of the outcomes of the action, and to revise their plans as necessary;”
- Psychological empowerment entailed an individual’s perceived locus of control versus the actual reality, and leads to social inclusion and community involvement;
- Self-realization involved awareness of personal limitations and strengths that lead towards self-reflective practice beneficial for social adjustment (p. 57).

Similar to the Ryan and Deci (2000) findings, Wehmeyer et al. (2003) stated that self-determination was fostered or facilitated by contextual factors:

When opportunities for self-determination and support for the exercise of personal control are consistently available across environments, children, youth and adults have the chance to acquire and refine those capacities necessary to take an age-appropriate degree of control over their lives (Wehmeyer et al., 2003, p. 77-78).

Shogren (2013) examined self-determination using a social-ecological lens to understand contextual factors that impact the development and expression of it, as it relates to individuals with disabilities in schools. The meta-analysis identified that self-determination develops over time and is influenced by individual, family and school characteristics. While a disability label may impact the level at which a person acts self-determined, Shogren (2013) warns against allowing the one factor to mask other intervening variables that may equally influence self-determination. The author states that a comprehensive perspective on self-determination encompasses individual factors such as age, gender, ethnicity, culture, family factors and social networks; school factors such as teacher characteristics, school program characteristics; community factors; cultural norms; and public policy.

Consistent with the Shogren (2013) study, Deci and Ryan (1985) suggested that self-determined behavior is enhanced in social contexts that support choice and opportunity for self-direction. According to the authors, undermining the development of self-determination were social contexts that provided negative feedback, and tangible rewards that were contingent upon task performance. Feelings of autonomy, competence, and relatedness were frustrated when control techniques, such as threats, deadlines, directives, and competitive pressure, were used. An educational environment that promotes self-determined behavior should offer students an understanding of the value of their learning activities, an opportunity for making choices with minimal or no pressure or coercion, and a means to include students' input (Ryan & Deci, 2000; Shogren, 2013).

**Self-determination and individuals with disabilities.** Wehmeyer (2005) stated that research pertaining to self-determination, particularly concerning individuals with

severe disabilities, is inadequate. He argued that personal ability, opportunities, and the perception of others limit self-determination skills for individuals with severe disabilities. They can express self-determined preferences, participate in problem solving and decision making, and act as self-advocates. Wehmeyer (2005) concluded that support for individuals with severe disabilities' development of self-determination could be provided by offering opportunities for student involvement in education planning meetings, provision of supports that are self-directed (including technology that augments capacity), effective communication instruction, and person-centered planning.

**Predictors of self-determination of young adults with disabilities.** Self-determination is positively correlated with satisfactory employment and education outcomes for students with disabilities (Pierson, Carter, Lane, & Glaser, 2008). Examining the contributions of students' social and behavioral skills to self-determination, Pierson et al. (2008) conducted a study of 90 secondary education students diagnosed with emotional disturbances and learning disabilities. Per their study, the researchers operationally defined self-determination as involving one's "interests, needs, and abilities; setting goals that reflect those needs and interests; taking steps to reach these goals; and adjusting actions after evaluating one's own progress" (p. 120). They found that social skills were strong predictors of self-determination. Using the AIR Self-Determination Scale, they found that students with stronger social skills were viewed as having a greater capacity to be self-determining ( $r = .77$ ,  $p < .0001$ ), and suggested that in order to enhance the development of self-determination, instruction of such skills should be incorporated in transition services and support domains (Pierson et al., 2008).

Lack of adequate instruction of self-determination skills can have detrimental effects on the ability of young adults with disabilities exercising their rights. Illustrated in the Trainor (2007) qualitative study, perceptions of adolescent girls with learning disabilities regarding their self-determination and postsecondary transition planning were examined. Although the participants indicated awareness of and competence in self-determination, the study found that female adolescents had inadequately developed component attitudes, skills, and knowledge to exercise self-determination skills. In addition, the participants made choices based on their self-knowledge and values, even when their values were not common to school requirements. This study illustrated that deliberate instruction and support in self-determination is critical if positive transition outcomes are to be achieved.

Similar to the findings of Trainor (2007) and Pierson et al. (2008), Lee and Carter (2012) found that instruction, knowledge, and dispositional factors were strong predictors of self-determination in students with disabilities. The authors measured students' self-determination using the ASDS and the AIR Self-Determination Scale in a study of 168 middle and high school students who required special education. Students with ASD represented 4.2% of the sample. Using multiple-regression analysis, the study found self-efficacy to be a significant predictor of high self-determination scores. Also, students' transition knowledge and skills predicted their post-intervention, self-determination score. The findings supported that when students are given opportunities to participate in school-to-work transition planning, they become more involved in their own transition, while enhancing their self-determination skills. Of importance to note from the Lee and Carter (2012) study were that personal variables, such as age, Intelligence Quotient (IQ),



and gender did not predict levels of acquired self-determination. However, when male and female students with disabilities were compared, the female students had higher degrees of self-determination compared to the male students. It is evident that predictors of self-determination for young adults with disabilities include both instruction and availability of authentic opportunities, such as work experience.

**Self-determination and young adults with ASD.** Fullerton and Coyne (1999) conducted an evaluation of a two-year program that encouraged self-determination for young adults with ASD. The program's instructional components included units on self-knowledge regarding the impact of autism, communication, life planning and goal setting, visual organization, and social information. Its goals were to increase social understanding, self-awareness, and self-directed actions, all of which the authors considered important for the development of self-determination. Conducting pre- and post-intervention interviews of 23 participants, the researchers found that 67% demonstrated improvement in their ability to plan the steps necessary to accomplish their goals, and about 37% could engage in self-directed actions toward their goals. The program participants valued knowledge about their disability and about how others with similar disorders experienced life. The authors found that for young adults with ASD, self-awareness and learning coping skills for their sensory, cognitive, and social deficits were critical to their development of self-determination.

Examining practices that support the development of self-determination of young adults with ASD, Wehmeyer et al. (2010) provided insight to the challenges that may impede, and those that support, the development of such. They recognized *direct instruction* as the best means to teach self-determination skills to students with ASD, but

warned that although it may be effective, individuals with ASD may lack the cognitive ability to utilize and transfer the knowledge of their skills beyond rote learning. For instance, when learning goal setting and attainment, which are critical self-determination skills, individuals with ASD may experience difficulties in simultaneously performing multiple goal-directed activities, because they find sequential goal-directed behavior easier to follow. In real-life settings, certain activities may require multi-tasking, hence requiring multiple, goal-directed efforts to accomplish those activities. To address this deficit, Wehmeyer et al. (2010) suggested using task analysis, where complex goals are simplified or broken down to smaller sub-goals that require fewer steps. They also suggested the following strategies:

- Providing opportunities for choice-making, by showing students how to problem-solve and make decisions using the scientific approach;
- Teaching self-regulation and student-directed learning skills through the use of self-management skills that call for “self-observation, self-evaluation, self-reinforcement, and self-instruction” (p. 479);
- Teaching self-advocacy, by providing opportunities to practice assertiveness, and effective communication through verbal, written, and nonverbal forms; and
- Promoting self-awareness and self-knowledge of strengths, abilities, unique learning and support needs, and limitations.

### **Summary**

The literature explored for this review examined the needs and best practices that support transition from secondary education to adult living for youths with disabilities. A solid legal framework exists to emphasize the need for quality transition support, to guide

areas when providing it, and to promote standards of expectations for educators and agencies that support young adults with disabilities. Several laws have been created, amended, and/or reauthorized over the past four decades to ensure that young adults with disabilities realize and are afforded their right to education and employment support. Studies included in this review consistently showed that young adults with developmental disabilities such as autism continue to experience high rates of unemployment, under-employment, and poverty. The literature further indicated that lack of opportunities to practice decision-making impede age-appropriate self-determination and self-advocacy skills. Young adults with a diagnosis of ASD face limitations to receiving and benefiting from school-to-work transition programs, because their disorder often involves deficits in communication, socialization, and behavior that support development of self-determination skills.

The research reviewed for this study further revealed that program interventions based on best practices in school-to-work transition have a strong correlation to successful education and employment outcomes for youth served in these programs. For instance, studies suggest that a young adult with ASD who receives school-to-work intervention can increase his or her chance of gaining employment fourfold. PS is an example of a school-to-work transition program that offers authentic work experiences with increased opportunities that nurture the development of self-determination. Other literature reviewed for this study also revealed that when provided with authentic work experiences, young adults with ASD are provided with real-life scripts that guide development of critical, work-appropriate communication, socialization, and behavior. When such skills are developed and nurtured, students feel successful, and they increase

their chances of gaining employment. Information regarding specific practices that promote development of self-determination specific to the population of individuals with ASD was identified as inadequate. A study to examine factors that support or impede changes in self-determination skills of young adults diagnosed with ASD would, therefore, serve to broaden and deepen the understanding of best practices that effectively support this population.

### **Chapter 3: Methods**

Chapter 3 presents the study's methodology, which includes the research design, sample selection, a description of setting and participants, data collection and instrumentation, and data analysis. Further, this chapter addresses quality standards (validity and reliability) and ethical considerations. Finally, it includes a reflection on the researcher's role, as the researcher's guiding assumptions might involve potential biases that could affect both data collection and data interpretation (Merriam, 2009).

#### **Study Design**

Examining factors that influenced positive changes in self-determination was considered a complex social phenomenon requiring in-depth exploration. A qualitative research design was deemed appropriate for the study, because it allowed flexibility and responsiveness to developing data during the research (Merriam, 2009). To adequately address the research questions, a case study approach was utilized to offer a systematic, in-depth analysis of the complex issues that impacted self-determination of the young adults in the transition program (Merriam, 2009; Stake, 2005; Yin, 1994).

**The Case Study Approach.** Recognizing that individuals with ASD are impacted by the disorder in various ways (Hendricks, 2010; Wehman et al., 2009), a case study approach was selected. This approach helped to examine how the unique experiences of the five young adults were interpreted from the study participants' perspectives as impacting the changes in self-determination. An advantage to the use of case studies was explained by Merriam (2009) as "a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon." Further, because it is anchored in real life situations, "the case study

results in a rich and holistic account of a phenomenon” (pp. 50-51). Additionally, case study approaches allow for utilization of multiple methods of inquiry, such as interviews, observations, and document analysis (Marshall & Rossman, 2011; Yin, 1994) and are, therefore, deemed appropriate for this study.

Stake (2005) identified intrinsic and instrumental cases study choices commonly used in case study research. An intrinsic case study is pre-selected and is identified based on the unique interest or obligation the researcher may have in studying it; while the instrumental case study allows the researcher to select information-rich cases with intention to gain understanding of a broader issue by examining individual or collective cases (c.f. Stake, 2005, pp. 3-4). The intent of the present study was to offer dual perspectives (both individual and collective) that explained underlying reasons that support or impede positive changes in self-determination of the youths. The study aimed to identify unique and common contextual factors impacting self-determination by examining the participants as instrumental cases. Multiple inquiry techniques helped to examine the breadth and depth of each young adult’s journey towards self-determination (Merriam, 2009; Stake, 2005; Yin, 1994). The researcher utilized data on the student interns’ individual experiences to identify similar ways in which their self-determination was influenced during participation in the transition program (Stake, 2005). By conducting a comparison of both unique and shared experiences of the five young adults, the study provided a global picture of factors that impact self-determination of this group (Merriam, 2009; Stake, 2005).

## **Participants**

This study focused on five young adults aged 18 to 21, diagnosed with ASD and participating in PS during the August 2012-June 2013 school year. The inclusion criteria for the student participants required that they be enrolled in PS and have a diagnosis of ASD. The presence of other associative conditions and behavior challenges did not affect their participation. There were six young adults enrolled in the program at the time of data collection. All students volunteered to participate in the study, as evidenced by parent consent and personal assent. However, during data collection and transcription of the interviews, the researcher noted that one student, Travis, did not have a diagnosis of ASD. This was confirmed during document analysis; Travis's documents clearly indicated that he did not have an ASD diagnosis. In order to maintain a focus on young adults with a diagnosis of ASD, Travis's archival data, field observations, and parent interviews were removed, and he was dropped from the study. Each of the young adults, also known as student interns, was given a dissertation name (pseudonym) in order to provide ease of reading and protect their personal identity.

Also included as participants, and serving as key informants in the study, were the young adults' parents or guardians. It was not necessary for both parents to be present for the interview. Although five parents consented to participate in the study, only four were available to participate in the interview. Only foster or biological parents of the student interns participated in the study. One of the students (Ted, who will be described in Chapter 4) had lived in a group home for three quarters of his participation in PS, however, by the time the study was approved, he had moved in with his biological parents. In Ted's case, only the biological parent was asked to participate to gain the parental perspective. The

group home guardian was not asked to participate because the biological mother was considered the legal guardian. Another parent (Tim's mother, Ms. Welako) provided consent, but was unavailable to participate despite multiple attempts to schedule an appointment. Tina's caseworker, also a legal guardian, granted her foster mother, Ms. Dorcas, permission to participate and speak on the parents' behalf.

The project staff members were also included in the study. These were classified as job coaches and program leadership. Five job coaches volunteered to participate, and the program leadership was comprised of a therapist, a job coaching director, a job developer, and the PS instructor. The study also included the perspectives of people who worked with the students in the various departments that offered internship positions. The individuals who worked with the students were referred to as internship supervisors or mentors. They were classified as supervisors because they provided daily work-related instruction, supervision, and mentorship to the students. Table 1 below summarizes the roles of the participants included in the study.

**Table 1: Summary of Participants in the Study**

<b>Participant Grouping</b>	<b>Dissertation Name</b>	<b>#of Interviews</b>	<b>Role in Project SEARCH</b>
<b>Student Interns (5)</b>	Tina	1	Participated in four internship rotations (food service, custodial, office help, computer and technology)
	Ted	1	Participated in three internship rotations (two custodial and food service)
	Tom	1	Participated in three light custodial internships (dusting rooms and picking trash)
	Tim	1	Participated in two custodial and laundry internships
	Terry	1	Participated in hospitality, office help and laundry internships (operating laundry machines, folding towels and clothing)
<b>Job Coaches (5)</b>	Charity	2	Worked with Tina and Terry
	Samantha	1	Worked with Tina and Terry
	Genevieve	2	Worked with Tim and Terry
	Morris	2	Worked with Ted
	Mayo	2	Worked with Tina, Ted, and Tom
<b>Project</b>	Sheila	5	Instructor worked with all students on record keeping, instructional planning,



<b>SEARCH</b>			IEP meetings, meeting with other agencies, and oversaw the program activities
<b>Leadership</b>			
<b>(4)</b>	Dee	5	Job coach trainer/director - facilitated setting up of internships, conducted job simulation for the students, assessment, task analysis and initial support for the interns during first week internship rotations. She did monitoring of internships, communicated with supervisors and mentors, and monitored job-coaching notes/reports from all the job coaches
	Jacobi	2	Job developer - was the outside link between the student interns and prospective employers in the community. He was responsible for job placement for the students following PS graduation.
	Gomez	1	Therapist, qualified social worker, conducted group therapy sessions with the students at least once or twice weekly
<b>Internship Supervisors and Mentors</b>	Gabriel	1	Supervisor/mentor of the food service internship worked with Tina and Ted
<b>(11)</b>	Jason	1	Mentor in the computer and technology internship worked with Tina
	Tammy and Kelly	1	Supervisor/mentor for the office internship, worked with Tina and Terry
	June	1	Supervisor/mentor for a custodial internship, worked with Tim and Tom
	Donaria	1	Supervisor/mentor for the food service internship, worked with Tina and Ted
	Jeke	1	Supervisor/mentor for a custodial internship, worked with Ted
	Dotty	1	Supervisor/mentor for a custodial internship, worked with Tina
	Angelina	1	Supervisor/mentor for the computer and technology, worked with Tina
	Amy	1	Supervisor/mentor for the computer and technology, worked with Tina
	Karim	1	Supervisor/mentor for a custodial internship worked with Tom and Ted
<b>Parents</b>	Kanisha	1	Tom's mother
<b>(5)</b>	Carrie	1	Ted's mother
	Dorcas	1	Tina's foster mother
	Florence	1	Terry's mother
	Welako	0	Tim's mother (consented, but later did not have time to participate)
<b>Total Participants</b>		30	

### Sampling

The inductive and iterative nature of qualitative designs such as this study deemed purposeful sampling techniques as appropriate (Marshall, 1996, p. 523; Marshall & Rossman, 2011). Purposeful sampling was used in this study to gain access to people, events, times, locations, and objects that were relevant to the study (Coyne, 1997), and is defined as a strategy for selecting “the most productive sample to answer the research questions” (Marshall, 1996, p. 523). It is selective, is guided by the aims of the research, and seeks to include what Coyne (1997) refers to as “information-rich cases” (p. 624). Such cases may not be limited to the above-stated factors, but may also include

conditions that show variations of the phenomenon being studied (Corbin & Strauss, 1990). For the present study, purposeful sampling was used to gain insight from the most knowledgeable people. The sampling approach also guided selection of relevant resources (documents) to be reviewed and included for the study.

In order to ensure rigor and “richness” of data collected, theoretical sampling followed the initial purposeful sampling (Coyne, 1997). According to Marshall (1996), theoretical sampling is a technique that “necessitates building interpretative theories from the emerging data and selecting a new sample to examine and elaborate on this theory” (p. 523). Coyne (1997) defined theoretical sampling as “the process of data collection where the researcher simultaneously collects, codes, and analyzes the data in order to decide what data to collect next” (p. 625). Theoretical sampling is a form of purposeful sampling, and has its roots in *grounded theory*. The approach helped to facilitate sampling on theoretical grounds (Glaser & Strauss, 1967), as will be described shortly. It also provided a means for data collection that led toward a rigorous and systematic development of categories, for this particular study (Coyne, 1997).

Probability sampling strategies, such as random sampling, were not suitable for this study, because the nature of the study did not meet the assumptions required for random sampling. For instance, random sampling seeks to draw samples that are representative of a population by including large sample sizes (Gall, Gall, & Borg, 2007); however, this was not possible for this study, because only five young adults with ASD were the focus of the study. Marshall (1996) stated that, “there is no evidence that the values, beliefs, and attitudes that form the core of qualitative investigation are normally distributed, making the probability approach inappropriate” (p. 523).

### **The Study Setting**

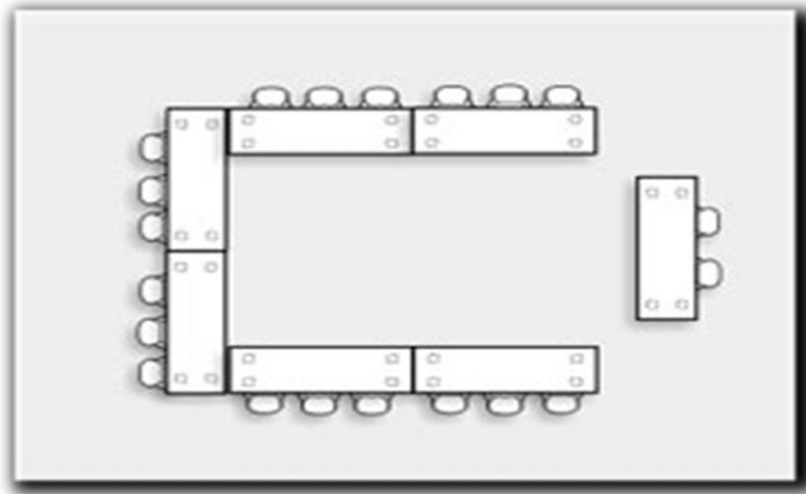
The study was conducted in a Midwestern metropolitan area. The program presented in this study was a joint collaboration between a university and private agency. At the time of the study (June 2013), only three such programs nationwide focused on the ASD population. The university-based PS recruited student interns through the private agency's Purchase of Service, a therapeutic program, which offered school districts in the surrounding area behavior support and as-needed therapy for students with challenging behaviors. On the first day of the data collection, the researcher conducted a field observation as an entry point to the study. Conducting a systematic field observation helped to document the physical setting that formed the base of the study.

**The Physical Setting.** The program was situated in a basement area of the University Library. Mainly students, faculty, and staff utilized the library. As such, the library location was a high-traffic area; PS student interns were meeting familiar and unfamiliar faces every day. In contrast, the PS Instructional Center (IC), located in the library's basement, was not frequented like the library (See Appendix A, Document One with images of the physical location of PS). An elevator and a stairway provided access from the library to the basement area. The entrance to the basement level was a long hallway that branched into two; one led to a restroom and the other branched off to a classroom area. PS signposts with direction pointers were displayed from the library entrance through the route that the student interns used to access the IC in the basement area.

Elementary-age children's artwork was also displayed on the walls of the hallway leading to the IC. A reading clinic for grade-school-level students from the community

schools, a teacher resource center, and a number of classrooms utilized by the university students were situated nearby. The IC was the largest classroom in the basement area.

At the center of the classroom, desks connected to form a “U” shape, as illustrated in Figure 1 below.



**Figure 1: An Illustration of the Project SEARCH classroom set-up**

The IC chairs were different colors (See Appendix A, Document I); the student interns were assigned to orange chairs, and the staff members took the remaining chairs.

Informational poster displays guided the eye around the room. For example, one poster, a duty chart, displayed students’ specific job responsibilities (vacuuming, emptying trash, taking lunch orders, and distributing breakfast). An adjacent wall exhibited two large bulletin boards displaying 3” by 5” cards clustered in five groups: interpersonal relationships, personal character, job skills, independent living, and values. A closer look at the cards indicated statements phrased as personal goals in various handwriting styles (Appendix A, Document 1). Ms. Sheila stated that these cards were used as a “team building” activity at the PS program outset. She said, “...the first couple

of days we designed to develop trust and partnership building activities with the instructional and job development teams with the interns...” (Ms. Sheila, T35:153-156).

A video camera, a chalkboard, and a projector screen equipped the periphery of the IC. Students were seated around the “U” tables, facing the instructor, Ms. Sheila. She faced the students and had a computer screen and an Android device on her desk. (Field notes #1, June 6, 2013).

**The Project SEARCH Daily Routines and Instruction.** The daily routines of PS were guided by the program’s schedule, included in Appendix A, Document 2. Since the IC was located in the basement of a library, the job coaches or any adult staff in the program walked to the entrance to meet students every morning. The students were dropped off at a curb located outside the library building, either by school bus or private transportation provided by parents/guardians. Only one student intern arrived on public transportation and walked from the train station to the IC, accompanied by his mother. PS staff walked with the students who were dropped off curbside to the IC, and back again at the end of the day, due to the critical nature of the adult-to-student pairing. The presence of the adult staff was important to support the students, as Ms. Sheila stated during one interview:

Our program has an interesting start to the day. Two of the [job coaches] arrive a little earlier than the rest of us, as some of the interns arrive at unanticipated times (which worked out well when a new intern joined our group close to the close of the regular session and arrives almost an hour prior to everyone else) on the local Metro Link system [Train] on which he travels with his mother in the AM.... One of the

advisors goes to observe for two of the interns since they have had male/ female issues in the past. (T35:30-38)

When all students arrived, breakfast was served as the first activity of the day. Then, students sat to participate in instructional activities related to employment. The instructional content of PS was guided by the PS curriculum goals outlined in the program's daily routine (Appendix A, Document 2). These goals were team building, familiarity with the workplace environment, workplace safety, technology, social skills/communication, interviewing skills, presentation skills, money management, health and wellness, résumé and career passport, job search skills, and keeping a job. The students were also assessed on skills and interests; daily performance in communication, self-presentation, behavior, and social skills; and self-determination skills (Ms. Sheila, June 2013). The Arc's Self-Determination Scale (ASDS) was used to assess self-determination skills. The application of the ASDS and other assessments used in the program were limited for this study.

During instruction periods, the job coaches provided one-on-one guidance on instructional activities, and helped with administration of specific assessments. This was done because the students' academic skills were below grade level and varied from one student to another. Ms. Sheila, the instructor, stated that "...because these kids are considered to have the severe form of autism that also impedes their cognitive functioning. I think the highest reading ability that we have is at 3.2 grade [third grade reading] level..." (T20:L110-112). The one-on-one instructional support was critical to ensure that the students benefited from instruction, and that assessments were administered accordingly.

Students went to their assigned internship sites for job training after the morning instruction session (see program schedule in Appendix A, Document 2). Each student intern

had a minimum of two internships. The job coaches provided one-on-one support for each student during job training. They monitored student behavior, provided guidance on job skills, and supported the internship supervisors with the students' job training.

During data collection, some internship sites had closed for the summer break (June-July). The custodial internship sites where Tina and Tim worked were open. Ted and Tom also dusted tables and furniture in the computer lab and surrounding areas, and participated in picking up trash outside the university campus (light custodial duties). Terry's internship was set up in the IC, where she shredded paper from the administrative office.

**Types of internships provided by the host institution.** The internships offered students job training in an administrative office, computer and technology, food service, hospitality, indoor and outdoor custodial services, and laundry services. The internships required the student interns to perform different types of skills and work responsibilities. Pseudonyms have been used to identify names of the internship supervisors/mentors.

***Administrative office internship.*** The work assignment in this internship required shredding of confidential documents and scanning of articles. The responsibilities for these two tasks entailed setting up a work station with a trash can, connecting the shredding machine, and ensuring a tidy work space. The work also required plugging and unplugging of the shredding machine, and general operation of the machine. Tina and Terry were assigned to this internship; however, only Tina participated in scanning of journal articles. Terry's work was limited to shredding. Ms. Tammy and Ms. Kelly were supervisors at this internship.

***Computer and technology internship.*** The job requirements at this site combined data entry, scanning of documents, cleaning of machines, and greeting clients

at the front desk. In some cases, the student intern was required to show clients how to use machines at the site. Only Tina participated in this internship. Ms. Angelina was the supervisor, while Ms. Amy and Mr. Jason were mentors at this internship.

***Food service internship.*** Ted and Tina worked in the food service internship. The work responsibilities required receiving dirty dishes from customers, scraping the leftover food into the trash can, stacking dishes, and taking the dirty dishes to the dishwasher. The job responsibilities also involved cleaning, wiping tables, arranging chairs and condiment bottles, replenishing stock, and operating the dishwasher. Although students worked with other staff members in the food service internship, Mr. Gabriel supervised, and Ms. Donaria mentored the student interns.

***Hospitality Services.*** This internship site was located in the host institution's student dormitory. A room was offered to PS for job training. Student interns at this site picked up trash; removed bed linens; cleaned the bathroom, sink areas, and windows; wiped furniture; and mopped the floor. There was no internship mentor or supervisor at this site. The person responsible for managing the student residence halls did not participate in the supervision and support. PS organized this space as a simulation classroom. All the student interns participated in this site as a simulation exercise, but Terry was the only student intern who worked there as her daily internship for most of her time at PS. Ms. Dee, Ms. Genevieve, and Ms. Samantha worked as job coaches with students assigned to this internship site.

***Indoor custodial services.*** This internship allowed student interns to participate in cleaning of the classrooms, the library, offices, and bathrooms located on the university campus. Tina, Tim, Tom, and Ted had opportunities to work with various in-



door custodial internships. Three supervisors/mentors got involved with the indoor custodial internships. Mr. Jeke cleaned offices, Ms. June cleaned the library and the basement classroom area close to the PS classroom, and Ms. Dotty cleaned the classroom building used by the School of Nursing.

*Outdoor custodial services.* This internship was set up as a work simulation activity. The students were involved in picking up papers and trash around the university campus grounds. There were no supervisors or mentors for this internship site. All the student interns participated in this as a work activity after lunch hours, and sometimes in the morning before instructional activities. Mr. Morris and Mr. Mayo, job coaches, accompanied the students for this internship.

*Laundry internship.* Student interns working at this site were required to operate the laundry machines and manage dirty and washed laundry items. When operating the laundry machines, the student interns ensured that appropriate amounts of detergent were used and that appropriate button commands were pressed to wash and dry laundry. Tim was permitted to work with the laundry machines in addition to other duties, while Terry folded and hung washed items. Mr. Abu-Bakr was responsible for this internship; however, during the time of data collection, the site was closed. Mr. Abu-Bakr did not participate in the study.

### **Data Collection and Instrumentation**

The qualitative measures included in this study offered a means for exploring the contextual factors that support or impede changes in self-determination (Marshall & Rossman, 2011). Three sources of qualitative data were used: observations, interviews, and documents. The fieldwork was documented using field notes or transcripts in cases of

interviews. Theoretical or analytical memos were written on a continual basis throughout the study. These formed a critical part in informing and guiding the steps of the research process. These memos also helped to establish a solid basis for examination and discussion of the researcher's actions, and decisions that informed the analysis and reporting of the results of the study (Corbin & Strauss, 1990; Montgomery & Bailey, 2007).

**Observations.** In order to understand the physical setting of the study, to create a complete picture of the school-to-work transition program model, and to follow the program activities, observations were conducted on the first day of the data collection. Merriam (2009) stated that, "observations are guided by the daily flow of events and activities, as well as the intuitive reactions and hunches that participant observers experience as the study unravels" (p. 120). For this study, the researcher planned to conduct observations of the program activities to document the physical context and setting, conversations, actions, and responses that demonstrated self-determination (behavior autonomy, self-regulated behavior, psychological empowerment, and self-realization), as described by Wehmeyer and Kelchner (1995). However, due to time constraints, the data collection focused mainly on interviews with the key informants who worked with the students during the nine months of the program.

Some observations were performed prior to interviews to capture the interviews' settings. In addition to the first day non-participant observations, the researcher documented observations during a group therapy activity with the students. Additionally, observations were done with Travis, the sixth student who was eliminated from the study. This student had joined PS two weeks before it ended. The objectives of observing him were to document firsthand activities that PS did to support students when they first enrolled in the

program. However, as stated earlier, Travis did not have an ASD diagnosis, the observational data was not used in this study. During the remainder of the data collection period, the researcher wrote daily reflective memos on impressions of the interviews and fieldwork for the purposes of theoretical sampling (Montgomery & Bailey, 2007).

**Interviews.** As described by Althof (2012), interviews included participants' perspectives expressed as "feelings, thoughts and intentions" on factors that support or impede positive changes in self-determination behavior (p. 2). Interviews provided a lens for examining meaningful accounts and meanings created by knowledgeable people directly involved with the students (Althof, 2012). An interview guide (included in Appendix B) was generated from the research questions for the interviews. Reflective notes (memos) written after each instance of data collection guided questions developed for subsequent interviews.

***First round of interviews.*** Using purposeful sampling, the first set of interviews was conducted with five groups of participants. First, the interviews targeted the PS staff members, who were important, because they provided specialized support to the young adults, as described in Table 1. The second group of participants included department supervisors or mentors. These were considered community partners within the host institution. The supervisors/mentors offered on-the-job instruction, supervision, and mentoring to the young adults in PS. The fourth group of participants included the parents of the young adults, and the fifth group was comprised of the young adults themselves. The parents and their children were the consumers of the services offered by PS. Additionally, the parents were assumed to be partners with PS in supporting the students to make positive changes in becoming self-determined. Interviews conducted in the first round were semi-structured interviews.

***Follow-up interviews.*** These were guided by preliminary data collected from observations and semi-structured interviews, and also from the archival data that was reported in form of self-determination scores and job coaching notes. As recommended by Althof (2012), ad hoc interviews were also conducted as follow-up interviews. The intention of the ad hoc interviews was to help clarify a perspective or provide depth to an observation. During the time of data collection, a graduation ceremony was organized for the students. The ad hoc interviews sought to gain the insights from key informants' personal reflections on the students' journeys towards increased independence.

The first round of interviews included every participant in the study; however, as the study progressed, theoretical sampling aided by the ongoing memos helped to streamline and limit selection of key informants. The key informants were considered "information-rich" sources that helped to drive the study toward deeper analysis (Coyne, 1997). The follow-up interviews were only conducted with key informants. The job coaches, the PS instructor, and the job coaching director were three types of key informants who were interviewed two or more times. The instructor, Ms. Sheila, and the job coaching director, Ms. Dee, had additional follow-up interviews. The two key informants had information about all the students and a global perspective of what was going on in the program. The two perspectives also acted as triangulating points for checking what was written and what each of the leading people (the instructor and the job coaching director) said regarding the students' participation in the program.

***Interviewing young adults with ASD.*** Semi-structured interviews were chosen when planning this study. This format was favored due to flexibility, free flow of discussion, and the clarification that it provided. Semi-structured interviews were thought to permit further

clarification and free flow of discussion through probes and supporting questions (Althof, 2012; Merriam, 2009). Prior to the data collection, the researcher planned to use semi-structured interviews with the young adults under the assumption that individuals diagnosed with ASD may exhibit deficits in communication skills (Wehman et al., 2009), and thought that highly structured interviews would be unsuitable because of potential limitations in the extent of responses (Merriam, 2009). However, during fieldwork, the researcher encountered hurdles with using this interviewing format, and opted to change the students' interview protocol to structured questions that requested very specific information. It was discovered during the data collection that the student interns preferred and did better with the highly-structured questions than open-ended questions.

Secondly, a few of the young adults did not like to have their voice recorded on the voice recorder. As an ethical measure, the researcher chose to use a simpler interviewing approach. The alternative approach only required paper and pencil and a few questions, which was acceptable to all the student participants. As described by Althof (2012), highly structured interviews often pre-determine the order and wording of questions. When this interviewing technique was used with the young adults, it was much easier for them to process the questions. The average time spent interviewing with this approach was about 5 to 8 minutes. The responses were used to confirm or disconfirm, and triangulate what was discussed with the adult participants in the study. With the adult study participants, the study utilized semi-structured interviewing techniques, because they provided adherence to the research focus while allowing flexibility of participant responses (Flick, 2006; Merriam, 2009; Patton, 2002).

***Recording of the Interviews.*** The interviews were recorded by way of digital voice recorders, except for the interviews conducted with the young adults, which were recorded on paper. For the digitally recorded interviews, a detailed, word-for-word transcription of each interview conducted was prepared following a consistent, well-established transcription protocol (Appendix F) according to Riessman (2008). This ensured that the researcher captured the context of an interview to preserve the essence of the tone of voice, as well as the meaning of the message. The authors state that when context is removed from the voice, the interview runs the risk of misinterpretation.

The transcription protocol adopted for this particular study (included in Appendix F) was utilized to capture the contextual factors and the tone of the message shared during the interview. Its use in the study enhanced the rich, descriptive accounts of factors that contribute to and influence positive changes in self-determination, and hence aided analysis and comparison of results among the cases (Merriam, 2009). Theoretical saturation guided completion of the interviewing and data collection phase. After closure of PS, the researcher stayed in touch with the key informants and sent email interviews to follow up on areas that needed further exploration. When there was no longer any new information coming from the participants, the researcher determined that theoretical saturation had been achieved.

***Documents.*** This study included a collection of documents that aimed to provide evidence of positive changes in self-determination of participants. Use of documents in research includes public and/or personal documents, popular culture documents, visual documents, physical material artifacts, and researcher-constructed documents (Merriam, 2009). The analyst's best judgment was used to identify and interpret relevant documents. This study collected and examined home and program communication notes, work samples

of student participants, and other appropriate documents supporting the research questions. The documents were identified for their relevance to the research questions, and were compiled in a manner that would be useful for the study.

**Storing and sorting of data.** All data, in the form of completed questionnaires, interview transcripts, and audio recordings of interviews, field notes, analytical memos, and writings, are only to be accessed by the researcher. Electronic documents are stored in a protected file with a password known only to the researcher. The dissertation committee has access to the information, with pseudonyms used where participants' names or identifying information are required. All print materials associated with the study are stored in a locked filing cabinet that is under the supervision of the researcher. Five years after completion of the study and final report, the data will be destroyed in a safe and orderly manner, in order to protect those participating.

### **Data Analysis**

The constant comparative grounded theory approaches by Glaser and Strauss (1967), Corbin and Strauss (1990), and Strauss and Corbin (1998) informed the data analysis. Grounded theory procedures regard data collection and analysis as interrelated processes. These processes utilize multiple levels of constant data comparison in order to generate a theory. The central focus of this approach is describing phenomena and the meaning constructed from the participants' perspectives (Corbin & Straus, 1990; Merriam, 2009). The researcher achieved this by utilizing memos of the first impressions of the daily fieldwork. Questions regarding impressions and preliminary findings were asked and used to probe further and guide theoretical sampling. Because of time constraints and the reliance on archival data, the microanalysis did not begin until after the fieldwork.

However, in order to reach saturation of the data, follow-up interviews with relevant key informants were conducted via email as already discussed in the data collection section.

Through the process of line-by-line analysis referred to as microanalysis, the researcher “opened up” data and identified, compared, and contrasted specific words, phrases, sentences and paragraphs. This was done in order to develop labels that represented phenomena reflected from the data. The phenomena described similar “events, objects, and actions/interactions,” and the labels developed were referred to as *concepts* (Strauss & Corbin, 1998, p.102). In grounded theory, a *concept* is an “abstract representation of a phenomena” or an important analytic idea that develops from the data (p. 103); by labeling concepts, the researcher was able to group similar events, objects, and actions/interactions to later develop *categories* and *sub-categories*. A *category* provides a more precise way of defining phenomena. The attributes of an identified category in grounded theory are referred to as a *property*. A category is measured on a continuum or range called a *dimension*. The processes of questioning and constant comparison are characteristic of grounded theory approaches (Strauss & Corbin, 1998).

In order to dig deeper into the data and construct categories, questions were utilized as analytic steps. Sensitizing questions were used to help heighten the researcher’s awareness and sensitivity to “what was happening” in the data (p. 77). This study utilized sensitizing questions as part of the process of developing concept labels. The questions helped the researcher develop labels for phenomena that were close to the cases that they represented. As Strauss and Corbin (1998) suggested, theoretical questions were also utilized to compare developing concepts and base decisions on connections formed between concepts, to begin to develop categories. Structural questions also directed the study toward



concepts that held to support the developing theory from the data (cf. pp. 77-78). All the data sources utilized in the study helped to provide a unique perspective into how the participants attached meanings to their unique experiences, personalities, and characteristics. Three constant, comparative, interrelated levels of analysis were utilized: *open coding*, *axial coding* and *selective coding*.

**Open Coding.** Corbin and Strauss (1990) described the process of open coding as “the interpretive process by which data are broken down analytically” (p.12). Beginning with the micro-analytical strategies of line-by-line coding, initial codes were identified from the interviews. The authors further stated that subjectivity and bias at this level of analysis are minimized during open coding when the microanalysis process allows data to be broken down into the smallest bits, and compared and classified to begin to make meaningful sense.

Reflections of initial analysis were summarized in theoretical memos. This constant comparative process helped to identify relevant events, actions, and interactions that described what was happening, and began to shed light on the research questions (Corbin & Strauss, 1990). The identified instances were then compared and grouped based on similarities and differences, to develop a concept label. In order to do this, all the data was coded and numbered with special identifying numbers. Each identified label was recorded for easy retrieval from the transcript or document from which it came. Each transcript was reformatted, each sentence was numbered, and then all statements recorded on the transcript were coded. For instance, a transcript of an interview with a job coach, Samantha, was coded as: JC-Sa (if it was the first interview). The location of a specific concept label made up the line numbers that followed the code; for example, a concept that came from lines 92 to 107 on Samantha’s first interview transcript was recorded as JC-Sa: 92-107.

To keep track of the developing concepts, the interview transcripts were grouped into four main groups: job coach perspective, PS leadership perspectives, internship supervisors/mentors perspectives, and parent perspectives. Table 2 summarizes developing concepts designed to record labels that pertained to the interviewee and to those that were specific to the young adults in the program. It illustrates the concept table developed to track all developing concepts. Appendix D includes the full table with all the developed concepts from the interviews.

Open coding facilitates “generative and comparative questions that guide the researcher upon return to the field” (Corbin & Strauss, 1990, p. 12) through theoretical sampling. This process guided the study to achieve a more precise description of the concepts that explained the impact of school-to-work transition on self-determination when the researcher assigned its dimensions and properties. Similar concepts were grouped and labeled to represent a particular phenomenon in the study. A concept label that was identified to be more representative of these concepts was used in order to label the developed category. Strauss and Corbin (1998) state that the phenomenon that a category represents is basically an analytic idea that is derived from the data (cf. p. 114). Sub-categories provide details that give a category specificity by answering the questions where, why, and how a phenomenon is likely to occur (cf. p. 119).

**Table 2: An Illustration of the concept development table**

Possible Category	Group of Transcripts	Concept Label		Location of the Concept (Line Number)
		Concepts that pertain to the interviewee	Concepts that pertain to the student Intern	
	<b>Job Coaches (JC)</b>		Transcript # 10 – Ad hoc Interview with Charity <b>Challenges</b> with Self-Regulation	Name of Intern Tina JC-Ca67-71
<b>Lack of Collegiality</b>	<b>Inadequate collaboration</b> efforts with supporting team		Recognition of <b>positive changes</b> <b>Work opportunities</b> <b>beneficial</b> <b>Not equipped</b> with relevant life skills though graduating from the program	Tina All All JC-Ca56-58; JC-Ca60-63; JC-Ca53-58; JC-Ca67-71; JC-Ca73-81;

**Axial Coding.** Higher level processes of confirming and disconfirming concepts and categories in this study were achieved through axial coding. The term *axial* is used in reference to how the coding at this level “occurs around the axis of a category, lining categories at the level of properties and dimensions” (Strauss & Corbin, 1998, p. 124). Identified categories were compared to their sub-categories and vice versa. This was done in order to form “precise and complete explanations about phenomena” (Strauss & Corbin, 1998, p. 124). The researcher was aware that grounded theory approaches are not linear processes; therefore, comparison processes were done at different levels. The researcher compared the developing categories to the raw data, to the constructed concept labels, and to other category labels. The aim was to find a category that was representative of a group of concepts. This process also allowed the researcher to identify concepts that had higher explanatory power and were therefore worthy of becoming sub-categories, but were not sufficiently encompassing to be identified as a full category.

During axial coding, the researcher also aimed to develop and verify a working hypothesis that predicts relationships among categories in given conditions regarding the factors that impact changes in self-determination (Corbin & Strauss, 1990). The process of axial coding helped to identify “conditions, actions or interactions, and consequences” that explain the influence of the school-to-work transition program on changes in self-determination (Corbin & Strauss, 1990, p. 126).

**Selective Coding.** Corbin and Strauss (1990) define selective coding as a process that unifies all categories around the core category (c.f. p. 14). Strauss and Corbin (1998) refer to selective coding as a “process of integrating and refining a theory” (p. 143). This process was attempted towards the end of the data analysis when categories and sub-categories had been developed from the data. Categories that had not developed fully were eliminated or re-configured as sub-categories. When the final category table was developed, the researcher compared the findings with the raw data, and shared the findings with some of the participants for their reactions. This approach enabled the unification of all categories around the central purpose of this study. A category table with details of sub-categories, properties, and dimensions is provided in Appendix B.

Time constraints on the research site limited further theoretical sampling and saturation of data, and hence limited development of a core-category. For this reason, a core category was not achieved. Four categories were constructed as a result of the open and axial coding. Three categories explained factors that impact changes in self-determination, and one described how self-determination was impacted during the participation of the students in PS program. Concept maps and peer groups were utilized to refine and verify the developed categories.

***Concept Maps.*** Diagramming of concept maps (Appendix C) was used to organize the category construction process as described by Corbin and Strauss (1990) and Strauss and Corbin (1998). To do this, the researcher utilized Nova Mind software to develop concept maps that illustrate the on-going process of developing concepts and facilitated additional comparison and formation of the main categories a manageable process. The concept maps also provided an audit trail of how the categories developed from the concept table and evolved to form the main categories. Figure 2 presents a summative concept map of developing the four categories. Appendix C has a full version of concept maps that were developed from the participants' interviews. The categories presented in the concept maps were not the final labels to the categories, further analytical processes were utilized to develop category labels that described the data adequately. The final category labels are presented in the code book in Appendix B.

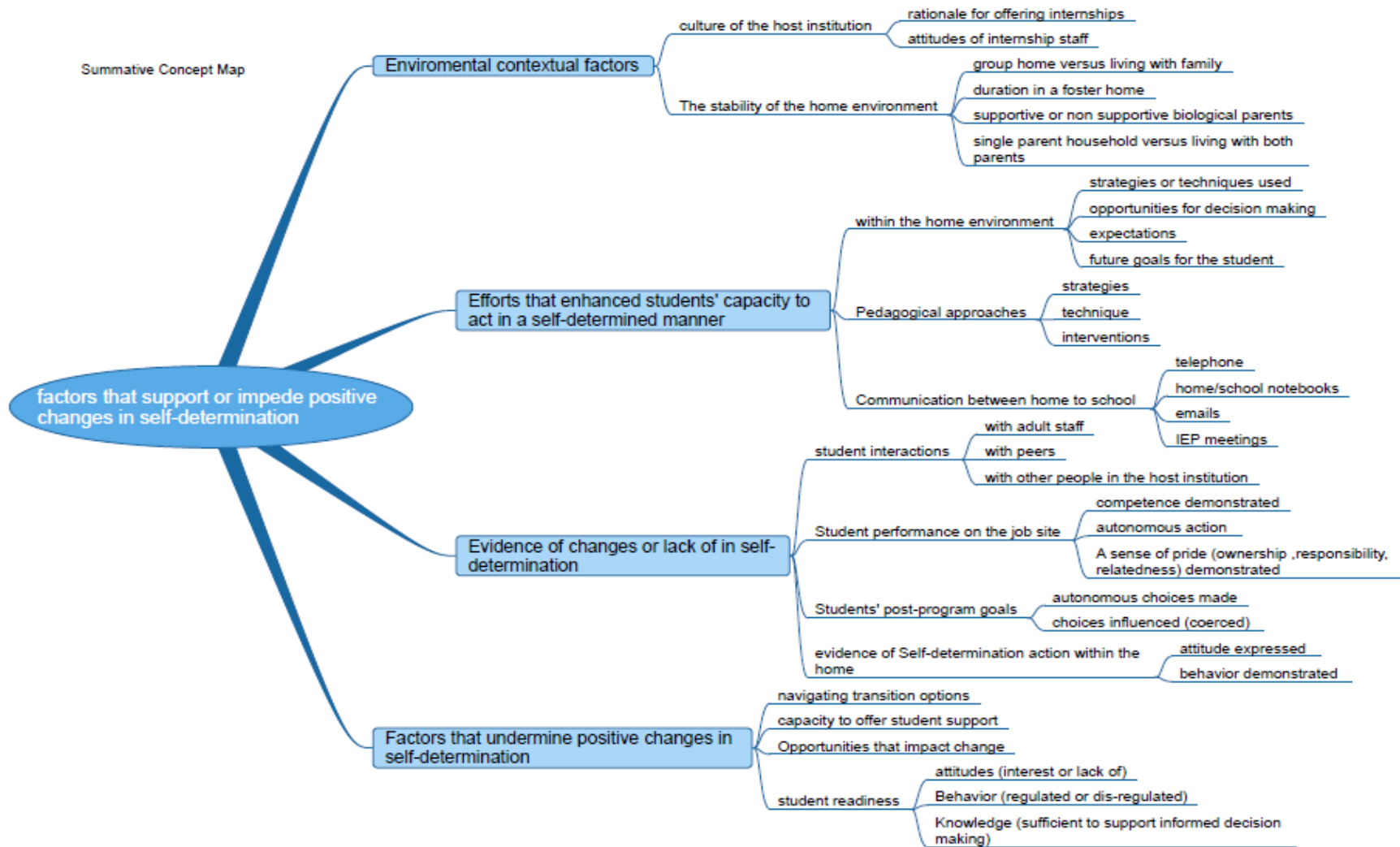


Figure 2: Summative concept map illustrating ongoing process of category construction

*Peer groups.* To challenge, refine, and verify the developed categories against the data, peer groups of qualitative researchers were utilized. The researcher met six other qualitative doctoral students who had at least two semesters of doctoral level qualitative research training and had experience with a grounded theory study. During three meetings with the peer reviewers, the developing categories were discussed in detail. Questions were asked pertaining to how each category accurately described what was identified in the data. They re-examined the data utilizing the grounded theory approaches described.

Peer reviewers also helped to analyze the relationship of the developed categories to the self-determination theoretical framework. For example, instead of utilizing the word *self-determination* to describe some of the positive changes, words such as *initiative* were used instead of *autonomy* because the term accurately described the behavior that was identified in the data to represent autonomous action. In other words, the peer reviewers helped to bring a microscopic lens into the data to guide and shape the construction of the categories within the context of the data. Two additional meetings with one research peer reviewer were held to do the same. The feedback received from the discussions with research peers helped the researcher refine the category labels, as well as the property and dimensions.

### **Validity and Reliability**

A credible study upholds the elements of good science, ensuring that efforts are made to support the reliability and validity of the study. Miles and Huberman (1994) and Miles, Huberman and Saldaña (2014) guided reliability and validity controls for the study. Although Chapter 5 discusses the quality standards of the study, this section presents reliability and validity controls that were considered prior to the study. In Chapter 5, the quality standards pertain to those that were utilized during data collection, analysis, and presentation.

External reliability (objectivity and conformability) evidenced by the study's reliability was enhanced by documenting an audit trail of the study's methods and procedures. These were provided in an explicit and detailed manner, showing sequence of how data-grounded theory approaches were employed from the first set of data collection to the end of the study (Miles & Huberman, 1994; Miles et al., 2014). Because complex social phenomena may not occur in the same context, replication of results in grounded theory guided research is limited to the extent to which the researcher elaborates on the relationship between conditions and actions or interactions with specific consequences (Corbin & Strauss, 1990).

Second, reliability or dependability of the study was addressed by ensuring consistency in how measures were utilized during fieldwork. For instance, before the commencement of the research, the researcher ensured that research questions were clear and aligned to the methods of inquiry, that the researcher's role in the study was explicitly described, and that the interpretations of the study were grounded in the data and verified with literature. During analysis, the researcher worked closely with the dissertation committee to ensure accountability and strict adherence to the steps required for a grounded theory study. Thus, the aspects of internal validity or authenticity of the study were increased by following the procedures and techniques of the grounded theory approach. Due to time constraints, the researcher did not begin microanalysis during fieldwork. However, theoretical memos of the initial impressions from fieldwork and sensitizing questions allowed for opportunities for theoretical sampling. Following the data collection, the constant comparative method was employed to dig deeper into the data; field notes will provide "context-rich" descriptions that helped support development of properties and dimensions of concepts, categories, and sub-categories. Triangulation was utilized to ensure that data were verified, and findings were "internally coherent" (Miles &



Huberman, 1994). Extreme cases--for instance, low performing participants or high performing participants--were closely monitored to establish sufficient representation of all in the selected sample (Miles & Huberman, 1994). For instance, during fieldwork, the researcher ensured that those who worked with Tina, a high performing student who participated in the expected minimum of four internships (custodial service, food service, computer lab, and administrative office), provided their input about how they made sense of their interaction with Tina as she developed work competencies in their various departments. Her data was verified with records of her job coaching notes from the time she entered PS to the end; additionally, Tina's foster mother, the instructor, and the job coaching director/trainer were interviewed to get the differing perspectives. The same was done for another extreme case, Terry, who was a non-verbal communicator. She had what most assumed were the lowest functioning skills, but a closer examination of her case revealed the opposite of people's assumptions, as discussed in Chapter 4.

The researcher hoped that external validity or transferability demonstrating the level of generalizability of the findings would be increased by use of theoretical sampling. Theoretical sampling, according to Miles and Huberman (1994), ensures the increase of generalizability by including events, incidences, interactions, and objects that encourage broader applicability. However, the approval of the study was provided when PS had only three and one-half weeks remaining. This impeded the opportunity to conduct a systematic theoretical sampling while in the field. This may have limiting implications for the generalizability of the study, which will be discussed in the subsequent chapters.

## **Ethical Considerations**

Merriam (2009) states that there is a direct relationship between credibility of a study and ethics of the investigator (c.f. p. 234). Three levels of ethical consideration were addressed to ensure protection of the participants prior to the research, during the data collection phase, and upon completion of the research.

**Ethical considerations prior to the research.** Since the study included participants in vulnerable populations, the researcher obtained the human subjects training certificate as a first step towards requesting Institutional Review Board (IRB) approval. The study was conducted upon receipt of approval from the Host Institution's IRB as well as written approval from the school that managed the PS school-to-work transition program.

Following approval from the agencies, letters of request and consent forms were submitted to the parents and guardians of the young adults, informing them of the study and their involvement, if they chose to participate. The consent form described the value of the research, the activities that their participation entailed, the means for protecting the participants' confidentiality, the options to withdraw their participation, and the contacts required if they needed assistance from the researcher's supervisor. The young adults were required to complete assent forms if they agreed to participate in the study. The assent form for the young adults was sent home, so that they had time to read or have it read to them. The program staff and the internship/jobsite supervisors/mentors were given consent forms that requested their participation in the study. Sample consent forms for the study participants and letters of approval are included in Appendix H.

**Ethical considerations during data collection phase.** During the course of the study, the participants were always informed, and asked for their verbal consent prior to any research

activities including but not limited to field observations and/or interviews with the young adults, program staff, internship supervisors/mentors, and parents.

To protect the rights of the young adults in the study, the researcher recognized the possible risks of their participation. Therefore, measures were taken to minimize these risks. It was anticipated that sudden changes and sometimes unknown triggers may elicit anxiety and feelings of agitation for individuals with a diagnosis of ASD (Bregman & Higdon, 2012). To minimize those feelings during interviews, the young adults were allowed to ask a program staff member to sit slightly removed from the participant, while the researcher conducted the interviews. They were on hand if the intern showed signs of unease or required attention.

The extent of participation by the young adults, in terms of time commitment, was minimal enough to sustain their attention (5 to 10 minutes of interview). The timing of the young adults' participation was limited to free time during their daily routines, and never during work or instructional time. No coercion was used to persuade the participants or influence their interests; the participants' opinions and requests were honored. For instance, a few students did not like to have their voices recorded; in order to honor this request, the researcher changed the interviewing format to paper/pencil, with which the students were familiar and comfortable.

In order to provide reporting and ensure accuracy in the transcription of participants' (student interns', program staff members', internship supervisors'/mentors', and parents') voices and representation of thoughts and ideas, several measures were taken. First, audio data was monitored and recorded by way of digital voice recorders. The audio voice was transcribed using well-established transcription protocols, included in Appendix F. In order to protect the participants and ensure integrity in the reporting, the study used multiple levels of data

collection. Through triangulation of developing findings, it was easy to manage consistency in concepts and categories that will emerge from the study.

To maintain a high level of accountability to ensure protection of the participants during the course of the study, the dissertation committee included members who were experts in research methods and special education law, and who worked with vulnerable populations. The committee members helped to maintain high levels of accountability to preserve the integrity of the study procedures and reporting. Any questions that arose regarding gaining entry to the research site, or working with individual participants or their family members, were addressed with the dissertation chair and the program supervisors.

**Ethical considerations upon completion of the research.** Within five years of completion of the study, all data collected in form of field notes, audio files, and samples of written work from the program will be destroyed in a safe and orderly manner. The dissertation report will not include any personal identifying information, as pseudonyms will be used to refer to individual cases, and the study setting and location will only be described with general, non-specific terms, such as “mid-western university program.” Furthermore, as recommended by Merriam (2009), the researcher will be actively cognizant of her role and position in the research to ensure awareness of possible biases introduced in the research, and address them promptly and appropriately.

### **Researcher’s Role, Assumptions, and Potential Biases**

The dual role of the researcher as both insider and outsider was thought to potentially influence the study. As an outsider, the researcher was new to special education and transition programs in the United States. Thus, the researcher might have interpreted seemingly obvious issues related to achievement of positive changes in self-determination as unique to the situation.

In order to address this bias, the study is supported by current research relating to the self-determination of young adults with developmental disabilities, particularly ASD. Through rigorous systematic analysis of the data and use of key informants to verify data, bias in the study was minimized. Additionally, subjectivity was minimized by engaging independent research peers to cross-examine preliminary findings, and challenge the researcher's perspective as a primary instrument of data collection.

The researcher worked with the PS school-to-work transition program as an assistant in its instructional center and as a job coach, with advantages that include having established a rapport with the possible participants and easy access to information necessary for the study. Removed was the novelty of meeting each of the participants and knowing what was involved in gaining entry into a research site to study participants diagnosed with ASD. On the other hand, the conflicting roles of participant-researcher were thought to pose challenges for potential opportunities to jot down events and instances that could support the data. A detailed audit trail was used to account for every decision, action, and reflection of the research activities from design to implementation.

## Chapter 4: Results

The leading assumption of this study was that participation in the Project SEARCH (PS) school-to-work transition program would result in positive changes in self-determination of young adults diagnosed with ASD. The study focused only on aspects related to students' self-determination during their participation in the program. The experiences of five young adults enrolled in PS provide a basis for examining influences that impact self-determination. The study examines data collected over a period of one academic year (August 2012-June 2013), and presents case summaries of each student intern and categories constructed to respond to the research questions.

### Study Participants

The PS participants were divided into five groups. Each group offered a valuable perspective on the experiences of the young adults in the study. A detailed discussion of the study participants is presented in Chapter 3. The names of the participants in this study are aliases. The groups are:

- PS leadership (Ms. Sheila the instructor, Ms. Dee the job coaching director, Ms. Gomez the therapist, and Mr. Jacobi the job developer),
- Internship supervisors/mentors (employees of the host institution),
- Parents or guardians of the student interns (Kanisha, Tom's mother; Carrie, Ted's mother; Welako, Tim's mother; Florence, Terry's mother; and Dorcas, Tina's mother),
- Job coaches (Charity, Samantha, Genevieve, Morris, and Mayo), and
- Student interns (Tom, Ted, Tim, Terry, and Tina), who are the focus of this study.

**The student interns.** Five young adults diagnosed with ASD and associated conditions participated in PS. The group of young adults included in this study was comprised of two

females and three males. Two females are referred to as Tina and Terry, and the three males are referred to as Ted, Tom, and Tim.

In order to present a balanced perspective on factors that impacted changes in self-determination of the young adults, it is critical to understand their previous education experiences. The student interns in this study had previously received educational services in very restricted environments, due to the severity of their behavioral needs. Ms. Sheila, the instructor, said "...these kids had all gone through several Purchase of Service, residential and therapeutic programs and still remained having significant behavioral concerns, lack of trust, high levels of distrust, anger, frustration, and anxieties" (T35:261-263). The students attended private specialized school programs to support their educational needs, and in this dissertation, these types of education setting are referred to as "private, separate." According to Ms. Sheila, in some cases, the participants had required the support of a one-on-one paraprofessional to provide behavioral intervention support for challenging behaviors. For instance, Ms. Sheila said:

.... The family got him [Tim] to go to an alternative school for a few years where he had up to four-on-one support ... four members of staff to one child! Because his behaviors were so aggressive and so profound, if he did not get what he demands... if people did not want to jump to the kid's [Tim's] expectations much as what he gotten used at home, then he would get aggressive. (T15:63-69)

Ms. Gomez, the program therapist who was also part of the leadership team, supported Ms. Sheila's position. She stated:

The kids that come to our therapeutic school, they have been suspended a lot, they have been in trouble with the principal, they do not do well getting along with other kids, they have had to be re-directed. And they know that a re-direction, even if it's worded

positively, they know that they are not making the grade, they see themselves not achieving the way the neighbor kid achieves. (T14:174-182)

The student interns enrolled in PS exhibited communication and social skills deficits considered severe when compared to those of the typical population of participants served in other PS programs. Special instruction was designed to address these deficits. Ms. Gomez, the therapist, indicated that her main goal for conducting group therapy sessions was to help the students develop some social and communication skills necessary for participating in the work environment (T14: 65-70). Because each student intern was unique, the study analyzed their individual experiences to describe factors that impacted positive changes in self-determination during the transition program.

***The case of Tina.*** The student intern was 18 years old at the time she started PS. According to Ms. Dorcas, Tina spent most of her life in foster care. Her foster care placement of three years, at the time of data collection, was the longest she ever had (Ms. Dorcas, T22: 207). Prior to enrollment in PS, her educational experience was in a private special school for students with challenging behaviors (private, separate day setting). Tina exhibited challenging behavior, such as elopement, verbal aggression, and physical aggression towards adults and peers. Her education placement was recommended due to these behaviors. Her foster mother, Ms. Dorcas, stated:

One of the problems she [Tina] was having was being confined in the room all day. And it was about behavior, constantly being suspended, paranoia, fights, so she was suspended quite frequently, but when they explained the program to me, I said “Hell yeah I want her to get to that program [PS] so let’s try it!” (Ms. Dorcas, T22: 69-72)

When she joined PS, Tina exhibited similar behaviors. Ms. Sheila said, “ [during the first weeks in PS] ...Tina tended to get hostile when academic work was presented, eloping and yelling was



increased if math or reading was presented but even more elevated if writing were involved” (T35: 364-365).

By the end of her time in PS, Tina demonstrated positive changes in socially-appropriate personal conduct and ability to work. Ms. Dee, a member of the leadership team in charge of job coaching and supervision of the internships, said:

...throughout this year I think [Tina] has learned a whole lot and that she takes pride in her work and being responsible and she likes being independent, she knows that she has earned that. So when we were over at the nursing building we had probably faded [job coaching] from 100% to about 5%. (T29:189-192)

***The case of Ted.*** The student intern was 20 years old when he joined PS. He lived in a private residence for young people with disabilities who could not live with their families during his first eight months at PS. The home placement is referred to as a group home in this dissertation. Ted’s family removed him from the group home during the last two months of the program (May-June 2013).

Prior to PS, Ted received his education in a separate private education facility due to challenging behaviors. He exhibited some of those behaviors during the first months at PS. He demonstrated behavior that was not appropriate for a 20-year-old young man. For instance, Ms. Dee recalled Ted “...laying on the floor, crying, and beating his head and hands against the doors, the window....requiring two of the gentlemen, [job] coaches to be sitting with him, so he would not hurt himself...” (T30: 72-76). Ted preferred to dress and act like his favorite celebrity or imaginary characters, rather than being himself. When he engaged in the character plays, he wanted people to call him by the names of the character whose role he played. The PS leadership identified this as

evidence of a poor self-image. For example, the job-coaching director who worked closely with Ted in PS stated:

When [Ted] came in here [PS], he kind of exhibited a very poor self-image. Because what he was doing was to be other people rather than himself. [He would say] “I am not Ted, I am so and so, or I am not Ted I am an old man” .... And it was like a game to him, when I asked him about it, he just laughed and said, “I liked those people better than myself.” (Ms. Dee, T30: 67-71)

A quarterly job coaching report (August-November 2012) identified that Ted was suspended from his internship twice during this period. First, he was suspended for a day in October, 2012, because he wore inappropriate attire for work. Only ten days from the first incident, he was suspended again for using inappropriate language, statements, and gestures to female employees on his work site (Ted’s PS 1st Quarterly Report, p.1).

By the end of the program, Ted made some positive changes. The incidences of impersonation of other characters and challenging behavior were under control, and did not occur on a daily basis, as was the case at the beginning of the program. Ted still required close monitoring and supervision for personal care and hygiene. His job coach provided support in the following areas: appropriate table etiquette, personal grooming, and communicating with his group home [through Ms. Sheila] to make sure Ted was groomed prior to coming to PS every morning. When Ted changed to live with his nuclear family, his personal care and grooming also improved (Mr. Morris, T12: 82-86).

***The case of Tom.*** He joined PS from a private, separate Autism program when he was 20 years old in October 2012. The focus on academics at his previous school became irrelevant to Tom’s needs and future goals. His mother, Kanisha, said:

Tom was really burnt out on school, so when there was an opportunity for him to change to a different program, particularly focusing on transition to job or volunteer, it was what I was really, really hoping to focus on for him, because academics, at this point, he is so capable of learning, but he needs more functional daily activities, and working skills. (T18:62-66)

Transition from previous education placement to PS was challenging for Tom. When he first joined PS, he did not want to talk with anyone or participate in PS instructional or work activities, and if forced to do so, he became frustrated and aggressive. Ms. Sheila, the program instructor, stated, “in the beginning, Tom would not introduce himself to anyone, [he] refused to talk, just waved his hand in a manner to suggest ‘go away’ leave me alone” (Ms. Sheila, T35:413-415). While most of the student interns started with their internships immediately after joining PS, Tom was still transitioning to the new program three months after joining. Tom’s first PS quarterly report, prepared by Ms. Dee on January 5, 2013, stated:

Tom’s interests at this time are reading books, drawing and playing games on a computer...in order to spend time participating in activities that interest him, he has to earn that through participation in vocational work training...progression towards amount of time Tom participates in simulated work activities has increased from 5 minutes up to 2 hours...but there are still days where he chooses not to work and becomes verbally combative. On two different occasions he was sent home due to this type of behavior. (L10-17)

Due to the behavior demonstrated, and the lack of motivation to work, Tom did not meet the student criteria required for the typical PS model. Tom’s PS activities were classified as a pre-vocational pre-PS program (Ms. Dee, PS quarterly report, January 05, 2013).

By the end of the PS school year, Kanisha explained that she noted positive changes with her son, Tom. She said, “I have seen improvement, it was difficult first with the transition, but once he got settled down in the routine, he kept it very well, I think” (T18:70-71). Similarly, Ms. Gomez, the therapist, identified Tom as the student intern with the most improvement. She said:

To me the person who has made the biggest change is Tom because in the beginning he was much more introverted and did not interact at all. To me, he is much more extroverted now. When you ask a question he gives an answer that is appropriate, even though it’s a simple answer. You can tell that he has thought it through, and it is a correct answer most of the times. (Ms. Gomez, T14:142-145)

Ms. Sheila made similar observations regarding Tom’s participation and social interaction in PS. “Tom now says ‘hey, nice red’ to those who are wearing a red shirt and often follows up with ‘just like Thomas’ - for those who don’t know, he is inviting them into his favorite world- that of Thomas the Tank Engine” (Ms. Sheila, T35:415-417). People who interacted with Tom on a daily basis narrated the positive changes.

***The case of Terry.*** Unlike the other student interns, Terry came to PS from another school-to-work transition program. She did not have a history of challenging behavior and education in a private, separate school, as did her peers in PS. Although she had a diagnosis of ASD, she was a unique participant in the program, because she communicated non-verbally and had a diagnosis of Down’s syndrome. Her mother, Florence, stated that Terry enrolled in PS to receive work training that was more challenging than the previous program she came from, and to improve her work stamina/endurance ( Florence, T19: 51-57).

During her first days in PS, Terry required a lot of verbal redirection, verbal prompting, and verbal encouragement to stay focused and remain on task, because she was playful and did not

always follow directions (Ms. Dee, 1<sup>st</sup> Quarterly report, P. 1). Similarly, one of the job coaches described her work with Terry as difficult because of communication barriers. Ms. Charity stated:

It was difficult to work with Terry because she is not responsive. I had not worked with her long enough to understand what certain mannerisms mean. So, I did not know if she wanted to use the restroom. I knew when she was tired, because she would not work. It took several verbal prompts, hand over hand, verbal re-directions to get her to complete her assigned task, so it was very difficult. (T9: 262-266)

Ms. Gomez sided with Ms. Charity's perspective; she said, "I do not see much change in Terry. I still see Terry as only being able to do very contained repetitive tasks and the group does not lend itself to that you know" (Ms. Gomez, T14: 145-147). Ms. Dee reported that Terry did not meet the student criteria required for PS; this was decided a few months after her enrollment in the program. Her quality of work was very good, but her production speed was very slow and did not meet the productive competitive standards. The PS leadership, in consultation with PS inter-agency partners, determined that Terry's job training be what they referred to as a "pre-vocational pre-PS program." Her participation in PS focused on skill deficits identified as essential for obtaining and maintaining a job (Ms. Dee, 1<sup>st</sup> Quarterly report, P.1).

By the end of the PS academic year, Ms. Samantha, a job coach, felt that her work with Terry had resulted in a journey of personal and professional growth. The duration with Terry allowed Ms. Samantha to understand how to work better with the student intern. She stated:

When [Terry] came, I knew nothing about her, and it took—and I think we had really low expectations of her, so I do not know what kind of growth I saw in Terry... I think it was growth in myself, and hopefully other people in the program that saw what she was capable of. (Ms. Samantha, T18: 237-243)

The researcher shared these sentiments with Terry's parent, and Florence agreed that such a trend was observed throughout Terry's life.

The researcher:

So every time [we worked with Terry] we felt that instead of teaching Terry, that she taught us and showed us more of what she was capable of doing. She does not always verbalize what is going on ...I think if you give her high expectations, she will rise to them, and if you give her low expectations, she will be okay to work within those parameters.

What do you think?

Ms. Florence:

Yes, and that is what we have seen all her life.

(Ms. Florence, T19: 79-83)

Florence's perspective of her daughter differed from that of the PS staff members. She described Terry as an independent young person who is free to express her choices based on preference, particularly in the area of leisure activities. She gave examples of things Terry participates in for leisure, and said:

She loves to go on walks, we walk the dog about a mile almost every night, um—she rides a bike that has these large training fat wheels, she swims, she used to dance when she was younger, just participates in dances, and birthday parties, and loves listening to music, she is very particular about which music she listens to when we are in the car. She competes to get to the front seat before I do so that she can have control of the radio [she laughs out loud] if I get to the front seat first then I ask her what CD you want to listen to. But she picks that out herself, she has a wallet that has that in there. So she decides what she is going to watch

on TV, what she is going to listen to, and the only time I tell her no is when we have heard something over and over. I say you have to pick something different. (Florence, T19: 166-174)

There were conflicting feelings about Terry's ability to work. While her mother's perspective was one of a self-determined individual, the PS staff members were still discovering the extent to which they could support Terry in the school-to-work transition program.

*The case of Tim.* At first, Tim visited PS under the guise of a field trip in order to reduce levels of anxiety, and also to explore whether he would benefit from the program. Tim met the diagnostic criteria of ASD, and he joined PS in the last week of October 2012. Like the other student interns, Tim received his previous education in a private, separate school. He was assigned a para-professional to support behavior challenges as part of his education program. Tim had very strong family support that came across as over-protective. Tim's home situation impacted his behavior and participation in school. However, the PS instructor identified this challenge and addressed it as she explained:

First we had to examine his history...He had a very protective cocoon around him, and in his protective cocoon his protective person was his grandmother. During his IEP meeting I saw he was petting her and somehow caressing her, somehow like an infant would than an adult, and so that made it clear to me that he had a different relationship with his family dynamic than is typical of that age, of a young man... the family got him to go to an alternative school for a few years where he had up to four-on-one support...because his behaviors were so aggressive and so profound if he did not get what he demands. That is when I decided we had very firm clear expectations for him. (Ms. Sheila, T35: 48-72)

After a few months at PS, the leadership team determined that Tim did not meet the criteria for PS student interns. Instead, he participated in the pre-vocational pre-PS program from January to June 2013. During this time, skills and behavior identified as barriers to the vocational training were addressed. Time management, following a schedule, problem solving, initiation of tasks, work speed, and job etiquettes (such as using a towel to wipe excessive sweat on the face and covering his mouth to prevent from spitting) were examples of the barriers (Ms. Dee, PS 1<sup>st</sup> Quarterly report, p. 2). Tim experienced challenges with fixation on people who stopped to say hello to him, which became a barrier during the internship rotations. Ms. June, his job mentor, said:

Tim liked to speak with people, there is nothing speaking with people, but with him, he will begin to perseverate and go ahahahahahahah! So I [would] say “Tim let’s go!” as long as I get him away from there. I will be like “Tim, you can speak to them, but when you get excited and happy you kind of scare them,” so we keep speaking and keep talking. (T7: 100-103)

By the end of the program, Tim worked independently on his job tasks, but still required encouragement to work. Ms. Genevieve, a job coach, stated:

By the time I started to work with Tim, he was pretty independent. My job was basically to just remind him to keep working. He liked to sit down sometimes. But other than that, he knew how to do everything. (Ms. Genevieve, T11: 64-67)

Although Tim was capable of work, he did not have a desire to work after PS. When asked about his employment goals after PS, he said, “My mama said I am not ready for a job yet, but [I] will work with my granddaddy at the real estate to cut trees, weeds, and grass” (Tim, Student Interview).



### **Monitoring of Self-Determination**

Students were assessed in various areas during their participation in PS. This study followed the assessment that measured the student interns' levels of self-determination over the period of their participation in the program. The student interns were assessed using the Arc's Self-Determination Scale (ASDS) during their participation in the program from August 2012-June 2013. The assessment conditions differed with every student intern, and limited the use of the results in this study. Instead, interviews with key informants and archival data in form of PS documents (minutes of meetings, memorandum of agreements, program planning documents, and home to school communication exchanges) were used to examine the influences that impacted self-determination skills of the five young adults.

### **The Category Development Process**

The analysis and process of category development occurred from January through March, 2014. Words, ideas, events, incidences, and actions describing the same phenomena were identified from the interview transcripts, and were then grouped and labeled as concepts. As the process continued through the 35 interview transcripts, the researcher verified that each label accurately corresponded to the data and cases from which they were drawn. Then, concepts were grouped into clusters with other related concepts to form a category. Concept maps (Appendix C) illustrate the process of category construction. Sub-categories were developed through constant comparison of categories, and then through assignment of labels to categories that had greater descriptive advantage; lesser descriptive labels became sub-categories (cf. Chapter 3). Using criteria for categories by Merriam (2009), the researcher ensured that the developed categories provided answers to the research questions, and that they were mutually exclusive and exhaustive in nature.

Four categories were developed from the qualitative analysis. The first three categories described factors that influenced self-determination of the student interns in the program, and the last category described indicators of self-determination across settings. The code book in Appendix D provides a summary of the four categories, their subcategories, properties, and dimensions. Each category plays a role in describing how PS impacted the young adults' self-determination. Categories describe the relationships among conditions, actions, and consequences identified in the PS that influenced the interns' behavior.

### **Category One: Environmental Contexts that Influence Self-Determination**

The category "environmental contexts that influenced self-determination" describes characteristics of settings that nurtured self-determined behavior. Two environmental contexts were identified: the PS host institution (the university) and the student interns' home environments. "The culture of the host institution" and "practices of the home environments" became subcategories of the environmental contexts that influenced self-determination.

**Culture of the host institution (the university campus).** The students in PS participated in job rotations, or internships, with different service departments on the university campus such as food service, computer and technology, custodial service, laundry, and hospitality. When the student interns went to these internship sites and interacted with their supervisors, mentors, and work colleagues, common features were identified in all the sites as contributing to positive changes identified. A supportive environment context that the researcher identified as "failure proof" created an atmosphere conducive to learning. In other words, the job sites offered nurturing contexts and gave student interns a sense of assurance to keep trying without fear of failure and ridicule. This resulted in student interns who were successful, with increased levels of competence in work responsibilities. The concept of "success" was identified as a positive

change. At PS, success was recognized from microscopic to macroscopic dimensions. Microscopic success included the smallest measures of effort that were demonstrated by the student, such as following the appropriate steps to neatly fold a towel, ability to wait for a turn and not throw a temper tantrum, or making the effort to wipe a spill on the floor without being asked. The macroscopic dimension of success involved learning job responsibilities and being able to execute them with 90 to 100% independence.

The culture of employees and university departments that participated in PS were characterized as supportive based on expressed commitment to supporting the student interns regardless of individual differences, as well as the attitudes and emotional quality of the staff members working with the student interns.

*Culture demonstrated as commitment to support the student interns.* Common traits of commitment were expressed in the values and beliefs of the internship supervisors and mentors during interviews. Deliberate efforts were made to offer a supportive learning experience for the student interns. For example, a supervisor in the food service department stated, “We want to make sure that they [student interns] have as much realism to the position or what it takes to actually work in practice as possible” (Mr. Gabriel, T1: 114-117). The internship supervisors acted on this belief and demonstrated commitment to the students’ success by ensuring that their staff members accepted the young adults as part of the department. In the food service department, Mr. Gabriel stated about the department’s pre-meal meetings: “We introduced each student ...and I think it is something that we all should give our whole heart to, and make sure that the individuals who are working with us feel welcomed” (Mr. Gabriel, T1: 224-239). Similar efforts were made in the computer lab internship site. A meeting was conducted with all members of staff to explain the PS program and expectations regarding support of the students.

Ms. Angelina, the supervisor, explained that staff should just quietly help the student intern should she need help, the same way they would help anyone else in the lab. She said, “I think we were all on the same page in the beginning” (Ms. Angelina, T4: 70-73).

All the internship sites demonstrated commitment through action and expressed values to establish a work atmosphere that was supportive and welcoming to the students. The food service and computer lab departments used meetings as a strategy to involve their employees and to explain the importance of making the students feel welcomed and supported. The statements that demonstrated a commitment to create a culture and atmosphere of support were: “We should give our whole heart;” “make sure that the individuals feel welcomed;” “let’s treat them how we would want everyone to treat someone with special needs in our family;” “make sure everyone was on board;” “the staff understood what the mission was;” “If she needed help, just to quietly help her;” “not to make a big deal about it;” “just the same way you would help anyone in the computer lab” (Mr. Gabriel, T1: 224-239; Ms. Angelina, T4: 70-73). The statements demonstrate commitment to creating opportunities for learning, supporting smooth transition to the work environment, and creating a work environment that was accepting of the student interns regardless of their abilities and skills. The preparation steps taken by the internship sites indicate recognition of the staff members’ critical role to ensure program success.

***Culture demonstrated by attitudes of the staff members.*** The emotional quality and attitudes of staff members working directly with the students were identified as important characteristics of the culture that supported changes in self-determination in the PS. Their attitudes toward both the PS program and the student interns shaped the environmental context for nurturing self-determined behavior. Optimism and acceptance nurtured the positive changes

in self-determined behavior, while cynicism and non-acceptance undermined self-determined behavior.

*Optimism and acceptance.* In most cases, the staff members who worked with the student interns showed optimism and acceptance toward PS program and the young adults they worked with. For example, Mr. Gabriel, the supervisor in food service, demonstrated an attitude of optimism when he shared his personal beliefs related to PS work. He said:

...This is something that I truly believe in. I think it is important that these students get some training that can get them to be viable citizens in this community. There are jobs out there that they can do but they have to have some basic training on social skills needed to be productive in these jobs and I think that is why we participate in it....I hope that the students are getting some much needed experience out of it. (Mr. Gabriel, T1: 122-133)

Some sense of optimism and acceptance was also demonstrated by how the mentors and supervisors made a personal connection to the program. Having a personal experience with a person with a disability seemed to create an attitude of acceptance. Ms. June and Mr. Jeke shared personal reasons of why they participated in PS as mentors. Ms. June said, "I have a brother, for one thing, he has an intellectual disability; I know how hard it is for people to take a little time with him" (T8: 50-51). Similarly, Mr. Jeke shared his personal experience with disability:

... Growing up, I had a lot of disabilities, not like the kids here, people have looked down on me. Now I am older, and kind of understand, when I try to help someone else, I want to really help them, not want to look down on them or make them feel bad. I want to

understand where you at in your disabilities so that I can be able to reach you and help you. (Mr. Jeke, T8: 118-123)

Having personal experience with disability allowed Mr. Jeke and Ms. June to show acceptance, empathy, and a desire to support PS student interns. However, the attitude of optimism was not easy for everyone. Some staff members felt that accepting student interns with disabilities in their departments would be disruptive to their jobs. Some individuals required convincing in order to participate in supporting the interns. When student interns started working in their internships, and individuals who were skeptical of the program observed some success, they became more accepting. Ms. Angelina explained:

Well, [in our department] we had quite a discussion about it. Some people thought it might be disruptive to our operations, but as it turned out, it was not. If anything, Tina was extremely helpful to the operation. It worked out really well. (Ms. Angelina, T4: 53-55)

In some cases, natural mentors emerged at some of the internship sites because staff members developed positive relationships with the student interns. The natural mentors were not assigned to work with the students, but their attitudes of acceptance and willingness to support the student interns resulted in such relationships. For example, Ms. Amy in the computer lab was not assigned to work with any student intern, but when Tina approached her for assistance, she became a willing mentor. Ms. Amy said, “Originally I was not working with them, but then, when Tina started, she just started asking me questions, so then, they told me to work with her pretty much” (Ms. Amy, T3: 41-13).

Similarly, Ms. Donaria from the food service department started working with the students without any prior arrangement or notice, and enjoyed providing support. She felt the

opportunity to work with the student interns was not a choice. She said, “Well, actually, it was thrown at me, so I had no other choice, but I enjoy kids... they are like brothers and sisters ...so you just deal with it, that’s kind of how it was” (T25: 54-56).

Attitudes of acceptance and emotional quality of optimism were not automatic; they were a result of deliberate effort among the employees in the internship sites. These attitudes were fostered by several factors: efforts by site managers who communicated expectations with their staff, successful experience working with the student interns, and significance of the student interns’ disabilities, as well as the presence of the PS staff members with the students. Despite these efforts, cynicism and non-acceptance were found to impede positive changes with the student interns.

*Cynicism and non-acceptance.* Other employees were cynical and not accepting of their roles in supporting the student interns, despite supervisors requesting their participation in doing so. A cynical attitude was identified with one PS staff member, while a non-accepting attitude was identified with other employees at the internship sites.

The cynical attitude was reflected in personal opinions about the relevance of the internships in equipping student interns for competitive careers. Cynical attitude was also identified in statements pertaining to the staff member’s beliefs about students’ abilities and limitations. Mr. Mayo said:

You know we are teaching them [student interns] to be servants. We are not teaching them to be independent. We are teaching them to take care of other people...taking care of other people’s garbage.... you know that is not independence, when you clean up after somebody. I do not care if you are autistic or straight, you do not want to get that

mentality in your head to know that you are always going to be cleaning after somebody.

(T13: 208-213)

Another cynical statement by Mr. Mayo pertained to the students' abilities to gain employment in the future. Mr. Mayo felt that PS did not succeed in preparing students for social integration within the inclusive working environment. He said:

They interact better among themselves with the group...Even when I take the kids over to the school like Tom and Tim, you take kids like Tim, his disability with the way he walks, that makes him the butt of kids' jokes, the way he walks, the way he talks, the way he looks, he walks with a limp, he is dark skinned, that just makes him the butt of people's jokes, you know how kids are, they do not understand, they like to tease, so it just makes them outcasts on their own period! (T13: 217-232)

Mr. Mayo's perspective was included in this study because it pointed to factors that influenced self-determination of the student interns in PS. Mr. Mayo believed that the student interns would not succeed, and that PS would not make any difference in their lives, because the program focused on service jobs, and because student interns did not possess requisite skills to succeed. Mr. Mayo had preconceived notions about PS and the student participants. His attitude led him to provide inadequate support to the student interns. His actions were seen and interpreted by others on campus as disruptive, and led to loss of opportunity for collaboration between PS and the custodial service department. Ms. June, one of the custodial staff, expressed that her supervisors did not want to continue working with PS, because they found job coaches idling around with the student interns. She said:

The supervisors make it hard for us, they be moving us around so we won't be able to support the kids ...I do not think you [Project SEARCH] are taking advantage of what is



available.... the job coaches are just walking around and ...they just sitting up front when they are supposed to be doing work, and my boss say, they aren't doing anything with the kids. (T7: 113-117)

Other people recognized Mr. Mayo's cynicism, mainly the PS program instructor, Ms. Sheila, who expressed disappointment with the PS staff. She reported two incidences in which staff members agitated Tom. In the first incident, Tom locked himself in a bathroom during the PS winter holiday celebration, and in the second incident he exhibited aggressive behavior in the hallway. Ms. Sheila discussed her concerns with Mr. Mayo and the other staff (who were not part of PS at the time of data collection), but she acknowledged minimal success because the behavior continued. No data was available to associate the cynical behavior to lack of positive changes in Tom (the student they worked with).

A non-accepting attitude was also identified in staff members at some internship sites. Mr. Jason, an employee in one of the departments, admitted that he had a non-accepting attitude toward the student interns, arising from lack of knowledge about or experience working with individuals with ASD. His attitudes were not intentional, but were expressed when he was required to work with a PS student intern. He said,

I was not really approached about it [helping Project SEARCH students]. Angelina facilitated them to come in and she instructed us about what was going to be happening and ...I was a bit anxious, because I have never really worked with any autistic children before. (Mr. Jason, T5: 52-53; 57)

Mr. Karim, a supervisor at another internship site, supported the basis for Mr. Jason's attitude. He realized that working with individuals with disabilities gets people out of their comfort zone. However, he stated that having job coaches and other adult staff members with the students

eased the anxiety levels of people within the host community. He stated, “For most people it will be scary at the beginning, but you know neural-typical people feel very –we are not hip enough to people with disabilities yet...” (T27: 143-148). Ms. Tammy and Ms. Kelly shared similar views regarding acceptance of student interns at their work site. However, their comfort levels depended on the significance of the student intern’s disability. For instance, they felt more at ease working with Tina than with Terry, who communicated non-verbally. They explained:

I think with Tina, it was like just having another student, you know, not a college student, but a high school student or something like that. With Terry, it was a little bit more – um, you were a little bit more on the edge because of her inability to converse. (Ms. Tammy & Ms. Kelly, T2: 101-103)

The data showed that no student worked in an environment in which they were not accepted. All PS staff members knew of Tom’s lack of interest to work. His lack of interest remained the same throughout the program; however, other positive changes with Tom’s behavior were observed. His mother, Ms. Kanisha; Mr. Gomez, the therapist; Ms. Sheila, the instructor; and Mr. Karim, a supervisor in the library, agreed that Tom had made positive changes. Ms. Gomez said, “When Tom first came... trying to get him to print his name, three letters, he just did not want to do anything... And now, he is more willing to consider the task... and participate and he gives helpful commentary” (T14: 81-84). Mr. Karim made similar observations:

Tom ...used to have a big problem with self-control. He would decide that he wanted to do something, or he wanted to come in the library... And it would take at least two people to talk him into doing what they wanted him to do... Lately over the last two or three months we have not seen that kind of behavior. He keeps his voice down, which for the library is very appropriate. (T27: 74-82)

The results of the study did not have sufficient evidence to establish a direct relationship between Mr. Mayo's cynicism and Tom's self-determined behavior. Tom was the only student intern who lacked motivation to work during and after the PS program. He made positive changes in behavior as reported by people who worked directly with him.

In summary, attitudes of cynicism and non-acceptance removed or limited opportunities for learning. For instance, Mr. Mayo limited students' opportunities to learn and practice skills by choosing to not work with them. When other internship supervisors saw Mr. Mayo sitting around and not working with the students, they decided to pull out their support of PS. This action in turn limited opportunities for students to learn and practice new skills. However, the behavior demonstrated at PS did not always correspond to what parents observed at home. Some students appeared to act more autonomously at PS than they did at home, and vice versa. Practices that occurred at students' homes also shaped changes in self-determination.

When attitudes of acceptance and optimism were present, supportive structures for the student interns were made available. The supportive structures were opportunities offered to student interns to learn and practice skills in a safe and accepting environment. Without the opportunities, student interns had no chance to demonstrate gaps in their knowledge and skills, demonstrate acquisition of new knowledge and skills, provide a premise for measuring their change, and become aware of their strengths and limitations. These factors are critical for one to act as a self-determined individual.

**The home environment influence on self-determination.** The PS student interns came from three types of home set-ups: group home, foster care home, and nuclear family. The dynamics of the home environment impacted positive changes in self-determination. Practices that encouraged independence, freedom of choice, and self-realization of the student interns

supported positive changes. However, practices that promoted dependence and restrictions, and did not commit to student success, undermined positive changes.

*Description of the students' home environments.* Ted lived in a group home eight out of his ten months at PS; Tina was a ward of the state and lived in foster care for most of her life. Tim, Tom, and Terry lived with their nuclear families. Practices within the homes created a context that either promoted or undermined self-determination. Such practices were based on the home set-up that encouraged students to have a sense of freedom to try new things, family attitudes that supported autonomy development versus dependency, and unwavering family commitment to student success.

Ted moved from a group home to living with his nuclear family. Practices of the group home were not documented by this study. At the time of data collection (June 2013), he had been living with his nuclear family for a few weeks and was making new adjustments. Inferences can only be made by comments shared during interviews with PS staff and Ted's mother, Ms. Carrie. PS staff noted improvements in personal care and grooming as a result of the change. Mr. Morris said, "Actually this is the cleanest I have seen him—this last month. [When he was at the group home] One day his teeth may be brushed, one day he may not. The last couple of weeks he has improved and been consistent" (T12: 88-89). Ms. Carrie expressed discontent with the group home practices in supporting Ted to develop independent living skills. She stated that:

[The] thing that group homes like to do, and this is even with the one Ted was at before, they like to sit ... watch television, all kinds of garbage, and listen to all kind of garbage, and let him [Ted] sit in his room, like a caged bird and leave him to himself, and when they are tired or hungry, or if he wants to eat, instead of getting him to the kitchen for

him to prepare something they go and get junk food or hang around the mall. (T32: 228-232)

Mr. Morris agreed with Ms. Carrie. He felt that Ted was secluded and lived in isolation. The researcher asked him why other people in the program perceived Ted as having a poor self-image, and as being introverted. In Ted's defense, Mr. Morris stated:

There is a difference! Staying in a group home, these people are there to just maintain a home; they are not there to hug you, to say you are doing a good job. They are just taking care of kids in a situation that nobody else can handle. He has not been exposed to the affection and the love that Tim and Tina are having, which is good. Because in Ted's situation he is basically locked in a room all day, he gets out to eat, there is no socializing, and he has a roommate who has nothing in common with him and the staff just basically keeps him in his place. (T23: 69-75)

Mr. Morris further explained that Ted was the only student who lived in a group home.

"Everybody else in PS stayed somewhere with their parents" (T23: 66-68). In comparing Ted with Tina, he felt that Ms. Dorcas (her foster mother) spoke on Tina's behalf, "giving her some mothering and Ted stayed at a place where folks are paid to take care of him" (T23: 66-68).

Despite the challenges of the home living situation, Ted was a good worker. However, his behavioral challenges impeded his progress. In August 2013, a follow-up interview with Mr. Jacobi, the job developer, indicated that Ted experienced some mental health challenges and was placed in a hospital, and his employment was delayed.

Tina did not live with her biological parents. She was a ward of the state, and under the state's foster care system. She lived with Ms. Dorcas for three years, which was the longest

period she had ever lived with a family. Tina was the most successful student at PS. She is the only one who qualified and actually gained employment immediately after the program ended.

Tom, Tim, and Terry lived with their nuclear families. Very little information was provided about Tom and Tim and their family practices. Tim's mother was unavailable for interviews. Tom's mother did not respond to follow-up interview questions via email. To examine nuclear family practices that impacted self-determination, Tim and Terry's cases are juxtaposed to demonstrate how the category of environmental context influenced self-determination. Tim's family information is based on interviews with Ms. Sheila, the program instructor, and the job mentors, while Terry's information is based on information from her mother and the job coaches.

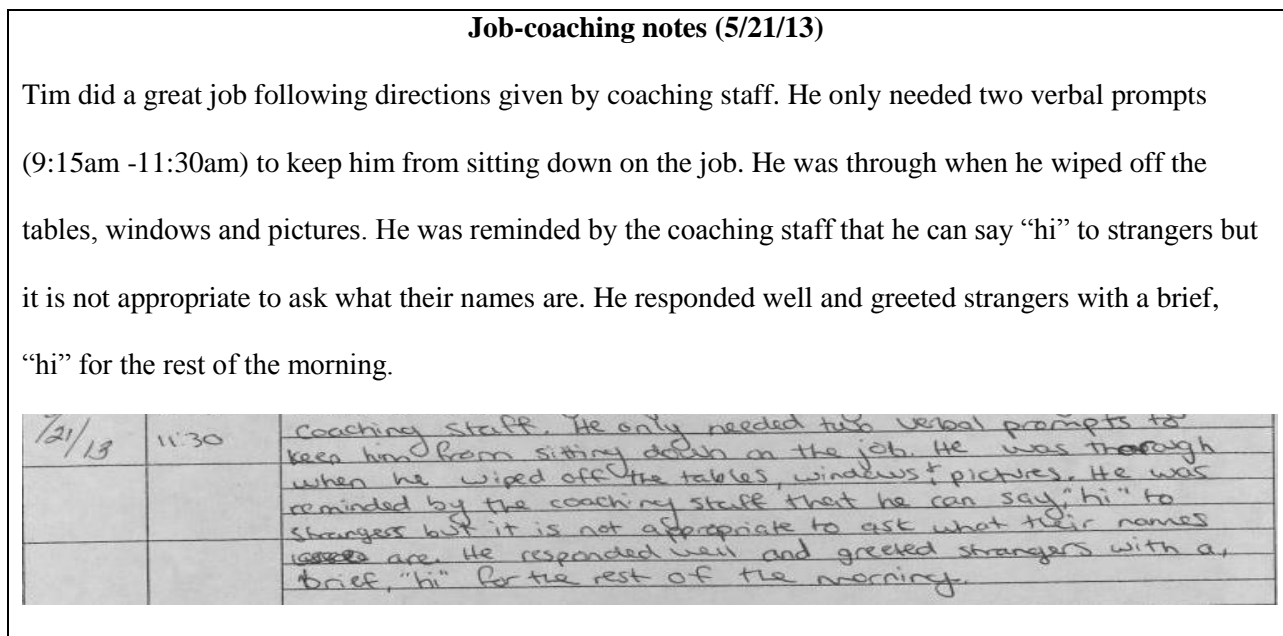
*Supportive family practices.* The dynamics of the home environment impacted different aspects of self-determination. Supportive environments were identified as less restrictive: those that promoted autonomy, and those that demonstrated commitment to student success. For instance, the dynamics of the three nuclear families differed, and impacted Tim, Terry, and Tom differently.

*A case of student intern Tim.* Family practices in Tim's home demonstrated closeness and love, but they also created restrictions and dependency. Tim lived with his nuclear family; however, his grandparents were central to his life. Tim's grandmother came to all his school meetings, and Ms. Sheila described her as overprotective. She explained how that impacted the set-up of Tim's PS program:

The family did not allow him to be around with other people outside of his family. He had a very protective cocoon around him, and in his protective cocoon his protective person was his grandmother. During his IEP meeting ... it [was] clear to me that he had a

different relationship with his family dynamic than is typical of that age, of a young man, and so, I knew that I needed to do something significant to really step up his level of experience with other people. (T15: 51-56)

The levels of protection that guarded Tim impacted his personal interests and aspirations. By the end of PS, Tim was showing progress on the internship. However, he did not believe he was ready to work. Job-coaching notes of May 21, 2013, provided below as Figure 3, evidenced that he was doing well with his job training.



**Figure 3: Job coaching notes for student intern Tim**

When he was asked what his employment goals were, he said, “My mama said I am not yet ready for work.” (Student Interviews, Tim: L6) This statement was provided in June 2013, the same week he graduated from the program. Tim’s mother was not available for interviews, so it was not possible to gain more in-depth perspective on the family support. A follow-up interview with Mr. Jacobi indicated recommendations for Tim to continue vocational training. However,

paperwork for that was not yet submitted by August 2013 (Personal Communication with Mr. Jacobi).

*A case of student intern Terry.* The dynamics in Terry's family differed greatly from those in Tim's family. Terry communicated non-verbally, had diagnoses of ASD and Down syndrome, but her family made goals and expectations similar to those they made for her older brothers without disabilities. Her mother stated,

“My goals were the same as for her older brothers, that she be productive that she be independent, responsible, and basically that means that she has a job whether it's competitive or volunteer, that she still goes to work every day, feels good about herself, and enjoys what she is doing. (Ms. Florence, T19:62-64)

The high expectations set by Terry's family supported her to develop preferences for food, leisure activities, and music, and to contribute as a member of the family by doing various chores. For instance, she was responsible for walking the dog every evening, and she did the routine activities with demonstrated autonomy. Florence stated:

Terry knows what we need to walk the dog, we need a plastic bag, we need a leash, when it's dark she knows she has to put on this reflective vest, she has these little LSD lights, so she will get the different things that we need. She will put those back when we get back or home from the walk and feed the dog at that point. So there are a lot of things that I do not have to remind her. She just does it as a matter of routine. (T19: 129-133)

When Terry joined PS, staff members did not know what she was capable of doing. Ms. Dee depended on Ms. Florence to inform the program. This led to her placement in laundry and hospitality internships. After working with Terry for ten weeks in the laundry internship, Ms. Charity was not convinced that Terry was capable of work. Ms. Charity said:



It was very challenging because it was my first time working with a non-verbal person ...She never independently completed her tasks. Whether it was hand over hand, or verbal re-direction... Always she needed my assistance of everything probably 95% of the time. Actually, she was never independent, so it was 100%. (T9: 268-277)

Ms. Charity's perspective was influenced by the decision to refer to Terry's education program at PS as pre-vocational training, instead of school-to-work transition (Ms. Dee, PS Quarterly Report). The assumption was that Terry would not be ready to transition to work after PS.

The home and PS perspectives on Terry differed significantly. Terry was described as more capable at home than at PS. Her family established high expectations and goals for her life, and she worked hard to meet those expectations with appropriate supports. Familiarity with the environmental context allowed Terry to be autonomous and to take initiative. Terry worked with a different job coach toward the end of the PS school year, who also took note of her efforts to be independent.

The new PS job coach took time to provide routines and increased expectations for Terry. In response, Terry worked hard to achieve them within the supports that were provided. Commitment toward her success and a supportive attitude created a context of encouragement for positive changes. Ms. Samantha possessed a positive attitude and commitment to supporting Terry. She said:

I found it more difficult to present to Terry because of the communication challenges, but I think that was not a bad challenge, it just took a little longer to try to figure out. And you know there was always a kind of constant compromise. I think it's the same, listening to what they [all the student interns] like and what they strive for, what they do

not want to do, who they want to work with and who they do not want to work with, whether they wanted to ask for a break or not? (T28: 211-228)

Listening to Terry communicate her needs guided Ms. Samantha to provide for Terry’s needs, as well as support her success. Figure 4 below shows a summary of job-coaching notes that described a scenario of supports provided, based on Terry’s expressed needs. The notes also exhibit how Ms. Samantha demonstrated the act of listening as Terry expressed her needs non-verbally.

Job-coaching notes on Terry (2/4/13)		
<p>She requested a drink of water (She was prompted with American Sign Language to ask) she got water and returned to work. At 11:10am she became frustrated while trying to place laundry sheets in a garbage bag. She sat down and twisted the sheets around her head. She was prompted (through ASL) to request help. At 11:15 she requested a break. She took 5 minutes. We worked from 11:20 to 11:30. We stopped after cleaning the toilet with the toilet brush.</p>		
2/4/13	11:30	<p>she requested a drink of water. (She was prompted with ASL to ask.) She got water and returned to work. At 11:10 she became frustrated while trying to place laundry sheets in a garbage bag. She sat down and twisted the sheets around her head. She was prompted (through ASL) to request help. At 11:15 she requested a break. She took 5 minutes. We worked from 11:20 to 11:30 we stopped after cleaning the toilet with the toilet brush.</p>

**Figure 4: Job coaching notes for student intern Terry**

Terry made progress on routine activities when specific expectations were made clear. Ms. Samantha indicated that Terry followed instructions and took initiative to act based on her needs and preferences as she became more familiar with the environment and routines. Ms. Samantha said:

In the beginning, I set a restroom schedule and just a lot of reminders and very structured environments. I found that she was a lot more independent, and would get up to go use

the restroom if she needed, I did not need to initiate. I do not know when people start listening to other people, but we need to listen to them a lot. If we do, they will get more practice making decisions. (T28: 218-224)

A summary of the comparison between Tim and Terry indicates the progress that the two interns were capable of with appropriate support from people who directly interacted with them. Tim came from an overprotective home that loved him, but did not want him to work; Terry came from a family that loved her, gave her all the same possibilities as an ordinary child, and pushed her to be productive. Tim received support at PS that pushed him to work because they perceived him as capable; for Terry, even though she was capable at home, it took time for PS staff to perceive the capabilities and skills that she could demonstrate with appropriate support. Low expectations impeded Terry's progress at PS. It took a new job coach, with new approaches, to begin to recognize the importance of listening to Terry, making meaningful connections, and providing the appropriate supports in order for her to accomplish her work demands.

Lack of uniformity in expectations between the home and PS environment impacted the success of the student interns. The student interns only worked within the set expectations: Tim worked hard at PS, but went back to his dependency mode at home; Terry worked hard at home, but only worked to the level that PS pushed her and within the available supports. Ms. Samantha explained:

When she came, I knew nothing about her, and it took—and I think we had really low expectations of her, so –I do not know what kind of growth I saw in Terry... [I] think it was growth in me, and hopefully other people in the program that saw what she was capable of. But I wonder if she was capable of doing those things prior to her coming

here and we just did not have the expectations, I don't have an answer to that. (T28: 237-243)

### **Category Two: Deliberate Efforts to Enhance Student Capacity for Self-Determination**

Deliberate efforts to increase the students' capacity to learn and act in a self-determined manner are presented as a second category. Families, PS, and collaboration between families and PS made deliberate efforts to support the student interns. The efforts included teaching/pedagogical approaches, opportunities for choice making, expectations of students, and collaborative partnerships with the home as well as within the host institution.

**Supports within the Home Environment.** Teaching approaches used by families increased the student interns' capacity to take initiative and act autonomously. Lack of deliberate efforts to increase this capacity resulted in continued dependence and lack of initiatives. Terry's case illustrates deliberate family effort that supported autonomy and initiative. Ms. Florence recognized that Terry required time allowance to do things like get dressed to go to PS. Creative use of time allowed Terry to process through instructions and act independently. Ms. Florence explained:

I look at what she is doing on a daily basis, and I always try to think forward, what is the next step to go, and again, just giving her enough time to do something, you know I know sometimes as a parent, you get rushed and you do things for kids, and so, one of the things that I started doing just to keep myself from falling into that trap is—I would ask her, let's say, get dressed, and then I would get busy with something else, I would go into the other room and start getting myself dressed. (Ms. Florence, T19:103-106)

The absence of adult help in the room forced Terry to mentally process instructions and act without help. Similarly, by removing herself from the situation, Ms. Florence eliminates the temptation to take over or provide unnecessary help to her daughter.

Tina and Tom's families used natural consequences as a strategy. Ms. Dorcas used natural consequences to get Tina to contribute to the household and teach money skills, while Ms. Kanisha used it to teach Tom to clean up after himself. These parental teaching approaches are illustrated in the following interview statements. Ms. Dorcas explained, "I tell [Tina that] you have to work for pay at my house, so she has chores, and if she does not complete her chores she does not get an allowance" (T22: 88-99). She offered critical life skills opportunities and a high level of expectations for Tina within the foster home. Her expectations relate to her desire for Tina to be able to have transferrable skills and adapt to any type of living environment. Ms. Dorcas believed that learning independent living skills was critical for Tina, regardless of her ability (T22: 125-127).

Ms. Kanisha supported Tom with the same intention, to teach through natural consequences, though her approach was less forceful compared to Ms. Dorcas's. Ms. Dorcas wanted Tina to be prepared for life beyond the foster home, being conscious of the fact that Tina's placement was temporary. Tom was going to continue living at home with his mother after PS. Therefore, Ms. Kanisha explained that setting a routine and having natural consequences created a structured system of expectations and an avenue of teaching for Tom:

When [Tom] does not do something I ask to do, I make him come down to do it. If he has gone up to his room, I say you did not put up your dishes you need to come down, you did not pick up your clothes on the floor, I need you to do it. It's often getting this off his back; it's the reward because he has followed through. I use verbal praise, "you

have done a good job” you know, telling other people in front of him so that he gets the praise and reinforcement, but he does not work for pictures of anything at home. (Ms. Kanisha, T18: 114-119)

Student capacities to act autonomously or take initiative were also enhanced by adaptations that families used to support this process. Ms. Florence shared an example of this in regard to Terry. Terry’s family provided consistent routine, opportunities for choice-making within reasonable limits, and accommodations/supports for Terry to express her choices without external influence. Ms. Florence explained:

A lot of times we give her a choice of two or three things. So that is built into our routine. “do you want to wear this shirt or this shirt” within the parameters of I am not going to offer a long sleeve shirt when it’s 90 degrees or a short sleeve shirt when it’s 30 degrees. ... we go to restaurants, and she looks at the menu, we used to go with a little magnet doddle, now we use the iPad and we would put several choices and she has to circle, and we use that as a prompt to tell the waitress what she wants. So, yes we are very cognizant of the importance of her personal freedom to make choices we make sure that we incorporate that into our routines. (Florence, T19:137-143)

Opportunities provided to the students helped identify likes and dislikes, and provided them a way to experience success, thus increasing capacity for the student to make informed decisions. Terry’s case best illustrates the relationship between availability of opportunity and choice making. The opportunities that were provided to Terry were age appropriate and safe. For instance, Ms. Florence explained that Terry rode a bike with large training wheels (safety) and participated in dance classes when she was younger (age appropriateness). As she grew older, she only danced at birthday parties. Additionally, Terry had opportunities to make choice based

on personal preference; without coercion, or undue influence. For instance, Ms. Florence explained how Terry exhibits a sense of autonomy in regard to her love for music:

[Terry] loves listening to music; she is very particular about which music she listens to when we are in the car. She likes to pick out. She competes to get to the front seat before I do so that she can have control of the radio [she laughs out loud] if I get to the front seat first then I ask her what CD she wants to listen to. But she picks that out herself. So she decides what she is going to watch on TV, what she is going to listen to, and the only time I tell her no is when we have heard something over and over. I say you have to pick something different. (Ms. Florence, T19:168-174)

In summary, the families and parents of the student interns played an active role in providing support for their children to increase capacity to be independent or autonomous in their actions. Since Tim's parent did not participate in the interviews, there was no perspective on how his family made an effort to support his capacity for self-determination. Ted was adjusting to his living situation after moving from the group home to living with his parents. Ted's mother identified independent skills that she wanted to teach Ted, such as safety and money skills, but she did not have any specific approach. There was consistency between the approaches used by Ms. Dorcas and PS, in that both were focused on employment skills. However, Ms. Kanisha's teaching approaches did not match with PS, which mainly used cartoon pictures to motivate Tom to do his assigned work (Mr. Mayo, T24:67-71). For Terry, the functional use of the iPad and a magnet doodle were not effectively implemented at PS to support choice and decision making. Ms. Genevieve tried to use the iPad as a communication device using ProloQuo2go (a software for communication), but there was no consistency in its use, and not everyone in the PS program had familiarity with the assistive device.

**Supports within the Project SEARCH Program.** As in the home environment, PS staff made deliberate direct and indirect efforts to support students' capacities to learn and act in a self-determined manner. PS offered opportunities for choice making, differing expectations, and pedagogical approaches as avenues to support capacity for self-determination. Additionally, PS coordinated supportive partnerships with the host institution and the students' homes.

*Opportunities given to the students.* The data showed that various opportunities were provided within the transition program to enhance student capacity for choice making. The main opportunity cited throughout the study was participation in internships, which gave students a concrete idea of the concept of work, helped them experience success, and also helped them identify what they liked and did not like. Ms. Charity identified the relevance of the work experience provided to the student interns as a critical prerequisite for gaining employment after PS. She explained:

[The students] need experience and practice, because if they are just thrown into something new, the outcomes could be very bad. So I think the fact that they are learning what it means to go to work, what it means to work consistently, things like actually signing in, earning a pay check, I think that it's beneficial, and it will be beneficial to them when they actually start work. (Ms. Charity, T9:171-177)

In agreement, parents/guardians believed job internships fostered acquisition of relevant skills required on the job market. The key things that Ms. Dorcas identified from the support that Tina received at PS were experiencing different jobs that were not repeated, opportunities to develop a sense of self-realization in which Tina identified things she enjoyed doing, as well as her strengths and weaknesses, and an opportunity to develop coping skills relevant for self-regulation (T22:101-116).



*Special adaptations and accommodations.* PS also provided special accommodations and adaptations that were work-appropriate, such as in Terry's case. Terry was encouraged to use an iPad as a communication device in order to enhance capacity to communicate with people in her internship. The iPad was used to help Terry advocate for her needs, for example, requesting a bathroom break, expressing "yes" and "no," and any other things that were deemed important for her daily needs. However, the communication device was not consistently used. Some members at PS did not know how to make use of it. For instance, Ms. Genevieve said:

I tried a little bit with her iPad, it had Proloquo2go software, I tried to press a button to ask for a bathroom break, or a drink. I think when she needed to go to the bathroom I just kind of – took into account her gestures, or her hands were not where they usually were...something like that. (Ms. Genevieve, T11: 145-150)

There was no consistency in the use of the communication device, Ms. Samantha mostly used American Sign Language, Ms. Charity just communicated verbally with Terry, and Ms. Genevieve used a combination of all three modes of communication (sign language, oral communication, and the iPad). The instructor and the remaining members of staff relied on oral communication. Terry was the only student intern who required significant accommodations and adaptations for communication. Minor adaptations were used with Tina, with a simplified task list to follow in her first internship, while Tim was had accommodations in his job requirement due to his physical limitations.

*Expectations of Project SEARCH on students.* Program goals and student expectations reflected deliberate efforts to increase capacity for students to be self-determined. Participants in the study repeatedly identified consistency of expectations as critical to supporting students' capacity to be self-determined. Specifically, job coaches expressed the need for PS to increase

students' sense of responsibility, and for setting up clearly outlined goals and monitoring them. For example, Mr. Morris stated, "Oh I think they should come in, in the morning, and write down what the goals for the day each day. They start off doing those things, and then try to achieve them" (T12: 149-153).

A comparison of the job coaches' interview perspectives with field observations and PS documents showed contrasting views. The data showed that PS provided clear program goals, as illustrated by images posted in Appendix A, Document 1, and Document 2. The goals were physically posted on the Instructional Center's walls. Student interns and staff members had also written personal goals at the onset of the program. The goals were stated in five areas: interpersonal relationships, personal character, job skills, independent living, and values. The PS daily schedule aligned daily routines and activities with the general PS goals. Compared to other PS staff members, Ms. Sheila had a different view in regard to goals and expectations as deliberate efforts to support student interns.

A 19-page transcribed interview with Ms. Sheila mentioned expectations seven times and goals nine times. The expectations and goals pertained to instructional goals, and work appropriate conduct, such as socialization, personal grooming, and behavior. Each young adult in the program experienced unique challenges; some expectations were tailored to student needs. Ms. Sheila explained how expectations for Tim were set to enhance his capacity:

Tim has CP [Cerebral Palsy] on top of other issues so at first it was difficult to determine whether his issues were related to his physical impairment or that of will/ effort effect. After the first couple of weeks ...he proved that he was capable of working and performing without the one-to-one assistant who once accompanied him—although just two years prior he had three staff assigned to him for daily performances in the academic

environment, now he performs vocational tasks in partnership with another custodian and completing all tasks as expected. (T35: 463-469)

Tim had an adult staff member assigned to him as a recommendation in his IEP. After observing him and assessing his skills, Ms. Sheila recommended removal of the adult staff. Tim was able to work independently with an internship mentor, Ms. June, with the occasional presence of a job coach.

Ms. Sheila also explained that expectations were communicated to the students from a strength-based approach. In other words, the expectations did not focus on the students' needs and limitations, but on their strengths. For example, Ms. Sheila explained the strength-based perspective used when communicating expectations with students as, "Instead of pointing out to all the wrong things that he did, we try to focus on all the 'I really like how you did that'" (T15: 90-94). According to Ms. Sheila, students were provided context for the learning and practice of set expectations. Meal times provided appropriate context for practicing socialization expectations. The contextual realism provided during meal times was aimed to guide student interns to identify appropriate conversational choices, eating habits, and self-care, and to practice them with each other. Through practice, PS expected students to apply and transfer those skills to appropriate settings.

PS used modeling and role plays to teach specific expectations. During the first weeks of PS, Ms. Sheila illustrated how they taught trust and acceptance as critical expectations for their program. She explained:

First, before any behavioral interventions were introduced trust had to be established. The interns had to know that we were committed to their success and believed that they would achieve the goals together. We started with activities to get to know one another,

modeling the expectations and acceptance that occasionally a mistake would be made but we move forward from them, never backward- learning from each experience. (T35: 241-245)

The data from the job coaches and the instructor, as well as PS documents, presented contrasting perspectives on the sub-category of “efforts provided by PS to enhance student capacity for self-determination.”

An examination of the context related to the responses showed that the PS staff members and the students did not share a common understanding of the laid-out goals and expectations. Program staff identified a need for established standards of expectations and increased student sense of responsibility, as well as monitoring and following through of stated goals. Ms. Genevieve’s perspective highlighted the lack of a shared understanding of expectations among the staff and the student interns. Structure and consistent framework for translating and supporting the shared understanding of the goals with PS staff and participants were not adequate. Asked if PS adequately addressed independence and employment goals, Ms. Samantha, another job coach, explained:

My first reaction would be a No, but we did do some kind of math, and we would talk about budgeting—but I do not know how much of that, there did not appear some kind of structure and plan to that. So I do not know how effective it was for our interns. (T28: 247 – 250)

The goals and expectations were stated and made available. However, there was inadequate effort to bring every PS participant to a shared understanding of the expectations and goals. Student interns lacked accountability and a sense of responsibility for or ownership of their learning. The program staff believed continued conversation and reinforcement of goals and

expectations would have supported deliberate efforts to enhance student capacity for self-determination.

*Project SEARCH pedagogical approaches.* The pedagogical approaches used by PS staff members revealed three particular features: personal beliefs and attitudes regarding student support, strategies for teaching new skills, and direct/indirect outcome of the instructional support.

First, effective pedagogical approaches examined reflected personal beliefs regarding student support. These beliefs were either passion-driven or lacked personal drive. In other words, the staff members perceived their supportive roles as driven by their love and enjoyment of the work with the young adults. Passion-driven pedagogy reflected a caring and supportive attitude when the PS staff worked with the student interns. For example, one internship supervisor stated that her success was influenced by her positive attitude. She was a staff member in the custodial service department. She was not trained to provide special education support or mentor a student with disabilities. However, her approach with Tim illustrated a passion-driven pedagogy. When asked how she offered support to new interns, she explained, “I think it’s my attitude ...I basically go off what I see they are capable of doing” (Ms. June, T7:77-82).

Ms. June first demonstrated awareness of the importance of trust and understanding unique needs of her student intern: “I try to get them comfortable;” “I do not know his disability but I see it’s something with his legs.” Second, she examined Tim’s skills, and provided appropriate accommodations: “I kind of let them to do what they want to do, to see what it is that they can do, and then I base myself from there.” Third, she planned and provided appropriate accommodations to help Tim be successful in his work internship: “I won’t let him walk and

sweep down the steps unless I let him sit and wipe the steps with a towel and a bucket of water, so he does not have to stand up” (T7: 77-82). Ms. Charity also illustrated a passion-driven attitude in her work with Tina and Terry:

You have to be passionate about this [job] because you are impacting the lives of these individuals, they have already gone through so much, so you want to have a positive influence on them, not a negative influence ... You have to want to give yourself in every way, mentally, physically, emotionally, you are like, you just have to be there and support, and even when you do not want to. ... You just have to have the child’s best interest at heart... (Ms. Charity, T9:230-247)

There are similarities between Ms. Charity’s and Ms. June’s attitudes with the student interns. They both demonstrate an awareness of the students’ needs, a positive attitude, and a commitment to support them, making appropriate adjustments and accommodations to help them succeed. Ms. June, as an internship mentor, possessed minimal knowledge of Tim; however, Ms. Charity possessed greater knowledge of Tina. Despite their levels of knowledge regarding the student interns, the two staff used that knowledge to provide appropriate accommodations for the student interns.

Second, PS pedagogical approaches followed a specific process for teaching new skills and introducing a student interns to new environments. This process started with gradual introduction of the new skill or environment and led to full immersion. For example, in order to minimize anxiety and prevent challenging behavior as a result of drastic change of environment, Tim was introduced to PS by organizing daily field trips from his previous school setting to PS (Ms. Sheila, Transcript 35).

*A case of Student Intern Tina:* At the end of the school year, the only student who achieved full independence from job coaching at PS was Tina. Her case illustrates how PS pedagogical approaches were organized in a process of gradual to full immersion. Those who worked with Tina described her transition from 100% job coaching to 5% job coaching during the PS academic year. Tina's job coaching began to decrease in the computer lab internship (described in Chapters 3 and 4). Ms. Dee, a member of the PS leadership team, explained how this process began:

We kind of guided her along the way and then we started seeing that she showed some independence, that is when we started fading back on her, I think we went from a 100% to eventually down to 40% as far as giving her the independence of walking to the computer lab on her own, doing lunch on her own and learning how to manage time during her breaks. (T29: 160-163)

Several steps were taken in order to reduce Tina's job coaching from 100% to 40%. A collaborative effort provided gradual support that led to full independence. First, Tina had a supportive work environment that made her feel at ease and safe at work. Ms. Samantha said,

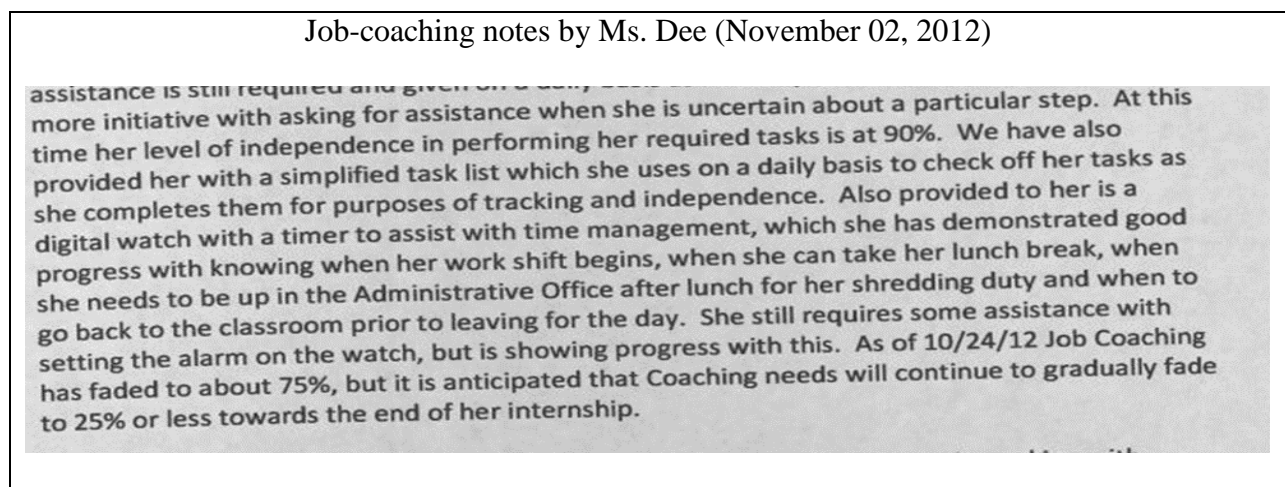
But I think the other piece that supplemented to the independence, is that there were at least two of the staff at the computer lab that were very comfortable interacting with Tina and that she was very comfortable interacting. So as I started to fade, if she had questions, she could go to them. I think that really could be help with my leaving the job site more often and giving her independence. (T29: 134-138)

Second, when trust was established in the work environment, a task list was prepared to teach monitoring and tracking of work completion. Every completed task was checked off the task list. Ms. Samantha modeled and guided this process (Ms. Samantha, T29: 134-138). As

Tina's skills developed, the job coach no longer had to come to the internship with her. Specific tools were provided to support and give structure to her independence. Tina was given an alarm watch, taught to read time, and set her alarm to self-monitor during her work breaks.

Tina was given a simplified task analysis with a list of specific steps for completion of assignment. She checked off every accomplished step and tracked her progress on the job.

Figure 5 below is a clip of a job coaching report explaining specific steps Tina used to guide her own independence.



**Figure 5: Job coaching notes for student intern Tina**

Her success with the independence was short-lived. Tina started to take advantage of the free time as Ms. Dee explained:

Well, we had hoped to fade further, but then we realized that she was starting to kind of take advantage of some of her breaks, and also kind of when she was leaving like the computer lab to come back to the classroom, she would take detours, and so we were finding that she was visiting other areas of the building without our permission, and also finding things that did not belong to her, as far as candy, cellphones, books and things like that. (T29: 171-175)



The job coaching was increased to 70%, and the consequences communicated to Tina. Ms. Dee explained to Tina that, “her actions were to the point where she could easily get herself into trouble, if she did not turn her actions back around” (T29: 176-177). They developed a strategy to address the challenge. Ms. Dee said, “what we would do was kind of stage ourselves, when it was her break time, we monitored her from a distance to see if she was following through directions” (T29: 177-180). Tina had to gain her trust back; Ms. Dee and the job coaching ensured that Tina knew she was being monitored. When Tina started making positive changes, Ms. Dee said:

We started to let her know that we were proud of her for following her rules and doing what she was supposed to do, and because of that we were going to give her a little bit more independence, but it was going to be a gradual process if she continued to show us that she could follow the rules. (T29: 184-186)

By the time of her final internship with the custodial service, Tina had gained her independence back. Her job coaching was faded to 5%. She conducted her work independently. Her case illustrated the process of gradual support to full immersion. There was no straight path to achieving full independence of skill acquisition. Close monitoring, continuous assessment, provision of accommodations, and supports (like the simplified task analysis and the watch) were provided to help the student self-monitor and establish parameters of her own independence.

The third feature identified in the PS pedagogical approaches pertained to the direct and indirect outcomes of the support. Instructional approaches aimed for autonomy support. If a student did not have the prerequisite skills, the instructional approach tended to offer scaffolding until the student gained independence. The job coaches or supervisors did not state the goals behind their approaches; however, the concepts developed to describe the pedagogical

approaches sub-category consistently showed that the supports directly or indirectly promoted students to work autonomously. This was observed in the relationship that Tina had with Ms.

Dotty during her custodial internship. Ms. Dotty recalled her approach to supporting Tina:

I had to walk Tina through when she was with me. I went through everything, I showed her what to do, and told her. Then she was catching on slowly, then after--I say after two or three weeks, I did not have to tell her anything, she would come in and just do what I had told her to do. But see I might have something different on that day, then I would have to stop her to tell her "Tina we have to do this first" she would pick up on what I would tell her to do.... I would say she is a quick learner. (Ms. Dotty, T6:66-72)

Ms. Charity explained the same approach:

When I started working with Tina, I had to follow her on a step by step basis, right now, because she has done so well, she is able to independently work, so I am over here for on an as need basis, if she needs me, then I am here. (Ms. Charity, T9:64-68)

The gradual support was used for all students, including Terry, who communicated non-verbally.

With Terry, it was a bit different – with the supports that I gave her at the beginning of her time in the job to the type of support that I gave her at the end...there was a mixture I guess in general at the beginning it was more direct support, and direct prompts, and just so I knew she was exposed to what she was supposed to do and she knew what to do. As time went on, I tried to use less direct prompts. (Ms. Genevieve, T11:70-78)

To support students' autonomy, direction was provided from concrete instructions to abstract expectations, e.g., clean the tables. The student intern was expected to know, based on previous learning or experience, what it meant to clean the tables. The instruction was also provided beginning with verbal directions to allow the student to work on her own based on

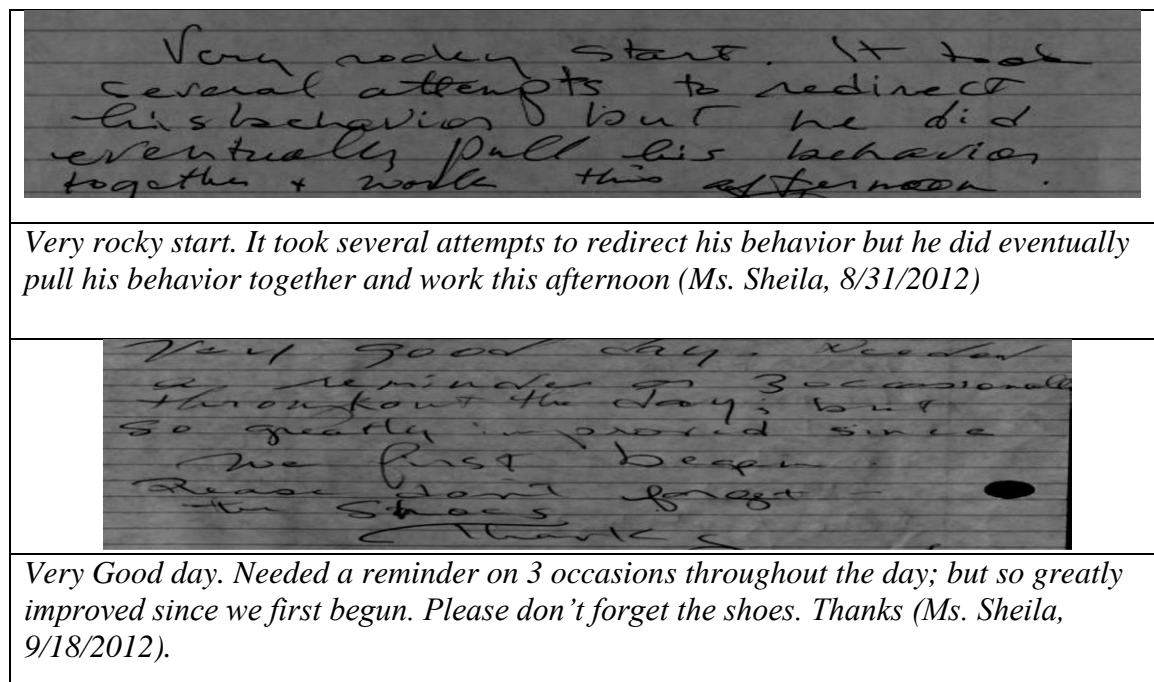
learned expectations. For instance, Mr. Jeke stated that he provided the verbal instruction and gave the students an opportunity to do what they were instructed to do. Mr. Jeke used this approach with Ted:

Well, some people you have to talk to them as a kid, teach them at a child level, and with Ted, he understands his –he may act like a child, but he knows how to, like if I tell him to go to the rest room and I give him towels to clean, wipe down the sinks, the urinals, or clean the toilet with the toilet brush he would do it. So it's not like he don't know. My strategy was telling him what needs to be done and let him do it. I told him to listen and learn. Once you listen, then you learn what you need to learn. (Mr. Jeke, T8:76-81)

In summary, the pedagogical approaches used within the PS program were similar to traditional strategies. The data presented unique features that ran across the participant interviews as effective: approaches driven by passion reflected in personal beliefs of the student, the process of gradual to full immersion as a method for teaching new skills or introducing students to new environments, and that the outcome of instruction seemed to lead toward autonomy. The data did not show any examples of approaches that lacked a positive drive or left students unsupported in a new environment, or strategies that perpetuated a sense of dependence.

*Project SEARCH coordination partnerships.* PS coordinated partnerships with parents and internship sites in an effort to enhance student capacity for self-determination. During the course of the program, the PS staff members were required to communicate and work with parents and internship supervisors as key players in support of the student interns in the program. Close working relationships developed as a result of the collaboration among these groups. The specific roles of the partners in the relationship were measured on the dimension of effectiveness, ranging from effective to non-effective.

*Partnerships with parents and guardians.* The initial plans of the Project SEARCH program aimed to include parental counseling and support; however, the plans took a different format (Ms. Genevieve, T11: 48-58). The PS instructor became the primary contact person between PS and the students' homes. The counseling did not occur, and parents did not meet. As students participated in PS, the instructor made various deliberate efforts to connect with the parents and collaborate regarding student success. Communication with parents took place through email, telephone, home-school notebook, and in-person communication. Ms. Sheila used the most convenient means to communicate with the parents/guardians. For instance, a home-to-school notebook was used to provide parents a brief summary of the student's day and sometimes a reminder or response to a Project SEARCH-related need. Figure 6 below presents a sample of home-school note communication with parents. The two notes were written by Ms. Sheila to the group home regarding Ted's day and internship requirements at PS.



**Figure 6: Sample of school-to-home communication**

The collaboration between PS and the home ensured that students' needs were addressed. In some instances, communication regarded addressing behavior interventions, requesting materials for the internships, announcing upcoming programs, or simply briefing parents on their child's day. Ms. Genevieve perceived the interaction and communication with parents as lacking in the dimension of support for parental needs. She stated:

The instructor has many roles in the program. Although she made good alliances with the parents, I think sometimes it's nice to have someone who is outside and not in charge that they could talk to without feeling that they were criticizing someone or somebody that they do not feel comfortable sharing all their business. (Ms. Genevieve, T11:250-253)

The other form of collaboration and partnership that PS coordinated developed on the university campus with the internship sites.

*Partnerships with internship sites.* The PS partnerships with internship sites were strongly dependent on the interaction between the job coach and the internship mentors. They worked together to support success of the students in their internships. The role of the job coach was perceived as key to the success of this partnership. Supervisors and mentors felt at ease working with the student interns because of the presence of the job coach. The responsibility for teaching the job task was also perceived as the job coach's responsibility. For example, Tammy, one of the internship supervisors said, "The job coaches really are the ones who lead them; we just provided them with the materials, the shredder" (Ms. Tammy, T2TK: 67-68). Similarly, Mr. Gabriel explained, "When they come in, I will walk the job coach and the student through the responsibilities of the job in detail. As far as my daily responsibilities with them" (Mr. Gabriel, T1G:78-85). In this context, the effectiveness of the job coach was in his ability to listen to instruction and to support the student with the site's job requirements for the student.

Some internship site managers understood their role to be to provide work and materials, and the job coach was responsible for directing and monitoring the student. The significance of the students' disabilities impacted the direct interaction between the internship staff and each student. If the disability was perceived as significant, the internship staff preferred to utilize the job coach as the direct contact with the student. Mr. Gabriel explained the reason why he did not have a direct interaction with some of the students:

I do not have a lot of interaction with them because a lot of the students have some other sensitivity or special situations—so I let the job coach take more responsibility. But it depends on what their demeanor is so we kind of step back and kind of go through the job coach. (Mr. Gabriel, T1G:78-90)

While the job coaches were perceived as critical to students learning the new job skills, other supervisors also perceived them as a safety net. Their presence assured the supervisors that things would be under control in a situation of challenging behavior by the student. Ms. Tammy and Ms. Kelly, in another internship site, explained the same. Ms. Tammy said:

The coaches know the person better than we do, and would know what to do. For example, listening to how the coaches for Terry talk to her, they knew how to talk to her in a way that did not make that outburst turn into something, so I and Kelly would not know what to do. (Ms. Kelly & Ms. Tammy, T2: 196-200)

The job coach's presence on the internship site facilitated ease of transition in unfamiliar environments. For example, Mr. Jason said, "I think Samantha helped Tina a lot. She was like a comfort zone that Tina knew. She could go back to Samantha and complain, or talk about what was going on" (Mr. Jason, T5:145-146). However, after a while in the internship, the student interns were required to ease away from adult support. The data showed that student interns

were more autonomous at sites where supervisors and mentors took responsibility to guide the student and create a natural work setting. This was noted with Ms. June and Ms. Dotty in the custodial service internships. The two mentors preferred to work without interference from the job coaches. Ms. June said, “I try to keep them [job coaches] away, because I notice that students will look more to their one on one than to listen to what I am saying... I [only] let them stay for a minute until they get used to it” (T7: 94-99). Another mentor in the custodial service agreed with Ms. June. Mr. Jeke perceived the presence of the job coach as an impediment to student support. He said:

Well...the biggest challenge with me was –I feel that the [job coach] needs to step back, not saying that I am trying to fill his shoes, but as you have Ted to work with me, I need to be in charge, if I have any problems I will come and let you know. So my biggest problems were me being the job coach. (Mr. Jeke, T8:91-97)

### **Category Three: Factors that Undermine Positive Changes in Self-Determination**

The third category constructed from the data represented concepts perceived to challenge the opportunities for the students to learn and act in a self-determined manner. Participants and the data in general identified their perceptions that they expressed as impediments to positive changes in self-determination. These factors directly or indirectly seemed to contribute or hinder the young adults’ opportunities to be self-determined. The sub-categories of this category identified parent challenges in navigating the transition from secondary to post-school options, perceived inadequacies within PS, and perceived gaps in student readiness. It was attempted for categories and sub-categories to be described in neutral terms, and they draw into the study negative perceptions; however, the responses offered help to answer the research questions of

this study, and do not serve to evaluate the PS program, its hired professionals, its administrators, nor the participants (as stated earlier).

**Parent Challenges in Navigating Transition Options.** Within the home environment, families faced challenges to navigate options for transition from secondary to post-secondary education placements. Parents/guardians communicated that it was difficult for them to identify post-secondary education options for their children. They also indicated that support services specific for young adults with ASD seemed to be inadequate. When asked about available post-school options for young adults with ASD, Ms. Kanisha shared her experience:

Good luck! There is not much out there to help. I thought that when I was going from high school to the next program, someone would give me options, there would be you know, a list of these types of programs, here is these types of programs, here is a list of these types of programs. Go ahead and figure out what is best for Tom, look at them and look at the choices. There is none of that. Anything that I found, I found on my own. The case manager was very good, but she did not know about the programs, she was not really able to guide me in the right directions. It was something I had to do on my own. That was the case most time with Tom; nothing has been set up I have had to do everything. (Ms. Kanisha, T18:173-180)

Almost all parents in the study expressed dissatisfaction with the programs in which their children were participating prior to PS. For instance, Ms. Florence indicated that Terry was enrolled in PS because she was not challenged sufficiently in the program in which she participated prior to PS (Ms. Florence, T17:51-54). Similarly, Ms. Dorcas found that Tina was frustrated in her education placement prior to PS. She stated that Tina needed a relevant program that addressed her needs:



I was contacted [about Project SEARCH] by Mr. Mario ... He has been working with me and Tina for the last couple of years. So he knows all the trials and tribulations, and problems that she was experiencing, and so when this opportunity presented itself he thought of her as being one of the children who might be able to excel in the program or at least being able to cope... She is not going to be confined to a room, she was going to be learning skills, and books, ABC's and math and all that, that's something that goes over her head that she does not understand and makes her frustrated... I think [functional] skills might bring her to a higher level. But trying to get her to read at a certain level, trying to teach her to learn multiplication at a certain level, division to a certain level that is not like her, she cannot cope ... (Ms. Dorcas, T22: 62-75)

Ms. Kanisha shared similar thoughts about Tom at PS:

Tom was going to another school in the city, and it's a self-contained autism program, and Tom was really burnt out on school, so when there was an opportunity for him to change to a different program, particularly focusing on transition to job or volunteer, it was what I was really, really hoping to focus on for him, because academics, at this point, he is so capable of learning, but he needs more functional daily activities, and working skills. (Ms. Kanisha, T18:62-66)

The parents stated that they experienced challenges with programs that did not address the functional needs of their children. They stated that PS provided hope for the support they required to successfully transition their young adults to employment. The implication of negative educational programs prior to PS entailed that the students came to PS with learning gaps that impacted the student interns' readiness for the program.

**Gaps in Student Readiness.** The data showed that expressed opportunity for PS practices to support and enhance capacity for self-determination was dependent on student readiness. Their levels of motivation, behavior and emotional regulation, as well as knowledge at the onset of PS, were reported as impacting positive changes in self-determination. Readiness for learning and for receiving supportive efforts at PS benefit students when they are motivated, behavior-regulated, have some prerequisite knowledge in order to begin making positive changes.

**Students' motivation perceived as important to student readiness.** Tina made more significant improvements and demonstrated success in PS compared to any other student intern in the program. When interviewed regarding her desire to work, Tina had already established an interest to work in the mall. She said, "I want to work somewhere in the mall, kind of clean where girls help people to pick up clothes. This is my future!" (Tina, T37: Q6). Because Tina was motivated, she made positive changes, her job coaching was decreased, and she worked independently. The job coaching director, Ms. Dee, said:

Now that Tina is working in the nursing building doing custodial jobs, throughout this year I think she has learned a whole lot and that she takes pride in her work and being responsible and she likes being independent, she knows that she has earned that. So when we were over at the nursing building we had probably faded [job-coaching] from 100% to about 5%. (Ms. Dee, T29:189-192)

The same could not be said regarding the other interns, particularly Tim and Tom. Both students were unmotivated at the onset of PS, and they both continued to struggle with the idea of work by the end of the program. When asked about their desire and future plans regarding employment, Tim said, "My mama said I am not ready for a job yet, but will work with my

granddaddy at the real estate to cut trees, weeds and grass” (Tim, T37; Q6). When asked the same question, Tom said, “I want to be alone in the future!” (Tom, T37: Q6).

Motivation to work was a key factor in supporting and nurturing self-determination for the student interns in PS. Tom did not have interest in employment. When queried about future plans for housing, work, and transportation, Tom replied, “I am not getting a job!” as recorded in his ASDS record.

Ms. Sheila rewarded Tom for his work by giving him pictures of cartoon characters. Mr. Mayo, his job coach, reacted differently to this, because he perceived the intervention as inappropriate for work. He said:

I do not think Tom is capable of doing his job, Tom can focus on really one thing at a time, and his true main focus everyday was just to get a picture, it wasn't to come here and be this great worker... But in real life and in real society you do not get rewarded do working. (Mr. Mayo, T24: 67-71)

Student intern motivation and interest were key attitudes prior to developing any career interest. Tina understood the concept of work, and with increased competence, she was able to experience success and a deeper motivation for work. On the other hand, Tom had no interest in work, and when there was no reward to motivate his interest, he did not want to work.

#### **Extent of behavior regulation skills perceived as important to student readiness.**

Lack of students' behavior regulation skills at PS was a perceived impediment to self-determination skill gains when working with internship training or instruction. Ted's case at PS provides an illustration of how his lack of behavior regulation skills impacted his readiness for learning and development of self-determination skills.

We were working on Ted's self-image, because when he came in here he kind of – exhibited a very poor self-image. Because what he was doing was to be other people rather than himself....Ted was also displaying some behaviors that would not be appropriate in a work site as far as laying on the floor, and crying and beating his head and hand against the doors, the windows, and actually requiring two of the gentlemen coaches to be sitting with him so he would not hurt himself in crying and displaying that he was not happy with his life. (Ms. Dee, T29: 69-79)

PS spent time addressing the behavior regulation challenges, devising interventions, and teaching work-appropriate skills. In-house simulation activities were organized prior to assigning students to various internships. Ms. Dee further commented:

I thought it was important to get some of those behaviors in a more controlled environment before he actually went out and started his internships. That is why in-house simulation worked very effective, because we were working on some of those behaviors, and we were still able to assess him, in a controlled environment to see where his skills were. (Ms. Dee, T29: 79-86)

In summary, for the safety of the student and the internship staff, aggressive behavior challenges were monitored and addressed as a priority. This delayed time spent in the actual internships, because the first months were spent on instruction, addressing learning gaps, and working with behavior challenges. Ms. Sheila said that the first student was assigned to an internship five weeks after PS started because the program focused on addressing behavior challenges (Ms. Sheila, T35: 485-488).

**Prerequisite knowledge perceived as important to student readiness.** As the students participated in the program, increased awareness and a more concrete understanding of work

helped them begin to make autonomous decisions regarding choice of work and future goals, among other things. Mr. Mayo mentioned the importance for the students to have a concrete understanding of work. For instance, Ms. Dorcas observed that internships helped Tina develop a concrete understanding of work, a realization of what she was capable of doing, and her limitations. She developed her work interest along those lines (Ms. Dorcas, T22: 109-115). Mr. Mayo agreed with Ms. Dorcas regarding Tina's progress. He indicated that Tina felt empowered because of the practical experience she received through work, which permitted her to be aware of her capabilities. He said:

Just the fact of them knowing that they can do something, them knowing that they are viable, useful kids... I think that kind of empowered Tina to do stuff on her own, and I use Tina because she was one of the main ones that was really on her own [working without a job coach]. I know it just gave her the great feeling that "I can do this" I think Tina was really one of our main success stories. (Mr. Mayo, T24: 202-205)

**Perceived Inadequacies for support of self-determination within internships.**

Specific factors at PS were perceived as negatively impacting student capacity to make positive changes in self-determination. Lack of understanding of roles and responsibilities in the program, weak self-efficacy belief among PS staff members' non-cohesive relationships among staff members, inadequate curriculum provisions, and duration of student participation in PS were identified by interviewees as perceptions that impeded self-determination gains of student interns in the program.

*Perceived lack of understanding of roles and responsibilities.* The staff members used a ranking of satisfactory to unsatisfactory to rate their performance of duties to support students. A

mentor in custodial duties expressed disappointment with some PS job coaches. She explained that her peers and supervisors observed job coaches not interacting with students. She said:

The job coaches think they are hiding, they are not, and the people keep talking all day. They are sitting in the optometry area ... I tell them that you all can't be sitting around the building because people are watching you when you think nobody is watching you. You see walls have ears. (Ms. June, T7: 122-124)

Another supervisor stated that he observed that the role of the job coaches was unclear, and he stated that their responsibilities at his internship site were inadequate. He suggested that the job coach role should include offering students growth in their work responsibilities. He specifically commented:

From my perspective, [their job responsibility] can go back to the growth of responsibility for the intern, so instead of having them working just the same, continuous, rigorous task, I think it should be on the job coach to come in and say, alright, now, we graduate from this, let's go to this, and let's go to this, so that they would know that your job forever in life is not always going to be just doing this, you are going to want to get better at what you do, and then you want to progress, take initiative to progress from just the job that you are doing. That would probably be the only main thing. (Mr. Gabriel, T1G: 197-203)

No data was collected and reported on perceptions of the PS leadership, internship supervisors, or parents in relations to self-determination.

*Cases of perceived weak sense of self-efficacy among internship staff members.* The data showed that self-efficacy was important for the PS staff members, and the perceived weak self-efficacy undermined capacity to support self-determination of the student interns effectively.

Self-efficacy was measured along the range of strong to weak. For instance, Ms. Charity expressed weak self-efficacy due to lack of training and mentorship specific to her job coaching role. She stated that she was not aware of Tina's challenges when she started PS, and the PS leadership did not alert her of Tina's attitudes toward black women. When Tina demonstrated aggressive behavior toward Ms. Charity during their initial working days, she commented:

I felt incompetent because I was not able to help this child. But as the relationship developed, she learned that I was not out to harm her or hurt her, so our relationship has changed drastically. (Ms. Charity, T9:221-226)

Similarly, Ms. Samantha stated that she was unprepared to work with a student who communicated non-verbally. She explained:

It was difficult to work with Terry because she is not responsive...it was very difficult... they [Project SEACH leadership] just told me I was working with her. I did not know any sign language, and from what I understand, she responds to sign language. I do not know anything about her diagnosis; I was just assigned to work with her. So, it was very challenging because it was my first time working with a non-verbal person especially with the type of work that we were doing. So it was very, very hard. (Ms. Charity, T9:262-272)

Another staff member also indicated a weak sense of self-efficacy in performing her role as a job coach. She perceived that she was recruited to provide administrative support for the program and the internships, yet after the program started and her roles were switched, and she was assigned to job coaching, and she felt inadequately prepared for that role. However, she relied on other staff at PS to guide her through the process. Ms. Samantha stated:

I definitely [felt] less prepared as a job coach, but I tried to rely on talking to my peers, the staff at Project SEARCH to get help with that, I used my intuition about what the specific students I was working with needed. (Ms. Samantha, T28:297-300)

The uniqueness of the PS program in supporting students with significant disabilities required mentoring and training of the staff. The PS staff expressed that they continued with their work, yet claimed that they felt inadequate in many aspects of supporting the student interns. Some staff members who admitted to a weak sense of self-efficacy were also the most supportive of the students. For instance, when Ms. Charity overcame her challenge with Tina, Tina grew to be very successful and independent in the program. Similarly, Ms. Samantha took on the responsibility of working with Terry. Terry demonstrated the most improvement in the program during the time she worked with Ms. Samantha.

*Staff relations that were perceived as lacking cohesiveness.* The data revealed expressed perceptions of cases of non-cohesive relationships among staff members at PS. Expressed relationship inadequacies were noted as existing in the area of communication with the leadership team, as well as the opportunity for staff input with regard to student programming. The staff members expressed their perceived lack of permission to provide their personal input on student activities at PS. For example, reflecting on her time at PS, Ms. Charity said:

I just basically can say that I have done the best that I could do through my time here with the resources that were given to me, and *the things that I was allowed to do* [emphasis noted by researcher]. I do feel like some things should have been done differently... I wanted to get on the computer and assist Tina to learn how to type; I was told that wasn't an option, that she would never have a job where she would be required



to type. So I think because technology is taking over the world, so I really do think that certain things could have been changed. (Ms. Charity, T9:83-89)

Mr. Morris shared Ms. Charity's views. His reflection of PS showed a perception that his input was not permitted in the program:

Given a choice to work in another program [like this] I think I would want to know what type of person was in charge, ...because *if you have different things to bring in like most people, and you are unable to do it, then why even bother? Because then they are looking for a robot so that they can control and make them say everything, so you do not need me* [emphasis noted by researcher]. So that is what I would do. I would investigate by talking to the workers and not the boss. (Mr. Morris, T12:229-236)

***Curriculum provisions that addressed self-determination.*** The data pointed to staff members' perceptions of inadequacies in curriculum, including their perceptions related to instruction of skills relevant for students to act in a self-determined manner, organization of instruction, job training support, and program outcomes relevant to the student needs. The data indicated staff members' perception that the curriculum at PS lacked sufficient life skills instruction of which students clearly needed more. Ms. Charity identified some of the gaps:

For some of these individuals, stress management, anger management, hygiene, proper attire, proper work attire, and proper attire in general, geez! Communication skills, organizational skills, there is a plethora of things that you know—anything that an individual needs to live, I think needs to be incorporated into this program. Budgeting skills, I guess that is associated with money management, but there is plenty of things that could be added. (Ms. Charity, T9:193-197)

The program therapist expressed agreement with Ms. Charity's observations. Ms. Gomez felt that the students required more practical skills related to money and budgeting. She said:

If they had learned a little more [instruction], like working with money...building in a reward store, you have to have the resources to do that too but that would be good.

Obviously when you do have a job you work you work for your paycheck so that you buy the things that you want or need for yourself, so I think we can kind of do that in our little microcosm. (Ms. Gomez, T14: 214-218)

Another staff member, Ms. Genevieve expressed need for better organization and planning of instruction:

I think that the overall organization of the program could be stronger; there is always room for growth there... I think that maybe having a really clear, not too long lesson plan right before going out to the jobsites would help them to understand what it means to be independent. Um—there is so much I could say... But we are with the interns; I think it may be better use of our time, just to focus all our energy on them, so that their time is not wasted ever! (Ms. Genevieve, T11: 200-215)

Other staff members expressed that they perceived the program outcomes as irrelevant to students' participating in gainful employment. Mr. Mayo expressed his wish that the PS program match the student's job training to their skills and interests, rather than limiting students' options to a job that was available. He said, "[some of the students] are very intelligent, and we have not even played on that, not one bit this year [2013].... (Mr. Mayo, T13:275-303). He continued:

I think the main disheartening thing to me is that we go and pick up trash all around campus...this is a great program. It's one of the best programs that I have run across in five, six, seven, years. ...let's get some high functional kids and then the program will

thrive. You know, so what is going to be done with these kids after this is over with.

They will have no job set up. They will have no nothing set up, majority of them will age out in a matter of a few years; Tina, Tim, and Tom has already aged out. (Mr. Mayo, T13:275-303)

*Perceived inadequate duration to offer the transition program.* The staff members expressed that they perceived the time and duration of student participation in the program as inadequate. The data indicated that the students' enrollment dates in the program varied; while some students had a full academic year, some only participated in the program for half of the time. The PS instructor expressed this in relation to the duration of the program:

It is critical, as I had been discussing with the leadership team since around December 2012 that programs be longer and more extensive than in a single year... The interns and families need to be involved in a counseling program that helps to prepare each family member for what will be expected, the adult service programs, how to apply and remain in their case management systems, and maintain competitive employment as they progress through the first years post-graduation. All of these participants need to work together- each has so much to learn together of the interns' capacity to learn and participate meaningfully in the aspects of the workplace and socially in the community.

(Ms. Sheila, T35: 551-562)

Perceived by staff members as important were curriculum provisions coupled with characteristics of the staff members working with the students. Staff members expressed that in order to make the curriculum effective, specific staff qualities and characteristics were necessary for working with the student interns in the program. Ms. Gomez, the program therapist, suggested that PS hire staff with certain skills:

Staff that has a lot of empathy, a lot of flexibility, that they are innovative, and figures out how to keep the interns moving in a positive direction. Somebody who is not at all punitive or you know, just somebody that not only has positive vibes but also can like change their thinking pretty quickly and try new things with someone when the things that we normally have been trying are not working. (Ms. Gomez, T14: 209-212)

#### **Category Four: Indicators of Self-Determination Across Settings**

The fourth category describes the extent to which the student interns acted in a self-determined manner in different situations while at PS. The label: “Indicators of self-determination across settings” was assigned to this category, because students appeared self-determined based on the environmental context and the specific supports provided.

**Aspects of self-determination changes identified.** Changes in self-determined action were demonstrated as competence of skills learned, autonomous action or choice that was non-coerced, behavior and emotional regulation, age appropriate self-care skills, and socialization of students in various contexts explained as student interactions.

**Competence.** Student interns demonstrated increased competence in execution of skills learned during PS. Several factors influenced demonstration of acquired competence in various settings. For instance, Ted was capable of doing any task required of him at PS. However, distractions within his work environment impeded his ability to stay focused. Mr. Morris, Ted’s job coach, stated:

Ted is a good worker; he can adjust to any type of work. Work is not the problem, it’s just his problem is basically based on the people around him. He can adjust to any job.

He is a good worker. You can give him directions or show him something physically, and

he will get the job done. He just gets distracted when different people, especially females around him that intrigue his interest I guess. (Mr. Morris, T12:134-141)

Within the home environment, Ted's mother, Ms. Carrie, made consistent observations regarding her son's ability to work at home. She reported that Ted had spilled some water on the floor, and he took initiative to get a mop and dried the floor, an example of the kind of independence they were hoping for with Ted. Ted showed increased competency in required work demands at PS, or chores at home; however, as reported by Mr. Morris, his ability to demonstrate competence was impeded by his attention-seeking behavior. In order to support Ted, PS leadership recommended a type of work environment that was free from interferences that caught Ted's attention. Ms. Dee said, "The busier that Ted is, the better he is. He needs to do a type of work that he is busy the whole time; he does not need time to think about anything else" (Ms. Dee, T30: 107-124).

*Autonomous action/choice.* As the student interns gained competence, their level of autonomy became more evident. Their ability to take action and make informed choices was demonstrated. It was common toward the end of the PS for students to take full work responsibility. Tina was one intern who consistently demonstrated increased sense of autonomy and initiative. Ms. Dotty, her supervisor during her third internship rotation, shared an instance in which Tina demonstrated competence and autonomy:

There is one day where Tina really worked hard ... She came to me and said, "You do not have to do nothing because I did the stairs, I did the knobs, I did everything. I had to walk with something in my hand just to look busy, but that day she did everything. (Ms. Dotty, T6:106-108)

Significance of disability and ability to communicate verbally did not seem to impede autonomous action. Terry, who communicated non-verbally, showed autonomy and initiative during the last part of PS compared to when she first started the program. Ms. Samantha, her coach, explained that taking time to wait and listen to Terry helped to allow opportunities for the student intern to take initiative, rather than acting on her behalf. Although Terry seemed to have made positive changes at PS, an interview with her mother revealed that she had more autonomy at home than at PS. Terry had routines and chores that she performed autonomously, and she demonstrated choice of action based on preference in area of music and other leisure activities (Ms. Florence, T19). The findings indicate that some students demonstrated more autonomy at PS than at home, while some students demonstrated more autonomy at home than at PS. Availability of supports within the PS environment increased the student interns' capacity to act autonomously at home or at PS.

***Behavior and emotional regulation.*** As discussed in the early sections of this chapter, students at this Project SEARCH had unique life experiences characterized by challenges with behavior and emotional regulation. This study found that with appropriate supports, the student interns who demonstrated challenges in behavior and emotional regulation made positive changes by the end of the PS program. Ted is one student intern who demonstrated such change. Ms. Sheila recalled the beginning of Ted's participation in PS:

Ted came in aggressive and making very unfathomable comments. In the residential unit that he lived, he was still urinating on the floors, defecating on himself, threatening staff or provoking to the point they had to walk away or confine him away from others to avoid further escalation...On one occasion Ted got off the taxicab and saw a security officer, so he walked up to that officer pushing his fist into the face of the officer. Ted

was claiming to be one of his favorite ‘gangster’ character plays. He did not have multiple personalities but enjoyed pretending to be others with whom he selected to identify. (Ms. Sheila, T35:507-516)

A comparison of Ted’s first months to his last months at PS showed complete changes in his behavior. By the end of the program, the data showed evidence of changes in Ted’s behavior and emotional regulation. Ms. Dee, the job coach trainer who worked with all the students and supported the job coaches, stated:

I think it has been a lot of consistency of the way that Project SEARCH team, the staff has worked with Ted and kind of the immediate re-direction when he starts to go off and be these other characters, like bringing him back into his place. We were trying to build that self-image and praise him a lot when he was staying focused and doing what he needed to do. And I think when he was hearing more of the positives, which he learned, and then he stopped acting like someone that he was not because that person is not going to work.

I think that kind of support really started to build up his self-confidence. Now I knew why Ted said he was not really happy where he lived, so he stayed most of his time in his room with the door closed, talking to himself and talking to these characters, because they kind of helped him fill his time. It was understandable, you know, but it was like trying to make him realize that when he was on the job he could not be talking to himself because it would draw people’s attention and they would maybe be afraid of him. (Ms. Dee, T30:89-102)

Tina and Tom also demonstrated positive changes with behavior and emotional regulation. They demonstrated introverted behavior tendencies during their first months of

participation in PS; however, more extroverted behavior was observed by the end of the program.

Tina wouldn't say hello to anyone in the room when we first met at the initial Open House... In the first days of class, she was verbally assaultive to almost everyone; the activities we initially did modified her verbal pronouncements. She began being willing to listen to suggestive feedback and then corrective... (Ms. Sheila, T35:447-460)

Tina's positive changes were gradual, and with appropriate supports, she was able to verbalize her thoughts, make requests, and ask questions regarding things she did not understand. When Tina started her internship in the computer lab, her work included greeting people who came to use the technology. During this time, Ms. Sheila said:

Tina was afraid what she would do if someone talked to her or started at her. We talked about the most common questions someone might ask and prepared her with a few potential responses. Inevitably people did engage in conversation with her and she was able to direct them to where they needed to go—when she didn't know the answer, she directed them to whom to go to ask. She came back to the room bouncing up and down with excitement that she knew what to do and she was so thrilled with talking to someone she didn't know and earning a compliment for being polite. (Ms. Sheila, T35:461-506)

The gradual changes were supported by small experiences of success in the tasks that Tina was assigned. Ms. Gomez, the program therapist, described opportunities to experience success as critical to addressing behavior and emotional regulation with the student interns:

If the students see adults who really believe in them, and want them to succeed, and they start to see some small successes, they are more likely to gain self confidence that they need to try harder to do a good job, and then to see more successes, and to build on that,



and it's just nice for them to know that there is people that want them to succeed, to think that they value them. (Ms. Gomez, T14: 179-182)

Each intern had specific factors that triggered the challenging behavior. For instance, an environment with a lot of people triggered Ted's attention-seeking behavior, while Tina demonstrated high levels of anxiety and agitation when she was in new environments and faced with new tasks. Competency and a feeling of success helped Tina to adjust, while for Ted, a controlled environment where he was kept busy with structured independence (where he understood expectations and had someone observing him from a distance) supported him to stay focused.

*Age-appropriate self-care skills.* PS student interns had varied levels of self-care skills, a necessary prerequisite for employment. Mr. Mayo, who worked with almost all the student interns, shared that with each young adult, skills ranged. Tina was the only intern with age-appropriate personal grooming skills. Tom, Tim, and Ted struggled with self-care and hygiene. The students with challenges in self-care depended on an adult at home to guide and support them. At PS, the job coaches provided this support. With Ted, personal care and hygiene changed when he moved from the group home to live with his nuclear family:

I had many issues with Ted about his hygiene, you know, brushing his teeth, even though a lot of it was him being rushed in the morning... You know when you are in a group home, or foster home care whatever. You know they are just going to do the bare minimum... (Mr. Mayo, T13: 149-168)

Mr. Morris observed:

His mother cleans him [Ted] up now, his clothes smell good, his breath is no longer stinking, he is groomed, he is cleaned up, and he is neater. At the [group] home Ted was not taking showers for three to four days at a time. (T23: 143-147)

While the majority of the students had the basic self-care skills, some still required adult support and reminders to improve personal care and grooming. Terry was well-groomed when she came to PS; however, a communication barrier between the job coaches and Terry posed a challenge to Terry's ability to maintain self-care and personal grooming at PS. Ms. Genevieve explained:

At first we were just waiting for her to tell us that she needed to go to the bathroom, but then that turned into longer breaks, then breaks which would not work on a work site, so we made a set time for a break or for when she could use the bathroom...When she went to the bathroom when she needed help with her pants in the beginning I would just button up her pants, but later I worked with her to say or sign help so that she had those self-help skills so I would wait for her to say that. (Ms. Genevieve, T11:92-99)

Ted was the only student who demonstrated positive changes in this area, because he had changed home placements. Ted's change was a result of change of adult support.

***Student interactions during Project SEARCH participation.*** The program monitored and taught work-appropriate social and communication skills. PS student interns demonstrated positive changes in how they interacted with staff, peers, and people on campus.

***Student interactions with staff members.*** Staff members, particularly job coaches, developed close working relationships with their student interns. Personal factors of the student or the staff member influenced the student-staff relationships. In such cases, the ability of the student to initiate work-appropriate conversation, request help, or ask a question of the staff member were influenced by those personal factors. Tina's case illustrates positive changes in the

areas of social interaction and communication, because she faced challenges with interaction with the university community on her work site, peers at PS, and female authority figures of black ethnicity, as shared by Ms. Charity, her job coach:

Initially when I started, I had issues, or Tina, had issues with me, and –um, I have never done anything to her, and could only understand the things why she did the things to me because of her past [mistreatment] so, when she goes through something and I would try to help her, she would reject me. I felt incompetent because I was not able to help this child. But as the relationship developed, – she learned that I was not out to harm her or hurt her, so our relationship has changed drastically. (Ms. Charity, T9:221-226)

By the end of the program, Tina was able to interact successfully with black women at PS. Ms. Sheila paired Tina with Ms. Charity, who was an African-American, and did not allow her to negotiate her way out of the relationship. The forced working relationship functioned well. Ms. Charity perceived that Tina demonstrated positive changes with regard to their interaction as an influence of PS. She said, “I guess the [PS] program has given Tina the perspective of African-American women. She now knows that we are not all out to harm her.” (Ms. Charity T10:58-63)

The relationship between Ted and Mr. Morris, his job coach, demonstrated a relationship that had problems due to the student’s behavior, as well as the staff member’s approach to supporting the student. In other words, the data indicate that, in some cases, the adult staff members demonstrated practices that impeded formation of a trusting and effective working relationship with the student. Mr. Jeke noted this with Ted and his job coach, Mr. Morris. He explained:

Sometimes I felt that Ted felt intimidated like he had to do this or his job coach was going to in a way discipline him...to Ted it may have felt like, if I do not do this, I may have some privileges taken or I may get punished. My personal opinion, I felt that although Ted was a grown adult, he felt like he was a child right under the Job coach.

That did not sit well with me. (Mr. Jeke, T8:100-112)

No opportunities for observations of the interaction between Ted and Mr. Morris at their job site were available at the time of data collection; an interview with Ted and Mr. Morris provided some insight into their relationship dynamics. Ms. Donaria's perspective, juxtaposed with Ted's and Mr. Morris's, also provides a clear idea of the factors that influenced the relationship between Ted and Mr. Morris.

By the end of the PS school year, Ted perceived his relationship with Mr. Morris as a beneficial interaction. He looked up to his job coach with utmost respect, and stated, "Mr. Morris, he showed me how to be a man when I act like a little boy" (Ted, T37: Q6). Mr. Morris justified his job coaching approach as such:

Well, Ted is a manipulator, so he will play the game he is used to play around. People in the instructional center, any opportunity that he gets to say something derogatory or sexual related he will do it even as far as trying to touch people. So, that needs to be addressed. And that is why I always put on his notes that he needs to be supervised all the time. Never give him an opportunity because if you give him five minutes, then he will try to get into something that is not work-related. (T14, 92-96)

Ms. Donaria confirmed Mr. Morris's comment:

Ted is a manipulator. When he was with the fellers [male job coaches] they were on his back 24/7 stare up through wall, so he could not budge, so he would not play the games we would when he was with the women [job coaches]. (T25: 108-110)

In summary, the relationship between Ted and Mr. Morris, and Mr. Morris's job coaching approach, influenced Ted's behavior and emotional regulation. The job coach perceived control as effective to their relationship. As a result of this relationship, Ted's ability to demonstrate initiative and autonomy were undermined. Mr. Jeke perceived this relationship as an intimidating one.

*Student interactions with people on the university campus.* The internship supervisors observed changes in level of interaction and appropriate social skills of the young adults within the internship sites. For instance, Ms. Angelina observed the positive changes with Tina, who did not look people in the eye, was unsure of herself, and did not want to talk to anyone at the beginning of her internship. By the end of the internship, Ms. Angelina explained that Tina's confidence had improved, because she was able to speak with everyone and initiate conversations (Ms. Angelina, T4:112-115). Another supervisor in the university library noted similar observations of Tina. Tina's job required scanning documents and use of public facilities in the university library. During her first months at PS, it was difficult for Tina to share the machine and take turns. Mr. Karim noted that by the end of the PS program, her behavior was different:

When she notices someone coming up, she will turn around, I have not been close enough to hear the dialogue but she seems to turn and acknowledge that they are there and then she stands aside to let the other person use it and then takes off from where she stopped. That's a big thing! I know that my son [with a diagnosis of ASD] can hyper

focus so to interrupt him can be a process. She is doing very well. That's a big thing!

(Mr. Karim, T27:105-113)

Beyond learning to use socially-appropriate manners in a work place, the data shows that Tina even developed friendships on campus. Ms. Donaria in the food service department took note that Tina developed a few friendships. She explained that when one particular customer came to the restaurant, Tina and the customer had an ongoing, friendly conversation. She said:

Every time she comes here, she stops to talk to her and Tina talks back. There is none of the slang language; she just has a normal conversation with her. I thought that was very positive, because when you first meet her you do not think she does not have any kind of people skills, but in reality she kind of does. (T25: 136-139)

Tina was the only student who really demonstrated apparent changes in regard to interaction with the community. Ms. Dee described Tim and Tom as the most-social student interns; they greeted people but did not make any significant conversations or interactions like Tina. There was not sufficient data demonstrating that Ted and Terry made any changes in regard to social interaction with people on campus.

*Student interaction with peers.* To examine how student interns demonstrated self-determination skills during interaction at PS, the aspect of their interaction with peers was also analyzed. Terry, Tim, and Tom seemed to have self-interests; they did not really engage with their peers in the program. Terry spent her time on her iPad when not working or participating in instruction, Tom preferred to talk to the adults about his interest in animated characters, and Tim also engaged with the adults more than he did with his peers. Ted and Tina seemed to be more aware of their social environment. However, Tina's social interaction seemed more meaningful with adults than with her peers. Tina acted in a self-determined manner with adults by making

use of personal interactions to achieve an intended goal, as already discussed in the previous section. Tina interacted differently with her male peers than with her female peer, Terry. Ms. Charity shared her perspective:

Tina is very outspoken, and she will say before she thinks. And I feel like, she is more outspoken with familiar individuals. So, some of her comments are very inappropriate. Most of them are negative, she does not know how to give positive or initiate — actually, none of the comments are positive comments. If one of the young men [in the program] is speaking, then she will say, “Shut up!” “You talk too much” “I cannot stand you” she will curse them out, or if they say something, she will call them stupid, very rarely that she is giving positive comments to the young men in the program.

Now, the young lady in the program [Terry] she will make comments like, ‘oh she is adorable’ or “I love her’ or “they say I am her big sister do you think I am a big sister or role model?” so her comments towards the boys are different from the comments she makes towards the young ladies. (Ms. Charity, T9:143-153)

In situations where Tina was positive, she still did not know how to relate appropriately with peers. Although Tina was not negative with Terry, she wanted to have a sisterly relationship with Terry. Ms. Charity explained:

She asked questions such as, “do you think I am a big sister [to Terry]” I say, well, technically she is older than you, but I tell her that I think she has positive interactions with her. I have never re-directed her to say, co-worker for the relationship that they have. I just re-direct her to the age-bracket that they have, and the nature of their relationship. So, I have not said, “no she is not a sister she is a co-worker.” (Ms. Charity, T9:158-161)

The category of indicators of self-determination across settings showed how self-determination was demonstrated by the young adults during their participation in PS. Specifically, the study examined how competence, autonomy, regulated behavior/emotions, and relationships were influenced during PS. Environmental factors, supportive efforts, and personal factors influenced how the students demonstrated their self-determination skills across settings.

### **A Summary of Individual Student Experiences Examined Per Category Developed**

This section examines how individual student experiences were reflected on each category developed in the study. As discussed earlier, the first three categories responded to the question: what factors influenced positive changes in self-determination? The fourth category described how self-determination skills were demonstrated by the student interns in the program.

**The first category.** Environmental contexts that influenced self-determination described beliefs and values that created an atmosphere that supported the nurturing of self-determination skills. Pre-meal meetings, communication with all key players in the program, past experiences with people with disabilities, and opportunities to work with the PS student interns helped to create an atmosphere of support for adult staff who worked in the PS program. As a result of a supportive learning atmosphere, Tina, Ted, Tom, Terry, and Tim demonstrated positive changes at the PS site.

Participants also shared that home practices created environments that influenced Positive changes in self-determination. Autonomy supportive environments offered family/home practices that encouraged students to develop a sense of responsibility, while over-protective and restrictive environments impeded a student intern's ability to make positive changes. Tina, who



lived with a foster family, was provided autonomous supportive environment in her home setting, and therefore made positive changes. Participants in the study shared that Ted did not experience autonomy supportive environments in a group home during the first eight months in the program; however, positive changes were made when he moved to live with his nuclear family. His job coach, Mr. Morris, indicated that Ted's personal care/grooming improved when he moved to live with his family. Tom, Tim, and Terry lived with their nuclear families. However, the data indicate that Tim had limited opportunities for autonomy support, while Terry and Tom experienced a structured and supportive environment that reinforced their ability to act in a self-determined manner.

**The second category.** All student interns in this study were provided supports that were tailored to their specific needs. Parents of Tina, Ted, Tom, and Terry shared that their young adults were provided with various learning opportunities such as decision making, high expectations, special adaptations, and natural consequences. Tim's mother was not available for interviews; therefore there was no data to inform the study on supportive practices in his home environment.

At PS, deliberate efforts that supported the student interns' capacity to act in a self-determined manner included pedagogical approaches, opportunities for choice making, increased expectations, special adaptations, and collaboration with key players in the program. Tina, Ted, Tom, Terry, and Tim made positive changes as a result of these efforts. Pedagogical approaches increased the level of autonomous behavior (students felt free to attempt or initiate new tasks), promoted competency through the gradual teaching of new skills, teaching of self-monitoring skills, and utilization of simplified visual supports. Opportunities for choice making and increased expectations were provided through internship rotations offered to each student

intern. Each student intern was provided at least two different work internships. Adaptations that were utilized included use of technology (such as an iPad for communication), use of adapted work requirements for students with physical limitations, and use of pictures for students with limited reading abilities.

**The third category.** Positive changes in self-determination were undermined by lack of motivation in the cases of Tim and Tom who had no desire to participate in employment. Challenges with emotional and behavior regulation, and inadequate prerequisite knowledge also impeded positive changes in self-determination. When appropriate interventions and supports were provided, the students made positive changes. For instance, the data showed that Tina demonstrated emotional and behavior regulation, and increased knowledge of her employment interests and goals. By the end of the program she worked independently and only required 5% internship supervision. With appropriate interventions and supports, Ted, Terry, and Tim made some positive changes; however, with the same conditions, Tom demonstrated changes on some days and not on others.

**The fourth category.** The data showed that student interns appeared to act in a self-determined manner when certain conditions were present, and did not act in a similar manner when the conditions were absent. Tina experienced challenges with behavior and emotional regulation when she was placed in a new work situation. Trust and acceptance had to be established between Tina and the adults she worked with, in order for her to act in a self-determined manner. For Ted, highly structured work environments and consistent adult support allowed him to demonstrate competence, behavior, and emotional regulation, as well as work-appropriate interactions. Tim demonstrated positive changes with close adult supervision and constant praise. Tom only worked when a desired reward (mainly a picture of a cartoon

character) was promised upon completion of a work assignment. Terry demonstrated improved work stamina and competency; however, her work pace was slow. Consistent routines and highly structured expectations supported Terry to act with some level of independence.

### **Summary of Results**

Chapter 4 presented results of the data collected for this study. Although the goal of the methodological approach used for this study sought to build a theory, following analysis of results for the study, no specific theory developed, and a core category was not constructed. However, four main categories were constructed. The first three categories responded to the research questions, and described factors that influenced positive changes in self-determination; the fourth category described indicators of self-determination behavior across settings. The result of the study showed that environmental contexts and deliberate efforts to enhance student capacity supported positive changes in self-determination. Factors that undermined positive changes in self-determination included student-related and internship-related factors.

Although the categories are independent of each other, they provide a description of the dynamics that influenced self-determination of the young adults in the PS program. Students demonstrated self-determination skills dependent upon the environmental set-up in which they found themselves and the prevalent supports put in place to enhance their capacity. Support for positive changes of self-determination was also dependent upon student motivation and interest, behavior regulation, and ability to make an informed choice. A discussion of the results will follow in the next chapter.

## **Chapter 5: Discussion and Conclusions**

### **Summary and discussion of findings**

This study examined factors that impact positive changes in self-determination of young adults diagnosed with ASD and participating in school-to-work transition. The assumption of the study was that there would be positive changes in levels of self-determination of students participating in the Project SEARCH (PS) school-to-work transition program. The study does not attempt a program evaluation of the university-based PS, nor does it assess the overall performance of the student interns in the program. To examine changes in self-determination and how it was influenced in the program, this research focused on the following questions:

What aspects of the school-to-work transition program contribute to positive changes in self-determination?

What aspects of the school-to-work transition program impede positive changes in self-determination?

Several theories of self-determination were examined prior to the study in order to define the psychological construct, and understand how it is examined. The researcher identified Deci and Ryan's (1985) and Wehmeyer et al.'s (2003) theories of self-determination as applicable to the study. Wehmeyer et al.'s (2003) functional theory, while based on Deci and Ryan's original version of self-determination theory, specifically relates to individuals with intellectual disabilities.

A basic qualitative design was used to examine experiences of five young adults with a diagnosis of ASD in a school-to-work transition program. The data collection and analyses were guided by grounded theory approaches based on Corbin and Strauss (1990) and Strauss and Corbin (1998). Applied to the context of the PS program, Reeve's (2002) study on self-

determination theory's relevance to education settings guided the qualitative exploration. The key findings in Reeve's (2002) study identified that "autonomously-motivated students thrive in educational settings, and students benefit when teachers support their capacity for autonomy" (p.185).

This study focused on experiences of the young adults in PS as a basis for identifying changes in self-determination, and how they were influenced. Data collection, analysis, and interpretation were inter-related, ongoing processes, characterized by constant comparisons that occurred from June 2013 through April 2014. The data collection ceased in September 2013; however, organization of the collected data, transcribing of interviews, analysis, and interpretation processes continued through April 2014. Unique perspectives on changes in self-determination and factors that influenced the five student interns were examined and re-examined to construct data-grounded conclusions.

Development of a core category was not achieved; however, four major categories covered the data in exhaustive ways that describe and explain changes in self-determination and factors that influence it. The first three categories described factors that influenced self-determination. Supportive environmental contexts and deliberate efforts to enhance student capacity contributed to positive changes; lack of student readiness and perceived internship inadequacies undermined positive changes in self-determination. A separate category was developed to further describe the nature of positive changes in self-determination, labeled as: indicators of self-determination across settings.

The following discussion of the findings utilizes the four categories as a lens for understanding how participation in PS influenced changes in self-determination behavior of the student interns. The experiences of the individual student interns in PS were unique, because

they had different skills, needs, and interests; the identified factors impacted them differently as well. For some, certain factors impacted them heavily compared to the others. The experiences of the young adults in the program are used to discuss the findings. The best case study is identified to demonstrate the finding and exemplify how self-determination was influenced.

**Identifying changes in self-determination.** The researcher identified positive changes in self-determination based on a comparison of reported experiences of the young adults during their first months at PS and those of their final months. For example, the concepts extracted from the interviews with direct PS service providers (Appendix D) present evidence of such changes.

*Example of changes with student intern Tina.* Taking the case of student intern Tina, she showed frustrated behaviors due to unfamiliarity with assigned job tasks during the first days in her internship; however, she later demonstrated improved self-confidence as a result of increased familiarity with those tasks. The changes identified with Tina led to her ability to work independently, her attempts to initiate new tasks, and formation of positive interactions with customers at her internship sites.

*Example of changes with student intern Ted.* Another example of the identified changes was with student intern Ted. At the beginning of his participation with PS, key informants shared that Ted did not like himself; he preferred to act like the ideal persons he mentally created<sup>1</sup>. He also demonstrated challenging behaviors. For instance, when he was “laying on the floor, he cried, beating his head against the doors” (Appendix D). During these early months, Ted also had challenges with personal hygiene. However, by the end of June 2013, his hygiene and personal

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<sup>1</sup> Ted lived in a group home for most of his teen years. Because he was secluded, he tried to fill up his time by creating characters of people he wanted to be. He would then act like these characters. The types of characters included: security officers, an old man, a thug, a baby, or any celebrity of interest from the television. Doing this was also a way of seeking attention. (Ms. Dee, Job coaching director, Transcript 29)

care changed due to a different living placement, and he was able to work semi-independently with support from a job coach. Additionally, his aggressive behaviors and character plays (when he acted out like his imaginary people) were under control.

*Example of changes with student intern Terry.* Terry's experiences at PS helped to examine another dimension of changes in self-determination. Terry functioned best when supported with consistent routines. Her mother, Ms. Florence, reported that Terry was very independent within her home environment. She enjoyed doing specific chores, and did them with no support; she had preferences for certain leisure activities, liked specific music, and participated in community activities such as birthday parties. Terry's mother cited routines and consistent supports as important to Terry's independence. However, at PS, Terry did not demonstrate the same skills. By the end of the school year, PS staff members were still not sure of the extent of Terry's capabilities. Findings from Terry's case prompted the researcher to deeply examine the influences of self-determination among the young adults in PS. The results of the study strongly suggested that self-determination behavior of the young adults in PS program was influenced by many factors.

To provide depth to the study, the researcher posed two questions: first, why did students demonstrate acquired skills in one situation, and not others? Second, why did other student interns, like Tina, demonstrate a cycle of behavior with regard to a new internship within the program? The second question was guided by observations of Tina's behavior in PS. It was observed from the interview data that before settling in a new internship, the first weeks of that internship seemed to cause her a lot of anxiety and frustration, and she displayed challenging behavior. With familiarity of the new environment and work requirements, she increased

competence and demonstrated initiative. The cycles repeated in the computer lab and the food-service internships.

During Tina's first internship in the computer lab, she seemed shy and introverted. She did not greet people, and when a person or student who came to use the lab asked her a question, Tina would refer them to other staff members or not respond at all. By the end of her internship, Tina was described by the internship staff members as friendly and sociable, and that she took initiative to show clients how to use the machines in the lab. After completion of the 10-week internship in the lab, Tina was assigned to the food service internship. The first weeks at the site were difficult for Tina. She demonstrated aggressive behavior toward her job coach, and she had to return back to the PS instructional center due to challenges in emotional and behavioral regulation. However, as in the computer lab internship, after a while Tina became successful in the food service internship. She demonstrated a sense of initiative to take on new tasks, she was independent with her work responsibilities, and she used appropriate social skills and developed new friendships (Ms. Donaria, T25).

Findings from Tina and Terry's case studies led to closer examination of cases of the other student interns: Tim, Tom, and Ted. The results did not show any clear pattern of changes in self-determination among the three student interns; however, with Tim, the longer his duration in PS, the more independent skills he demonstrated. He started with a laundry internship and completed PS as an intern in custodial services.

In summary, when the experiences of the students were examined separately, the results strongly suggested that positive changes were observed in specific areas or situations, and not in others, and the changes were not transferrable. Further analysis of the students' experiences led to the analysis of factors that supported or impeded positive changes in self-determination.



### **Factors that Influenced Self-Determination Behavior of the PS Student Interns**

Consistent actions and deliberate efforts nurtured the capacity for student interns to act in self-determined manners. The researcher examined words, ideas, events, incidences, and actions presented in interviews, documents, and observations (Appendix D) that occurred contiguously with the specific indicators of positive changes in self-determination (competence, autonomy of action/choice, behavior and emotional regulation, age appropriate self-care skills, and social interactions). Several factors were identified as influential to self-determined behavior of the student interns in either supportive or impeding ways.

**Factors that support positive changes in self-determination.** Specific features within the PS program and the home environment were identified to support student capacity to act self-determined. The results revealed that environments where student interns demonstrated such behavior were structured to be supportive and made appropriate efforts to facilitate student success.

*Attitudes and commitment that supported positive changes.* The PS leadership and the internship managers briefed staff members employed at the internship sites to make deliberate efforts to support the students. These efforts and actions led to an atmosphere of tolerance for the unique differences presented by the students. For instance, if a student became agitated and had to leave their internship site, the staff members within these sites did not make a big deal out of the incidences. When the students returned to the site, everything continued like nothing had ever happened. Students in supportive internship environments developed a sense of pride for their work, and showed more independence and initiative with their job responsibilities. For example, Tina showed a sense of pride and initiative in many ways. Her internship mentor, Ms. Donaria, recalled a scenario where a customer spilled some food on the floor and Tina

demonstrated a sense of initiative in response to the spill. Ms. Donaria said, “I think at one time, a customer wasted something [spilled something on the floor], and Tina just went right to it, cleaned it and asked if she could help him (Ms. Donaria, T25:142-144).

*Autonomy supportive pedagogical approaches.* The PS staff members, as well as parents/guardians at home, utilized specific approaches to instruct and support capacity for self-determined behavior. The support was always geared towards autonomy development, so that students executed instructions independently. The results showed that such instructional support offered numerous opportunities for practice. For example, at PS, students were provided with a minimum of two internship rotations. Tina, who was the most successful intern, participated in four internships (computer lab, administrative office helper, custodial, and food service). By the end of the internships, Tina worked independently, her job-coaching support was reduced from 100% to 5%, and she was looking forward to employment post-PS. Ms. Dorcas felt that her foster daughter had gained a better understanding of what she did well and what she did not; she had learned to make friends and act in socially-appropriate ways.

Special accommodations and adaptations increased students’ abilities to act in a self-determined manner. For example, Ms. June did not allow Tim to mop or sweep along the stairs because he had Cerebral Palsy, and his gait was restricted. Instead, Tim was successful in doing other jobs that were provided to him. If he was asked to mop the floor, Ms. June showed him how he could do it while seated, using a clean cloth. Similarly, Terry utilized an iPad to increase opportunities to express her choices (yes or no), or even to order food at restaurants. Ms. Dee, the job coaching director, made an adaptation for Tina, who had difficulties with reading; her work responsibilities required her to read a task list. Ms. Dee simplified the task list for, which helped her to easily follow without asking a job coach to read her work responsibilities.

Structured independence was another pedagogical approach practiced by PS at the university campus, and the families of the student interns at home. For example, student intern Ted did well with structured independence. The adults gave him some space to work and stepped away, but remained within close proximity to monitor his behavior. Since Ted liked to talk to himself during work, Ms. Dee did not stop him (she recognized he would never be able to do that), but rather she permitted Ted to talk to himself as long as it was not too loud to disturb others. Ted demonstrated progress, and managed to stay focused on his work with this type of support. A similar approach was shared by Ms. Florence with regard to Terry's dressing and self-care skills. At home, Ms. Florence provided direct verbal instructions for Terry to get dressed, and instead of staying around to see her daughter comply with the instructions, Florence explained that she left the room to allow Terry to mentally process the instructions and act independently. This teaching approach worked for Florence and Terry.

Supports that enhanced students were also characterized by high expectations, and the adult support providers were highly passionate about their supportive roles. High expectations challenged student interns to stretch their limits. For example, Tim used to be assigned a one-on-one staff member to be with him as a behavior support. Ms. Sheila, the PS instructor, removed this adult support and pushed Tim to work with a regular job coach. Tim's family expressed fears of their child working without such support, which had been useful in his previous education setting; however, despite those fears, Tim did very well working with his internship supervisor. Tina and Terry were supported by passionate job coaches: Ms. Charity expressed a deep passion for her work. When she first got paired with Tina, Ms. Charity experienced difficulties because Tina did not want to work with women of black ethnicity. Ms. Charity explained her passion for the job-coaching position:

You have to be passionate about this [job] because you are impacting the lives of these individuals, they have already gone through so much, so you want to have a positive influence on them, not a negative influence ... You have to want to give yourself in every way, mentally, physically, emotionally, you are like, you just have to be there and support, and even when you do not want to. ... You just have to have the child's best interest at heart... (Ms. Charity, T9:230-247)

Similar attitudes were demonstrated with several other job coaches, internship supervisors, and mentors, as well as the PS leadership. The results of the study strongly suggest that supportive factors that influenced self-determined behavior of the student interns were mostly external. The actions created an environment conducive to learning and practice of self-determination skills. When student interns were in an environment of tolerance, they felt safe and less anxious; hence, familiarity of new tasks and a feeling of competence were supported. The factors, in turn, supported an intrinsic motivation for work. The students enjoyed what they did, and demonstrated a sense of pride. When the other supportive factors were not present, the students became more anxious and agitated. This was the case with Tina every time she went to a new job-site; Terry was more successful in her home environment than at PS. The prevailing supportive efforts at home helped Terry achieve there, what Tina demonstrated at PS.

**Factors that impede positive changes in self-determination.** The results of the study revealed some factors that undermined positive changes in self-determination. These factors impeded positive changes, because they hindered opportunities for students to maximize learning of new skills. The two main factors were student-related and some program-related factors. The category was negatively labeled, because it described contexts that thwarted capacity of student interns to act self-determined. Only when these factors were removed or improved did student

progress prevail. In situations where the factors were not removed, students failed to demonstrate self-determined action, even if they were able to demonstrate it in other settings.

*Student-related factors that undermined positive changes in self-determination.* The data showed consistently that student-related factors presented multiple layers of barriers that impeded effort by the direct service providers at PS and home to support capacity for students to be self-determined. Prior education experiences and inadequate information resources regarding transition opportunities left families and guardians of the students with limited options for preparing their youth for employment. All the parents except for one (Terry's mother), who was an educator, admitted to not having adequate resources regarding school-to-work transition. The parents also expressed dissatisfaction with the many years of prior education that were irrelevant to their child's needs. For example, Ms. Carrie, Ms. Dorcas, and Ms. Kanisha expressed that their children spent many years in secluded classrooms that focused on academics and not the functional skills required for transition to the workplace. Ms. Florence, on the other hand, despite having access to transition options, disclosed that Terry's prior education setting did not provide the programming that she desired for her daughter. The results indicated that the inadequate education preparation may have contributed to gaps in knowledge and skills necessary for programs like PS.

Analysis of the data showed that only Tina and Ted qualified under criteria for PS student interns. Tim, Terry, and Tom did not qualify for the criteria, and their program at PS was a pre-vocational training focused on providing requisite skills. The typical PS program requires students to have the following skills: independent personal hygiene and grooming skills, independent daily living skills, ability to maintain appropriate behavior and social skills in the

workplace, ability to communicate effectively, and desire and plans to work competitively in the community at the conclusion of PS (Daston et al., 2012).

Additionally, the results of the study showed that the students' prior learning experiences were in non-inclusive settings, such that, at the time of their enrolment in PS, they lacked appropriate social skills for an inclusive work environment. The concept of "work" was still abstract to the interns when they enrolled in the program. These factors, coupled with behavior challenges exhibited by the young adults, delayed internship placement. The university-based PS spent a long time addressing the gaps in knowledge and skills. Ms. Sheila noted that Tina and Ted started their internships five weeks after PS started, a two-week delay compared to standard PS procedure (Ms. Sheila, T 35).

Challenging behavior impeded students and restricted opportunities for them to learn and practice self-determined skills. For example, with the case of Ted, he was capable of working, but because of his challenging behavior, he did not achieve Tina's work independence. He required consistent adult support and structured work environments to succeed. Mr. Morris, Ted's job coach, stated that he could not have let Ted out of his sight for 5 minutes (even by the end of the internship in June 2013). Ted was easily distracted, and when he found an audience for attention, he did anything to get that attention. Ted performed best when he was highly engaged in a work activity in a place without a lot of people. Such distractions impeded his progress, or opportunities to increase capacity for self-determination.

Lack of motivation to work also hindered student interns from developing autonomy, initiative, and required skill competence. Tom, specifically, did not desire to work, as the data consistently indicated. At PS, the instructor provided tangible rewards as reinforcement for developing his interest in work. He was rewarded with a picture of his favorite cartoon characters

at the end of the day if he completed his assigned work responsibilities. Still, by the end of the program, there was no difference in Tom's attitude towards employment. Tim increased his work endurance, and consistently performed his duties with the custodial supervisor. However, he also had no interest in working. When asked regarding his future employment goals, he said, "My mama said, I am not ready to work yet" (Student Interviews).

The results strongly suggest the importance of student readiness prior to providing interventions aimed at supporting capacity for self-determination. The results showed that motivation, and behavior and emotional regulation, as well as prerequisite knowledge, are critical for success in school-to-work transition programs. None of the students were ever left alone 100% of the time during their internships. Only Tina required just 5% job-coaching because of her success.

***Program-related factors that impeded self-determination support.*** The results of the study showed that some factors related to the university-based PS were perceived to undermine opportunities for providing adequate support for self-determination. The data showed that inadequate time and duration of the program, inadequacies in curriculum provisions, non-cohesive relationships among staff members, and weak self-efficacy were perceived as impeding to student support for self-determination. These factors were analyzed in the context of the direct relationship to the supporting student interns for self-determination; they are not an evaluation of the program. Other instruments would be appropriate for that purpose.

***Case of inadequate time and curriculum provisions.*** PS was offered as a one-year program; however, student enrollment occurred throughout the year. Participants in the study indicated that the duration for offering the PS program was inadequate. Most of the students recruited for this program demonstrated challenges with behavior and emotional regulation, and

gaps in prerequisite knowledge. As a result, PS focused on addressing behavior challenges and skill deficits during the first few months of the program. Although PS recorded a few incidences of student behavior problems, indicating that students had made positive changes; only one student gained employment by the end of the school year. The data suggests that the students may not have had adequate time to improve on employment skills.

According to Ms. Dee and Mr. Jacobi, members of the PS leadership team, none of the five students were employed three months after the program ended. Questions arise whether the program adequately addressed the areas that the students required in order to find employment, or if the duration of the program was adequate to teach and build the students' capacity for self-determination. There was no sufficient data collected in this study to support or respond to these questions.

The key informants in the study cited inadequate curriculum provisions as a factor that impeded student interns from developing a capacity for self-determination. They consistently cited the lack of stated goals for students to focus on. The results of the study indicate that although goals were written in program documents and displayed on the walls of the PS Instructional Center (IC), that staff members did not know or utilize them in working with the students. Ms. Genevieve, a job coach, explained that there was need to reiterate the goals to the students and work with them individually to ensure that they were held accountable for their own learning. Other staff members perceived the curriculum as lacking elements that prepared students with skills such as budgeting, stress and anger management, organization skills, and communication skills. These life skills are critical for students to be what Wehmeyer et al. (2009) call "causal agents" of their lives.



An in-depth analysis revealed that staff input and comments were not always taken or addressed to improve the programming of the student interns. Document analysis of the PS program planning materials revealed that all the PS goals were addressed in the program's activities. Planning was detailed (Appendix A); each student intern was assessed and their information was plotted and presented on a data wall in the IC. However, none of the PS job coaches seemed to have incorporated that information in their work. The results showed evidence of non-cohesiveness in the PS support team.

*Case of perceived non-cohesive relationships that impede support for self-determination.*

The results of the analysis identified statements and comments that reflected dissatisfaction with professional relationships in the PS program. For example, reflecting on their time in PS, the job coaches utilized statements such as, "I feel like some things should have been done differently," "I really do think that certain things could have been changed," "If you have different things to bring [to the program]... and you are unable to do it, then why even bother," "I did everything that I was allowed to do," "I think the organization of the program could be stronger." These are all statements which reflect a sense of dissatisfaction with what was going on. The results indicate that staff members within the program went along with the status quo, even though they felt dissatisfied with the programming and organization. Analysis of the interviews identified a PS staff member with a cynical attitude towards the program and the students' abilities. He took an opposing stance toward the approaches utilized at PS, and the selection criteria of the students in the program. While other staff demonstrated passion for their work, a generally weak sense of self-efficacy was identified among some of the members of staff. Ms. Gomez, one of the program leaders, closed her interview pointing to the need to hire staff members who had qualities that promoted student interests rather than rigid regiments that were non-responsive to

change. Her statements, compared with the statements from other staff members, reflect dissatisfaction with certain things that may have been present in the program. Because this study focused on self-determination of the young adults in the program, the researcher did not probe further on the probable relational deficits in the program.

*Case of perceived weak self-efficacy.* The PS student interns had unique needs: Terry communicated non-verbally; Tina had challenges with working with women of African or African-American origin; Tim perseverated on specific people, events, or prior experiences; Ted engaged in his character plays; and Tom was focused on animated characters from Disney movies. The results of the study indicate that some staff members felt “incompetent” to provide appropriate support to the student interns assigned to them. Ms. Charity found her inability to communicate non-verbally a barrier to her support of Terry, and Ms. Samantha felt she was ill-prepared for job-coaching. The data did not permit further exploration of the job coaches’ training needs. However, the results show that the program staff could have benefited from understanding their student interns and providing adequate support. The students, in turn, would have increased their sense of competency and behavior regulation, and achieved some positive changes.

### **Findings Related to Literature**

Youth with ASD and significant behavior challenges face complex barriers regarding transition from secondary education to employment. A trail of negative past school experiences in non-inclusive learning placements creates multiple layers of challenges for school-to-work transition programs to support youths with significant disabilities for integration in inclusive work environments. The findings in this study confirm studies by Newman et al. (2011); Wagner et al. (2006); Papay and Bambara, (2011); and Hendricks (2010), regarding employment

outcomes of these youths. Hendricks (2010) specifically identified that, “Individuals with ASD were much more likely than adults with other impairments to be denied services as a result of being considered to have a disability too severe to benefit from services” (p. 128). The results show that the university-based PS identified behavior challenges as a need to be addressed, and prioritized behavior support as an integral part of the program. Only two of the five student interns, Tina and Ted, met the PS student intern criteria. Tom, Terry, and Tim did not meet the criteria for PS student intern. The three students did not meet the entrance requirements for the program, which include independent personal hygiene and grooming skills, independent daily living skills, ability to maintain appropriate behavior and social skills in the work place, ability to communicate effectively, and a desire and plans to work competitively in the community at the conclusion of PS (Daston et al., 2012, p. 30). The eligibility of the three student interns was determined after they had enrolled in the program. Adjustments were made to their program goals, and the PS program focused on pre-vocational strategies to develop the requisite skills.

The literature examined for this study identified self-determination support as a best practice of young adults with disabilities during transition from school to employment (Wehman et al., 2012; Wehman et al., 2013; Rutkowski et al., 2006; Versnel et al., 2008). The Project SEARCH school-to-work transition model is created to provide such transition best practices for youth with disabilities (Muller & VanGuilder, 2014). Research reviewed in this study identified that self-determination status strongly correlates with positive education and employment outcomes for adolescents with disabilities (Wehmeyer & Smith, 2012). The results of this study are in line with this finding, particularly with respect to Tina, the only student intern who did not require job coaching by the end of the program. Tina demonstrated behavior that reflected a sense of autonomy, self-reliance, self-direction, and responsibility.

The findings in this study did not support the assumption that self-determination skills would be transferable across settings. The student interns in PS only demonstrated autonomy when the environmental influences were favorable. The literature reviewed in this study stated that individuals with disabilities who achieve age-appropriate self-determination are more equipped with skills to transition to adulthood with fewer difficulties (Carter, 2010; Wehmeyer & Smith, 2012). Every person may be affected by their own sense of self-determination, but for individuals diagnosed with ASD, achievement of age-appropriate self-determination is critical for their successful participation in competitive employment (Wehman, et al., 2009; Wehmeyer & Smith, 2012). This was confirmed in this study; only one of the five young adults in the PS program gained employment following completion of PS in June 2013, and three months after the program, none of the young adults were employed. Behavior and emotional regulation were cited as the main challenge that impeded success with employment (Ms. Dee, personal communication, September, 2013).

The findings confirmed that development and achievement of self-determination may be challenged by limitations experienced by individuals with ASD, due to the nature of the disability. Tina, Ted, Tom, Tim, and Terry experienced unique needs which indeed impeded their sense of self-determination, due to limitations and deficits in forming relationships, in communication, and in behavior characteristic of ASD. The studies examined stated that ASD may impact achievement of age-appropriate self-determination skills that may be vital to their daily lives, as they transition from secondary education to adulthood (Colombi, Kim, Schreier, & Lord, 2012; Wehman et al., 2009).

The literature review in Chapter 2 identified that there is an inadequate number of studies that specifically address support for self-determination of young adults with ASD and

transitioning from school to employment, like PS. Only two studies by Wehman et al. (2013) and Muller & VanGilder (2014), published after data collection of this study, presented findings on PS school-to-work transition and youths with ASD. The Wehman et al. (2013) study made principles of Applied Behavior Analysis (ABA) an integral part of their PS program with students with ASD. Their program included regular behavior consultation with an ABA analyst, used ASD-specific visual supports, and used self-monitoring reinforcement programs and ABA instructional techniques. The university-based PS did not utilize ABA strategies as they were applied with the Wehman et al. (2013) study. The studies reviewed do not offer factors that supported or impeded positive changes in self-determination of youths with ASD.

In this study, the capacity for self-determination was evident with all the students regardless of the significance of their disabilities. However, specific factors consistent with the literature reviewed influenced the program's opportunity to nurture self-determination skills. Supportive environments and deliberate autonomy-supportive efforts aimed at increasing capacity for self-determination had a positive influence on the students. However, lack of student readiness skills was found to influence ability to achieve the positive changes. Based on the program-related influences of self-determination, the study results strongly suggest the need for adequate time, specific curriculum and instruction on self-determination, an adequately trained personnel, and authentic learning contexts to support students' capacity to become self-determined. Additionally, learning from the Wehman et al. (2013) study, ABA principles could be considered as part of interventional support for young adults with ASD transitioning from school to employment.

## **Limitations**

Several limitations were identified during the course of the data collection, analysis and presentation. The researcher took measures to address them; however, those that were not addressed are identified and their implication on the study findings presented.

**Student Participants in the study.** The young adults in the study were also included as interview participants. However, during interviews, they preferred to not have their voices recorded, and did not want to be asked to elaborate on responses. To respond to this, the researcher utilized closed questions that were developed for Project SEARCH by one of the program leaders. This was adapted for the student's interviews, because the closed questions were easy for the students to respond to. The student interviews were only used to support main findings from the interviews with key informants.

**Generalizability of the findings.** The study focused on only five students with very diverse needs. The study took cognizance of the wide differences, and only utilized the unique aspects of their experiences to examine self-determination changes and how they are influenced. A larger-scale study with more participants would need to be conducted in order to identify generalizable findings.

**Newness of the ASD-focused Project SEARCH program.** Although Project SEARCH is a well-established, school-to-work transition program in the USA, the university-based PS was one of only three in the United States that focused on supporting transition of students with ASD. As such, the approaches utilized were a learning experience for everyone in the program. Although best practices by well-trained educators were utilized, August 2012-June 2013 was a trial school year for the program, particularly with young adults with severe behavior challenges.

Therefore, the findings can only be used to inform about changes in self-determination as they were reflected within the context of this particular PS site.

### **Quality Standards**

To enhance the credibility of this study, several measures were taken. The study utilized multiple data sources to enhance the credibility of the findings. Miles and Huberman (1994) suggest approaches for checking objectivity or conformability, reliability or dependability, authenticity (internal validity) and transferability (external validity) of the study. The researcher examined the study procedures and reporting standards within the context of these suggestions to assess the validity and reliability of the study. Of the four aspects of quality standards mentioned, external validity/or transferability of the study was identified as weak; suggestions for enhancing it are provided.

**Objectivity of the study.** The researcher's role as a worker in the PS program and a researcher posed as a threat to objectivity of the interpretation of the findings of the qualitative study. To address this, grounded theory approaches guided analysis of the study because the techniques lead to findings that are grounded in the data (Corbin & Strauss, 1990; Merriam, 2009). The study provided a detailed discussion of an audit trail of methods and approaches utilized for data collection, analysis, and presentation of results. These are provided in Chapters 3 and 4. The appendices section of the research report provides relevant documents and visual illustrations of the data analysis process. These are provided to help the researcher and the readers follow through "the actual sequence of how data was collected, processed, condensed/transformed, and displayed" (Miles and Huberman, 1994, p. 278).

**Reliability/dependability of the study.** Based on Miles and Huberman (1994), the researcher utilized multiple data sources to ensure "convergent accounts in instances, setting, and

times” (p.278) reported by key informants. During the data analysis, the researcher used peer reviewers, comprised of a team of six doctoral students who had one year of training in grounded theory approaches. The peer reviewers examined the significant analytical approaches, used as follows: the development of concept labels from transcripts, and the construction of categories and sub-categories. The concepts and categories developed from the data were checked to ensure that they were grounded in the raw data collected. Additionally, the iterative, constant comparison nature of grounded theory allowed the researcher to check and address potential bias.

For instance, the use of archival data posed a challenge for the study, particularly on the credibility of the written reports. The archival documents prepared for specific audiences could have introduced unintended bias to the study. Data based on archival records were the job-coaching notes and program planning documents. A hierarchy of utilization of data was created to systematically verify claims and statements identified in the data. The interviews with key informants (PS leadership, PS job coaches, internship supervisors and mentors, and parents/guardians) were used as the main data sources. The archival data was used as a secondary information source. The major findings of the study are based on the interview data; the secondary sources are utilized for triangulation and supporting the main findings. This decision was based on the fact that the researcher did not have information regarding the intended use of some the archival documents.

**Internal validity/credibility of the study.** The unique characteristics of the study participants and the qualitative data collection posed a challenge to the internal validity of the study. Since the five student interns presented very diverse needs and required different levels of support, cross-case comparison and generalizations were not possible. The researcher



constructed categories that were used as lenses for identifying self-determination, and explaining how it is influenced within the context of the university-based PS program.

**External validity/transferability of the results.** The findings of this study are limited to a setting that offers school-to-work transition features offered by PS, and focused on students with a diagnosis of ASD and associated conditions. A larger and more controlled study would be required to assess the robustness of the findings and their broader application.

### **Summary and Recommendations**

The results of this study revealed that student interns only began to demonstrate self-determined behavior after other challenges and readiness gaps were addressed. For instance, Ted could not show competency or initiative when his behavior regulation was out of control. Similarly, Tina had anxiety and demonstrated challenging behaviors due to frustrations with the new tasks and work environments; however, when those impeding factors were addressed, Tina developed a sense of initiative and added on more positive changes. Accommodations and adaptations to increase students' ability to self-express, act autonomously, and take initiative were also relevant for supporting the students.

The results also showed that making positive changes in self-determination was not a linear process. Acquisition of and ability to demonstrate such skills sometimes can be a back-and-forth or cyclical process. A change in routine and setting influenced the students' ability to demonstrate or act in a self-determined manner. When students were supported and provided with opportunities for learning, they developed a sense of trust and demonstrated increased competence and initiative, knowing that they were not judged or punished for failure. In such environments, when they encountered challenging situations or behaved badly, the students were able to spring back without having to look back at their mistakes. Tina particularly faced cycles

of behavior with adjustments to new environments. A change or transfer in routines and work placements impacted how she demonstrated self-determined behavior.

None of the students demonstrated a seamless transfer of self-determined behavior. In each new setting, the students had to feel a sense of belonging, be familiar with new tasks, and be supported to act autonomously without fear of failure. The findings are consistent with Deci and Ryan's (1985) theory of self-determination and Reeve's (2002) study on the importance of autonomy supportive environments.

The study findings also revealed factors that impeded changes in self-determination: student readiness; curriculum inadequacies; and lack of cohesive staff relationships, training, and mentorship. There were many interesting tangents that the study could have taken; however, the focus was on changes in self-determination and factors that influence it. Recommendations for future research are based on questions that arose from the study findings, as well as limitations in the research design.

There is need to explore how students with a diagnosis of ASD can be supported to generalize self-determination skills and use them seamlessly across settings. This kind of research would help provide options to educators of supportive strategies beyond the use of Applied Behavior Analysis principles.

A systematic analysis of introspective reflections of students with ASD in relation to social inclusion and adjustments over time would be a relevant topic to examine. Such a study has relevance in understanding if self-report measures, such as the Arc's Self-Determination Scale (ASDS), are an effective means for assessing self-determination of young people with a diagnosis of ASD. PS monitored students using the ASDS; however, this study was not able to utilize the instrument as a way of monitoring positive changes with the student interns.

A randomized experimental design that assesses the factors that impact self-determination during school-to-work transition for young adults with a diagnosis of ASD would benefit educators in identifying the impact of supportive efforts on student self-determination. This study utilized qualitative approaches to identify factors influential to self-determination, however, it would be important to test these factors and establish the predictive power of the factors on self-determination.

Lastly, it would be appropriate to conduct an investigation on how transition programs support capacity for self-determination for students with intellectual disabilities and communicate non-verbally. Since expectations play a role in challenging students to improve their skills, when a transition program is clueless about effective support for students who communicate non-verbally and have limitations in cognitive processing, such students remain disadvantaged until educators devise means of meaningfully including the students. This study would provide developing knowledge on best practices for students with developmental disabilities.

### **Summary**

Parents and guardians of the young adults in the program consistently expressed an appreciation for having their child in the PS transition program. The results of this study suggest that such a program has significant relevance in addressing the needs of young adults with severe behavior challenges. However, considering the intensity of the challenges and severity of needs experienced by the young adults in the program, examining positive changes in self-determination over a period of ten months was quite an ambitious project. Self-determination is a very broad construct. It develops over time across an individual's life span. The findings of this

study can be used as a basis for a larger longitudinal study to provide a comprehensive view of how students with ASD can be supported to make positive changes in self-determination.

The findings of the study showed that generalization of self-determination skills should be taught within natural settings, where learning of new skills occurs at deep enough levels that support generalization and application of new skills to new settings. The conclusions were based on two main findings.

First, the results of this study strongly indicated that when the young adults in the program acquired self-determination skills, they did not appear to utilize or transfer them to new situations. Changes in routines and settings undermined the students' ability to demonstrate initiative, a sense of autonomy, and behavior and emotional regulation. A supportive environment and efforts helped the students develop trust. When supportive factors were present, the students were able to demonstrate self-determined behavior. A few lessons are learned regarding dynamics that influence self-determination of young adults with ASD in contexts like the university-based Project SEARCH.

Secondly, based on the background education experiences of the students, the program focused the first months of the school year to address challenging behaviors. This study concluded that students with significant disabilities and associated challenging behaviors exit school with varied levels of skill and knowledge gaps. The students require skills to integrate in inclusive work environments as they exit secluded learning environments. Such skills include socially-appropriate communication and behavior relevant for interacting with peers and people in authority; appropriate ways of expressing frustrations, managing stress, and seeking help; and skills for managing the work environment such as management of time and maintenance of personal hygiene. These skills are critical before a school-to-work transition program begins to

offer support that targets self-determination. Proficiency in these skills leads to competency and ease of transition to the inclusive work environment.

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## Appendices

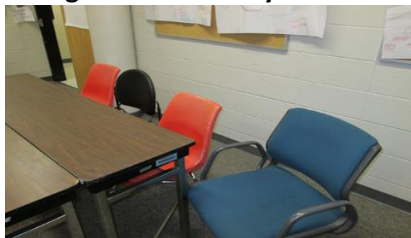
### Appendix A: Project SEARCH Documents

#### Document1: The Physical Description of the PS Instructional Setting The Physical location of PS's Instructional Center

Sign posts were placed to direct students and guests to the location



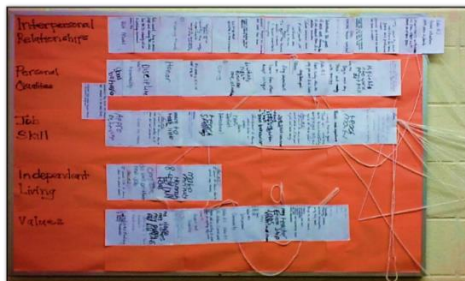
#### Orange Chairs used by the student interns



#### Children's artwork decorated the walls of the Instructional Center

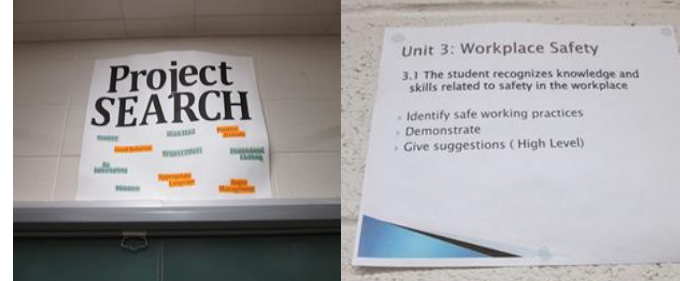


#### Wall Display with student and staff goals



#### Document 2: Daily Schedule of PS routines

#### Behavior expectations and curriculum goals





<h2 style="text-align: center;">Project SEARCH Daily Activity Routines</h2> <p style="text-align: center;">Developed by Ms. Sheila, the Project SEARCH Instructor (June, 2013)</p>						See Calendar for special events
Day of the Week	Monday	Tuesday	Wednesday	Thursday	Friday	
Topic	Money Skills	Missouri Connections/ Vocational topic	Group Therapy-	Refresh day: Missouri Connections & Independence	Mock Interviews & Paycheck	***If intern finishes tasks early, their options include:
General Purpose	Independence Development	Technology Integration	Working together- team work	Vocational Activity-	individual conferences	<ul style="list-style-type: none"> <li>• Money folder (remember working on integrating real life application so must keep realistic numbers)</li> <li>• Vocabulary development- terms must be purposeful: link to vocational sites or real world application</li> <li>• Complete tasks from earlier sessions</li> <li>• Job activity</li> </ul>
Source	Professional experience and Life Skills Math	MODESE and VR/	MO Guidance Curriculum & individual therapy	PS curriculum	PS curriculum & moderated the 'Center'	
PS Unit linkage	8: Money Management 9: Health & Wellness	4: Technology 10: Resume and Career Passport 11: Job Search Skills	1: Team building 3: Workplace Safety 5: Social Skills/ Communication	2: Getting Around your workplace 12: Keeping a job	6: Presentation Skills 7: Interviewing Skills	
PS Objectives:	<p>UNIT 8: The student understands personal financial management and recognizes the value of personal fiscal responsibility</p> <p>Compare and contrast different types of banking services</p> <p>Practice different methods of withdrawing, maintaining, and depositing funds (ex: writing and cashing checks, direct deposit, ATM...)</p>	<p>UNIT 4: The student will demonstrate knowledge of basic technology skills</p> <p>Demonstrate how to turn on and off a computer</p> <p>Create and save documents using appropriate software to complete assignment (Word, PowerPoint, Excel...)</p> <p>Establish and use an email account (ex: sending emails, attaching documents...)</p> <p>Create a folder on a computer</p> <p>Explain the importance of online safety and how to appropriately protect</p>	<p>UNIT 1 The student will acquire skills necessary to function within a team</p> <p>Demonstrate the ability to communicate personal needs, wants and questions within a team</p> <p>Identify and practice effective interpersonal and team-building skills with coworkers, managers, and customers</p> <p>Identify the steps necessary to complete a task within a team</p> <p>Display concern for each team member and for team goals (ex: provide encouragement, maintain a can-do attitude, and common focus)</p>	<p>UNIT 2: The student will demonstrate skills needed to navigate within a workplace</p> <p>Identify workplace locations on a map (ex: restrooms, stairs, elevators, exits, where you are, where you are headed...)</p> <p>Demonstrate the ability to find specific locations on a map of a workplace</p> <p>Explain appropriate communication skills for asking or responding to questions for directions in a workplace</p> <p>Demonstrate functional literacy skills for the workplace</p> <p>UNIT 12: The student will demonstrate skills needed to enter, maintain, or reenter the workforce</p>	<p>UNIT 6: The student will demonstrate presentation skills</p> <p>Create presentations that fulfill specific purposes using appropriate technology (ex: using a PowerPoint to explain skills learned at the workplace)</p> <p>Create a story board that illustrates workplace skills</p> <p>UNIT 7: The student exhibit appropriate interview skills</p> <p>Identify appropriate interview etiquette (ex: dress, behavior, first impression, eye contact,</p>	

**Document #3: Sample Memorandum of Agreement****Memorandum of Agreement**

The Parties to this Memorandum of Agreement are: \_\_\_\_\_

**I. Purpose:**

The Parties to this Memorandum of Agreement will collaborate and cooperate to create a PS High School Transition Program ("PS Program") at XXXXXXXXXXXXXXXXXXXX for student interns ("PS Participant(s)") with developmental disabilities, and to foster and facilitate the acquisition of competitive employment by the participants as they complete their internships within XXXXXXXXXXXXXXXXXXXX. The goal of the program is for each PS Participant to participate in a variety of internships and to obtain employment in the community. This Memorandum of Agreement specifies the roles and responsibilities of the Parties as they work in partnership to increase training and employment opportunities for students with disabilities. The program will be titled "XXXXXXXXXXXXXXXXX/\*\*\*\*\* PS". It is modeled after PS at the Children's Hospital Medical Center in Cincinnati, Ohio.

**Definitions:**

XXXXXXXXXXXXXXXXXX employees = all XXXXXXXXXXXXXXXXXXXX employees.

Business Liaison = employee of the XXXXXXXXXXXXXXXXXXXX.

Instructor = certified special education instructor.

Other Partners = Funding partners: #####

Application/Selection Committee to establish PS Participant eligibility guidelines and participants for the program.

PS Business Advisory Council = Community Business Leaders organized with the purpose of advocating for PS in the community and advising the PS Team. It has no formal authority.

PS Employment Advisors = Individuals hired to teach employment skills to participants and are employees of either \*\*\*\*\*or  
=====

PS Participant = Student Participant with developmental disabilities.

PS Staff = Team on site which includes the Instructor and Employment Advisors.

PS Team = Consists of a representative or representatives from each of the Parties to this Memorandum.

**II. Roles and Responsibilities**

The Parties agree to the following roles, responsibilities, and guidelines.

- The Program is limited to no more than a total of twelve (12) students.
- The ratio of Instructors to PS Participants shall be no less than one (1) adult to every four (4) PS Participants.
- Family members and students will be responsible for their own transportation as the students transition to independence; parking pass information will be provided to staff and any student that drives to the site.
- Student/employee placement requirements – Payment for Instructor and school staff is the responsibility \*\*\*\*\*; Payment for ++++ Services staff is the responsibility of ++++ Services.

**(A) Hepatitis A is required for food service workers** – (This will most likely be a rotation for the students). The Hepatitis A vaccine is a two (2) shot series at \$60 each. It is not necessary to do a titer after vaccinating.

**A. Party C will:**

- Provide classroom space and separate Instructor/Employment Advisor space, if possible, with telephone and computer connections including internet access.
- Provide access to work space, telephone, fax, photocopy equipment, basic office supplies, computer and email access for PS Instructor and Employment Advisors.
- Provide a Business Liaison that is available to assist with internship and job site development, introduce PS Staff to XXXXXXXXXXXXXXXXXXXX, market the program internally, and attend periodic meetings to discuss and evaluate program progress, and work with the Instructor to reinforce workplace rules.
- Assist the PS Team in developing intern work sites and a point of contact at each site for the purpose of teaching competitive, marketable skills to the program participants. Facilitate job analysis of those sites for the PS Staff.
- Provide access to hiring opportunities if a PS Participant is appropriate for an internal job opening.
- Provide badges, uniforms (if applicable), and parking access for PS Staff.
- Provide badges and appropriate employee orientation to student participants and PS Staff.
- Provide feedback (verbally and by completing progress reports) to PS Participants and PS Staff regarding progress on internship sites (from XXXXXXXXXXXXXXXXXXXX department managers.)
- Provide access to conference space for Open Houses and other events.
- Implement accommodations for PS Participants as universal design for the benefit of all XXXXXXXXXXXXXXXXXXXX employees when appropriate.
- Provide assistance to PS Staff through the marketing department, including marketing materials and public relations expertise.
- Participate as a lead member of the local PS Business Advisory Council to evaluate program progress, report outcomes, and work

**Appendix B: Category Table**

<b>Category Table</b>					
<b>Category # 1</b>					
<b>Category Label</b>	<b>Sub-category</b>	<b>Property</b>	<b>Sub-properties</b>	<b>Sub-properties</b>	<b>Dimension (Range)</b>
<b>The environmental context that influence self-determination</b>	Host Institution’s commitment to achieving a shared goal	Host institutional culture	Expressed values and beliefs		Committed to non-committed
				Attitudes of staff working with the students	Internship supervisors
		Acceptance of student interns	Accepting to non-Accepting		
		PS staff	Emotional quality		Optimistic to cynicism
			Acceptance of student interns		Accepting to non-accepting
		Influences in the home environment	Family practices	Group home	Set-up of the home
	Attitude on student support				Autonomy to dependency
	Commitment to student success				Dedicated to undedicated support for student success
	Foster home			Set-up of the home	Restrictive to emancipative
				Attitude on student support	Autonomy to dependency
				Commitment to student success	Dedicated to undedicated support for student success
	Nuclear family		Set-up of the home	Restrictive to emancipative	
			Attitude on student support	Autonomy to dependency	
			Commitment to student success	Dedicated to undedicated support for student success	

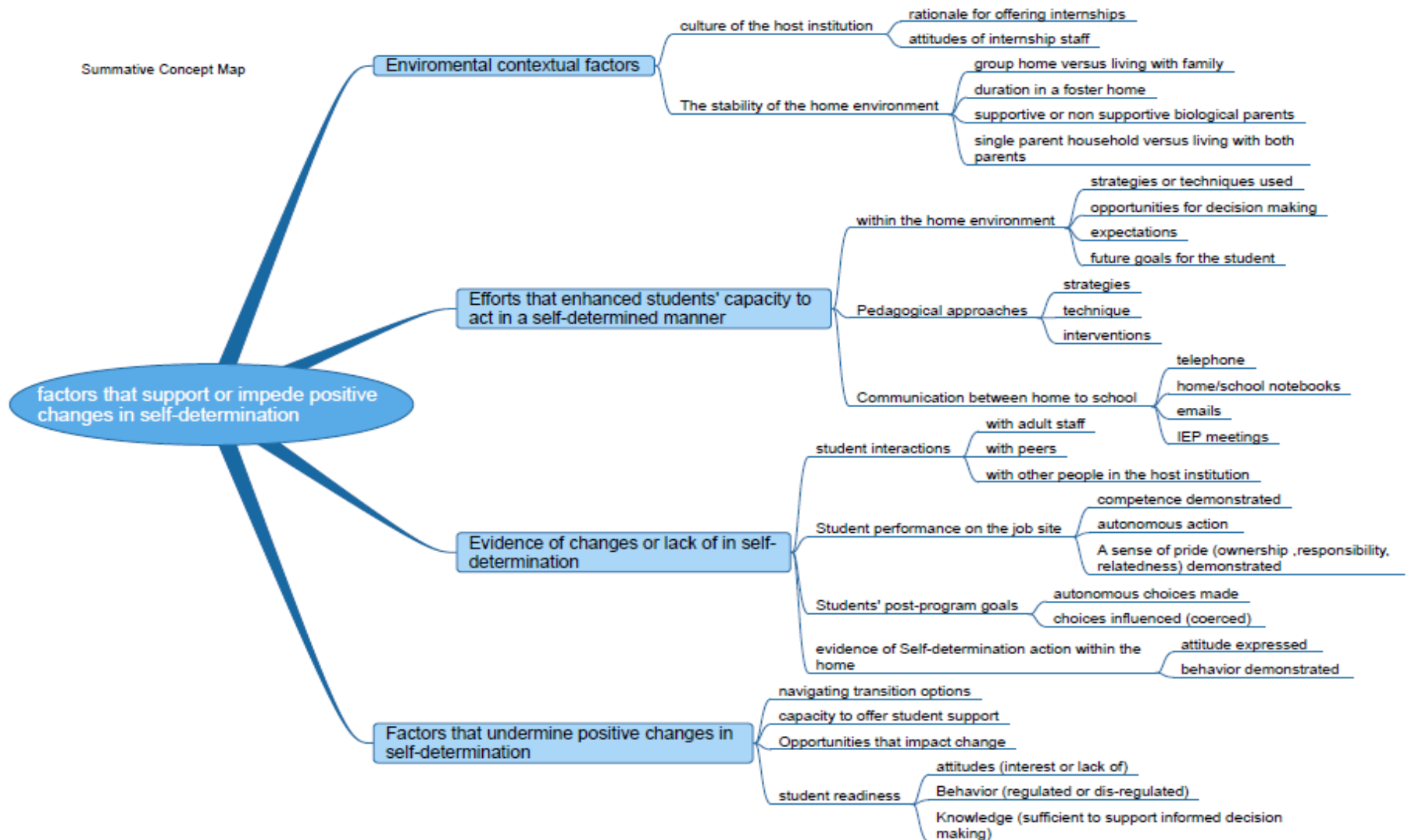
<b>Category # 2</b>					
<b>Category Label</b>	<b>Sub-category</b>	<b>Property</b>	<b>Sub-properties</b>	<b>Sub-properties</b>	<b>Dimension (Range)</b>
<b>Deliberate effort to enhance student capacity to act self-determined</b>	Supports within the home (Placement or Nuclear family)	Teaching approaches			Autonomy to dependence support
					Supportive to unsupportive
		Opportunities for Choice-making	Student capacity enhancement		Supportive to unsupportive
			Accommodating student needs		Adapted to not adapted
	Post-school expectations			High to low	
	Supports within the PS program	Opportunities for choice- making	Student capacity enhancement		Supportive to unsupportive
			Accommodating student needs		Adapted to not adapted
		expectations of Project SERCH on students	Student sense of responsibility		Supportive to unsupportive
			Student achievement goals		Articulated to ambiguous
		PS Pedagogical approaches	Personal beliefs regarding student support		Passion-driven to lack of drive
			Strategies for teaching new skills		Gradual support to full immersion
			Direct/indirect outcome of the instructional support		Autonomy to dependency support
		PS coordination of partnerships	PS staff and Internship supervisors direct support		Perceived as effective to non-effective
	PS and home collaborations			Successful to unsuccessful implementation of plans	
			Effective or not effective		

<b>Category # 3</b>						
<b>Category Label</b>	<b>Sub-category</b>	<b>Property</b>	<b>Sub-properties</b>	<b>Sub-properties</b>	<b>Dimension (Range)</b>	
<b>Factors that undermine positive changes in self-determination</b>	Challenges to navigate the transition from secondary to post school options	Family access to resources and opportunities	Choice of post-secondary education options		Available to not available	
			Availability of ASD support services during school transition		Adequate to inadequate	
	Perceived Inadequacies within PS program	Program staff member’s roles and job responsibilities (job coaches, internship supervisors and program leadership)	Perceived performance of supportive duties			Satisfactory to unsatisfactory
				Self-efficacy belief		Strong to weak
		Staff relationships	Staff input on student programming			Encouraged to frustrated
				Communication among staff		Cohesive to non-cohesive group dynamics
		Curriculum provisions intended to address self-determination	instruction of skills that support self-determination behavior			Adequate to inadequate
				Order of instruction and job training support		Organized to disorganized
				Perceived outcomes of the curriculum provisions		Relevant to irrelevant
		Time/Duration of student participation in the program	Enrollment dates of students			Sufficient to insufficient exposure to opportunities in the program
				PS Program length		Adequate time to inadequate time provided
		Gaps in student readiness	Student attitudes			Motivated to unmotivated to indifferent
	Student behavior				Regulated to dis-regulated	
	Student knowledge				Satisfactory to unsatisfactory	
	<b>Category # 4</b>					

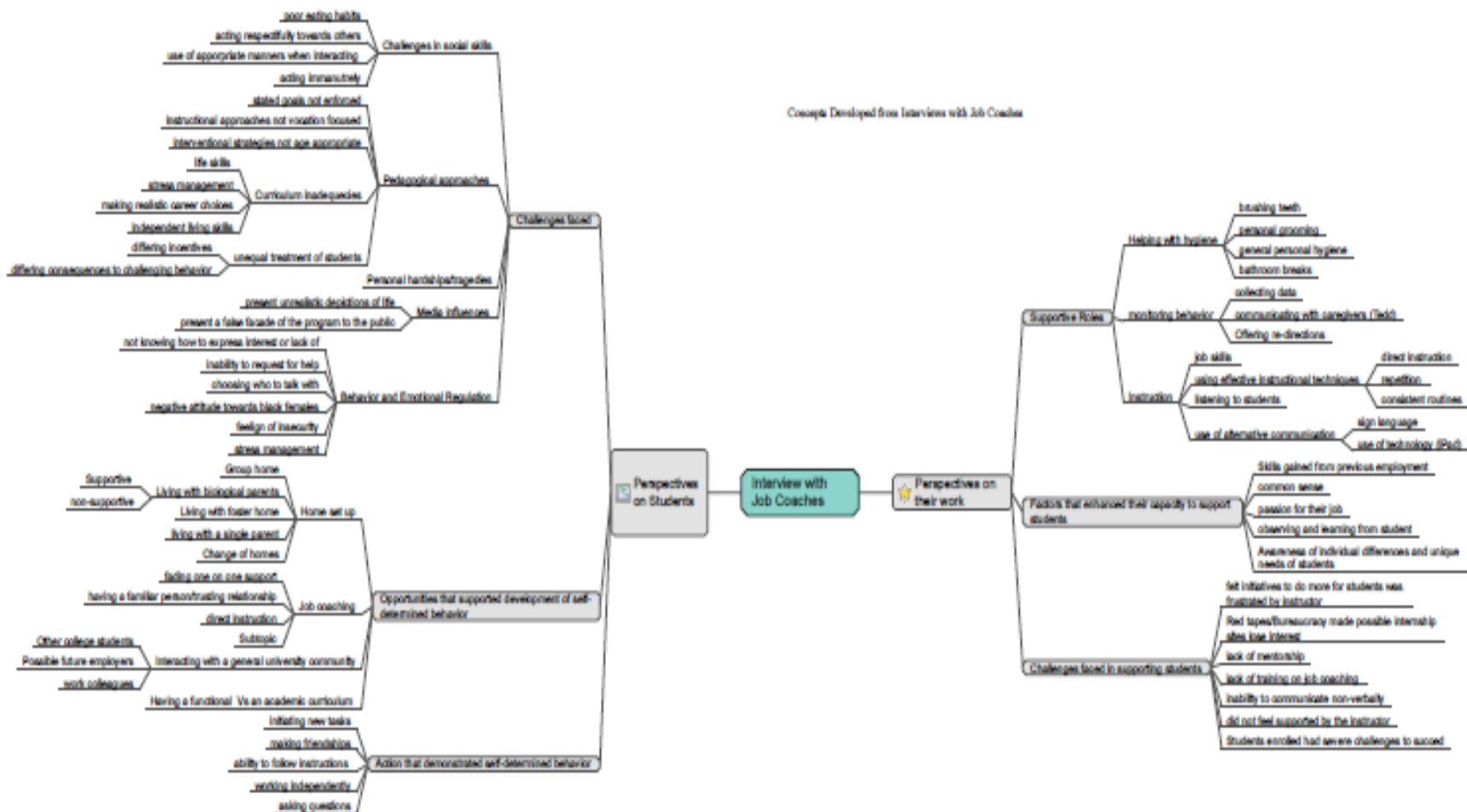
Category Label	Sub-category	Property	Sub-properties	Sub-properties	Dimension (Range)
<b>Indicators of self-determination across settings</b>	Student behavior at home	Autonomous action/choice	Initiative and followed action in response to behavior consequences		Demonstrated to not demonstrated
	Student performance at PS	Competence	Skills learned		Demonstrated to not demonstrated
		Autonomous action/choice	Initiative and followed action in response to behavior consequences		Demonstrated to not demonstrated
		Behavior			Introverted to extraverted
		Emotions			Self-control to lack of self-control
		Age-appropriate Self-Care skills			Independent to dependent
	Perceptions on Student interactions during the course of their participation in the PS program	Student interaction with adult staff			Trusting to not trusting
		Student interaction that promoted ability to make			Accepting to not accepting
		Student interaction with people in the host institution			Socially-appropriate to socially inappropriate

**Appendix C: Concept Maps Demonstrating Category Construction as Work in Progress**

**Concept Map 1: Summative Concept Map leading to category formation**



Concept Map 2: with concepts from Interviews with Job Coaches

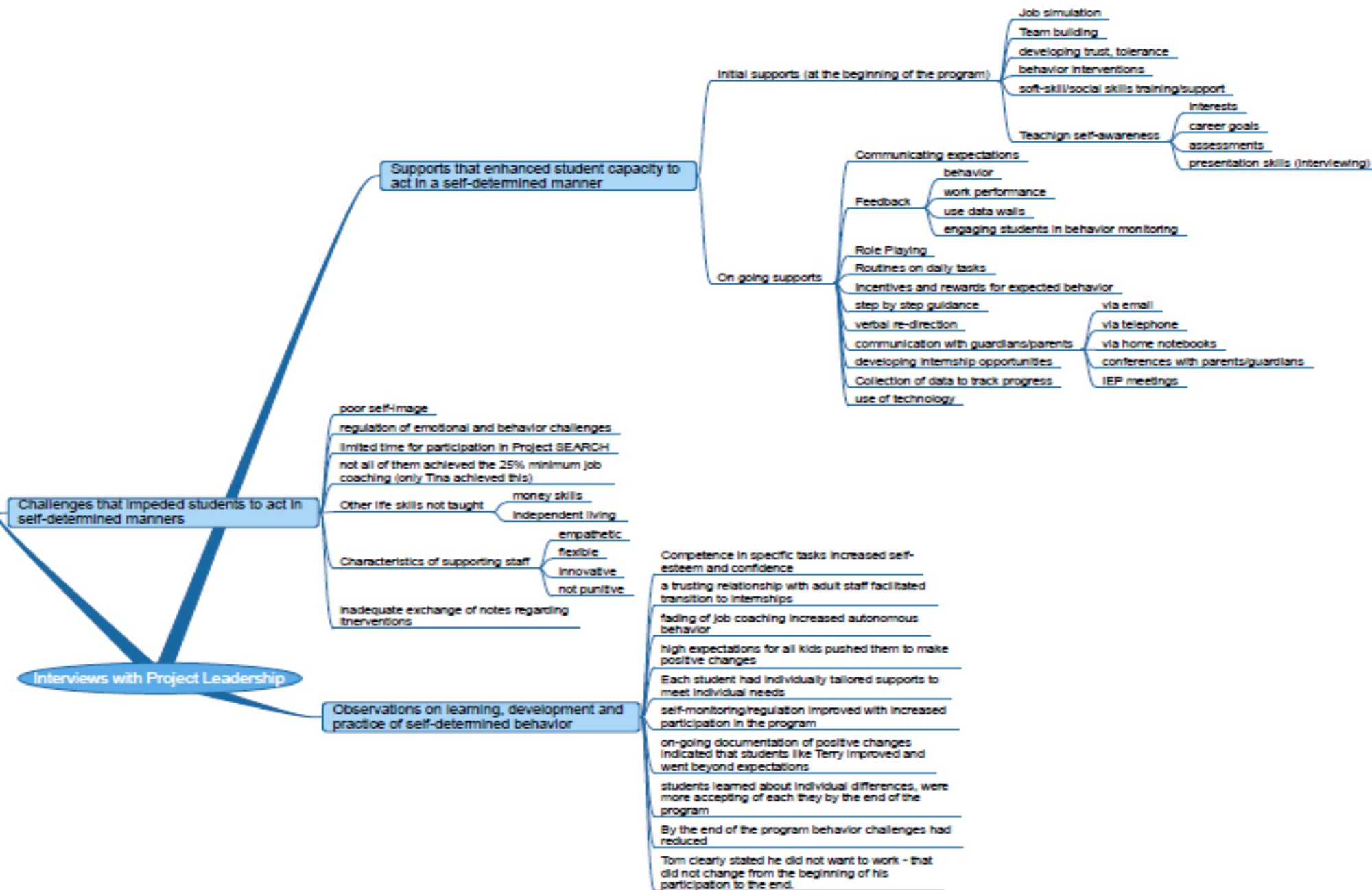




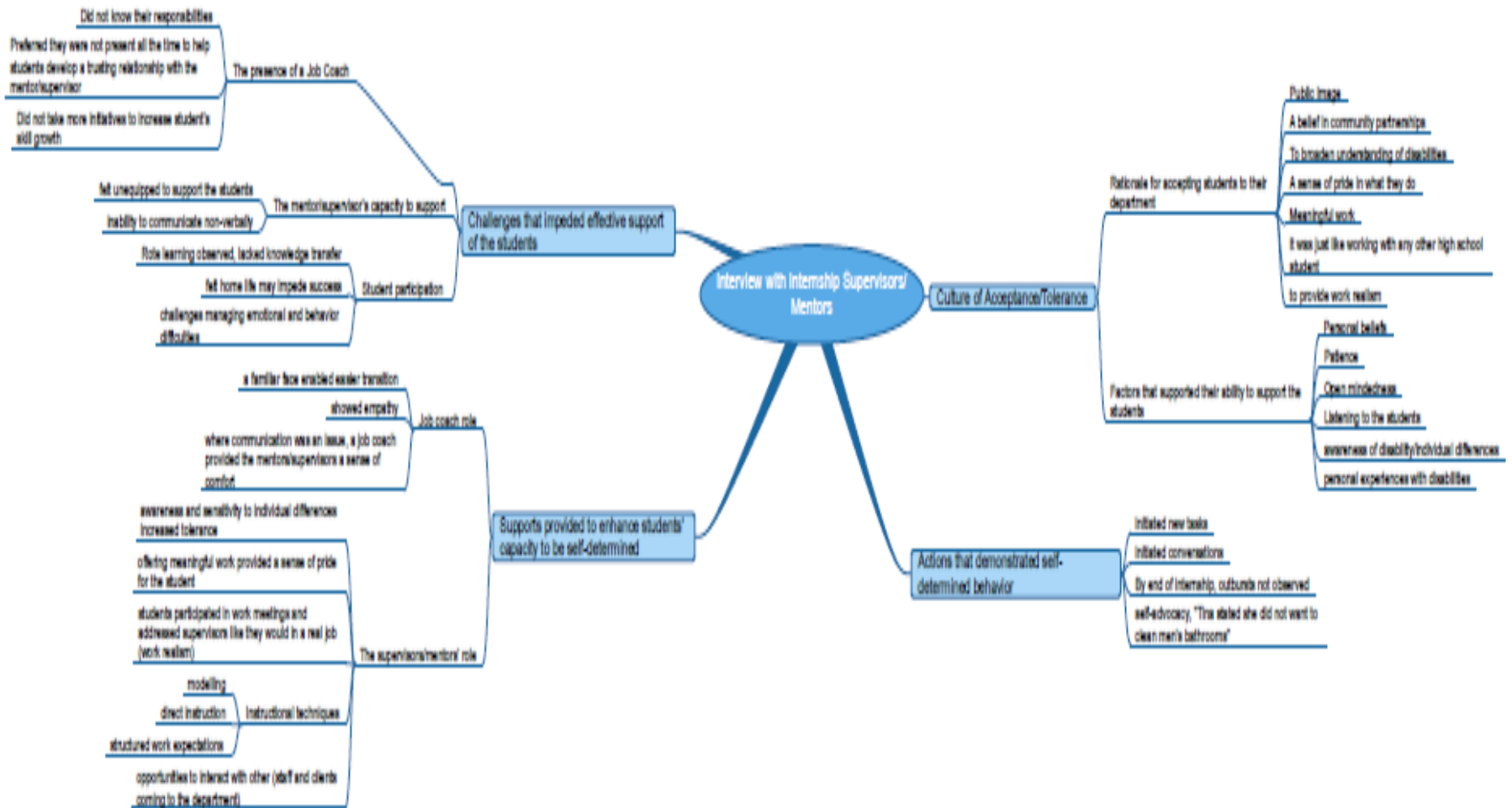
Concept map 3: With concepts from Interviews with Parents



Concept Map 4: with Concepts developed from Interviews with Project Leaders



Concept Map 5: With concepts from Interviews with Internship Supervisors/mentors



**Appendix D: Illustration of the development of concepts to categories**

**Concept Table 1: Summary of Concepts Developed from Interviews with Job Coaches**

The concepts were classified into two: statements that were used to describe Job Coaches’ perspectives regarding their participation as well as the students’ participation in the school-to-work transition program.

The Job Coaches’ Perspectives about themselves	The Job coaches’ perspectives about the students
<b>Students lack of opportunities to participate in decision making / Feeling that students not adequately prepared to transition to work independently</b>	Challenges with self-regulation Challenges with personal hygiene and self-care Home life impacts positive changes
<b>Inadequate collaboration efforts with supporting team/challenges with program leadership</b>	Recognition of positive changes Challenges in making realistic future goals Challenges with peer interactions Challenges with social skills Work opportunities supportive to development of autonomous behavior
<b>Awareness/understanding of student strengths and needs supports or impedes coaching Communication with parents/guardians important</b>	Autonomy in self-care and hygiene Awareness of self (strengths and challenges)
<b>Curriculum Inadequacies</b>	Education and past personal tragedies impact positive changes
<b>Developing a trusting relationship with the intern Repetition and direct instruction supports positive changes</b>	Sensory Challenges
<b>Feeling of inadequacy In supporting young adults Feeling of being victims of Racial injustice ( Talks of “Our Kids”) (It depends on her color)</b>	
<b>Trust a key to beginning a successful supportive relationship with the student</b>	
<b>Listening to the student supports development of autonomy</b>	
<b>Failed plans to incorporate parent counseling</b>	Repetition and familiarity with work tasks led to autonomous actions Non-verbal communication demonstrated autonomy in decision making
<b>Relied on asking others for supportive strategies</b>	Students indicated a desire to work
<b>Utilized technology to facilitate relationship</b>	Utilized technology (iPad) to facilitate communication

<b>Sensed/observed a lack of respect for the student interns by adult PS staff</b>	Change in life events a challenge
<b>A sense of lack of knowledge about the PS The University internships were made ready to welcome and support the student interns</b>	
<b>Creating a Task analysis supported learning of job expectations</b>	
<b>Structured/clear expectations supportive</b>	Limitations in expressive language Autonomy in career choice
<b>Challenges to communicate non-verbally Availability of job mentors created a safe environment</b>	
<b>Positive attitude and high expectations support autonomy development</b>	
<b>Self-motivation is something all young adults learn</b>	

**Concept Table 2: Summary of Concepts Developed from Interviews with PS Leadership**

<b>Concept Label</b>	
<b>Concepts that pertain to the interviewee</b>	<b>Concepts that pertain to the student Intern</b>
<b>Responsible for identifying internship sites</b>	Internship setup was guided by students' interests Job simulation exercises guided in identification of job performance baseline information and student interest
<b>Internship chosen targeted to teach specific job skills</b>	Training of work-appropriate soft skills was an important part of the initial training
<b>Visual task-analysis supported development of competency of specific job skills</b>	
<b>The internships were collaboratively developed by PS Leadership and the Internship Supervisors</b>	
<b>Information regarding the students' challenges and support strategies were provided to the internship supervisors</b>	Tina was the first student to have one-on-one adult supervision faded during her first internship from 100% to 40% of the time. A digital watch with a timer helped Tina monitor her own breaks Difficulties in making appropriate choices during break time (wandering to other places around campus, taking things that did not belong to her) resulted in loss of independence

<p><b>Job Coaches staged themselves at a distance within the internship site in order to give opportunity for independence at the same time monitor student behavior on the internships</b></p>	<p>Constant communication of expectations and positive feedback with Tina allowed her to learn the importance of showing others she could be trusted</p>
	<p>A feeling of competence and success helped Tina to demonstrate a sense of pride in her work responsibilities</p>
	<p>Increased competency and trust allowed Tina more opportunities to work without adult support.</p>
	<p>Role-playing and guided questioning helped Tina to understand other people’s perspectives and empathy</p>
<p><b>Use past experience working with transition-age individuals with disabilities to identify strategies that support the students.</b></p>	
<p><b>Visual support strategies help to promote understanding, and hence development of competency</b></p>	
<p><b>Routines and structured environments increase familiarity and competency</b></p>	
	<p>At the beginning of the program, Tina had a poor self-image and her frustrated behaviors were a result of unfamiliarity with job tasks</p>
	<p>Familiarity with a job task and increased competence improved the feeling of self-confidence and led to more attempts to initiate new tasks</p>
	<p>Guided questioning technique helped Ted express that he loved jobs that allowed him to work with his hands</p>
	<p>Ted benefited from simulation exercises as a means for learning job-appropriate soft skills (saying thank you, excuse me, looking people in the eye, etc.)</p>
	<p>At the start of the program, Ted had a poor self-image, and preferred to act like other people he had met in his life or created in his mind</p>
	<p>Ted also had a lot of challenging behaviors at the beginning of the program, (Talking to himself, laying on the floor, crying, beating his head against the doors, etc.)</p>
	<p>At the start of the program, Ted required at least two gentlemen to closely monitor him so that he did not hurt himself</p>
	<p>Getting challenging behaviors under control for Ted was more important before placing him on the internship to begin learning job skills.</p>
	<p>Consistent expectations, immediate re-direction, and positive praise helped to support Ted to build</p>

	<p>a positive image about himself.</p> <p>Keeping Ted busy on the jobsite helps him to focus on his job</p>
	<p>Towards the end of the program, Ted demonstrated that he could work, with a little space for independence, as long as the job coach was within close proximity.</p> <p>Ted showed signs of self-monitoring by looking towards the job coach and giving a thumbs up to check, “am I doing this right?”</p>
	<p>Choosing internships with less people to interact with helped Ted to focus on his work</p> <p>Giving Ted opportunities to fail and make a decision on the consequences of his actions helped him to better understand decisions and choices that were appropriate</p>
<b>High expectations for Ted after participation in PS</b>	
	<p>Terry had thorough documentation on her job performance to demonstrate her skills</p> <p>Communication with Terry’s parents helped to guide appropriate internship placement for her.</p>
<b>Parents play a key role in supporting students’ success</b>	
	<p>Terry’s documentation showed she had experience in a similar school-to-work transition program and this guided her internship placement as well</p> <p>Gestures and expressed emotions/feelings helped to determine how Terry felt about her internship placements and work expectations.</p>
	<p>Picture documentation of the internship showed evidence of the job skills that Terry was capable of doing</p> <p>Terry worked according to work expectations, her only challenges were work speed and endurance</p> <p>Job performance for Terry ranged from hand-over-hand support to independent performance resulting from consistent routines and familiarity of work tasks</p> <p>Terry’s work endurance was supported with continuous verbal praise, increased expectations with each day of work ( from working 5 minutes and seeking a break to ten minutes till she worked for up to two or more hours without stopping)</p>
	<p>When Terry started working, avoidance behavior resulted from lack of motivation</p> <p>Routine of daily tasks supported familiarity of work tasks, and development of competency for Terry</p>
	<p>Tom was not motivated to work despite the potential and capacity he had to work</p> <p>Tom is very social, “he is a joy to be with”</p> <p>High level of expectations for Tom pushed him to</p>

	demonstrate his tolerance and frustration levels Incentives were used to encourage Tom to work (a cartoon picture, access to a computer)
<b>Incentives or tangible rewards were appropriate to motivate Tom because it's a similar concept to receiving a paycheck</b>	
	With rewards Tom worked for 3 to 4 hours a day
<b>Mum did not know if Tom would be able to work Tom's mother's expectations are that he be productive in life – whether through employment or other means</b>	
<b>Individuals with Autism Spectrum Disorders are motivated by having a clear understanding of start to finish points of a job expectation.</b>	
<b>Individual with autism are motivated in what they have interest in and want to do</b>	
<b>Routine and Step-by-step guidance supports development of competency, and self-confidence</b>	
	Tina self-advocated throughout bursts at the beginning of the internship
<b>Feeling that she and staff learned from the students</b>	
	All students have been observed to demonstrate elements of self-advocacy
<b>Teaching through role-playing, step-by-step guidance supports learning of acceptable opportunities to self-regulate</b>	
<b>It is important to listen to the students</b>	
	Ted advocated for himself when he did not understand instructions
<b>Helping students know it is okay to ask questions supports their ability to self-advocate</b>	
	Terry advocated for herself by clearly verbalizing the word "STOP", or signaling "STOP" using sign language, or showed gestures and body language that indicated frustration
	Tom advocated for himself and stated "leave me alone!" Or "No!" Or "Step back!"
	Terry has taught other students that there are other means to communicate
	Students have demonstrated an acceptance of Terry by making sure she is safe and cared for.
	Tim started the program with a one-on-one staff due to challenging behavior
	Tim had challenges managing his level of excitement that was fuelled with attention from others.
	Past experience of death of a family member triggered levels of anxiety when Tim saw or heard people coughing
	Verbal redirection and reassurance helped Tim from triggering anxiety or increasing level of perseveration on people's attention
	Tim demonstrated work avoidance behaviors
	Tim's work performance was impacted by his physical disabilities due to Cerebral Palsy which



	affected his gait
	Increased expectations and verbal praise supported him to develop work endurance
	Tim had good social skills – he shows care and concern for others
	Tim was very detail oriented, and therefore ensured that his cleaning and work was carefully done
	With longer participation in the internship, Tim felt a sense of self-worth as he became more aware of the value of his work – that he was helping and doing a good job.
	By the end of the PS, Tim was not ready for employment
	Tim’s success in the program was the ability to remove his one-on-one behavior support person
<b>Parents’ role in supporting transition of their youth should involve research and identification of support services</b>	
<b>In order to assure success in transition, vocational skills training should start as early as 15 or 16 years to identify skills, interests, and barriers that support or impede the students</b>	
<b>A job developer’s role is to be mentor, trainer, coach, advocate and community networker</b>	
	Student personal traits essential for keeping a job
	Only Ted and Tina qualified for employment at the end of PS
	Improvement in behavior challenges key to gaining employment
	Tina and Ted have the knowledge and physical abilities to gain employment
	Tina has demonstrated growth in ability to react appropriately to situations
<b>To be employed students had to demonstrate ability to be independent with only 25% adult support</b>	
	Challenges to communication a barrier to employment
	Transition to new environments with differing sensory stimuli an important consideration to address for individuals with ASD
<b>Employer buy-in and coworker supports are key to successful transition to employment</b>	
<b>Transition from school to work requires transitions in many aspects of life (school to work; student role to employee roles; school environment to work environments; dependence on teachers to independence on self; etc.)</b>	
	Pubescent issues impact transition of youth with disabilities
	Students who have a sense of self-awareness are able to advocate themselves
<b>Social Skills training was part of the school-to-work transition done as group therapy</b>	
	By end of program students demonstrate a

	willingness to participate in activities Through continued encouragement, Tina started to show willingness to participate
	By end of the program, Tom shows interest to participate in group therapy activities and provides helpful commentary.
<b>Unsure of how much Tim understands due to his disability because he echoes questions asked to him</b>	
<b>Therapy notes are not shared with the instructor or PS team</b>	Students have demonstrated an improvement in a way that actions that required prompting by an external source have become internalized and they know what to do when in most instances
	Not sure if Ted is ready to be without a Job Coach and control his impulses independently
	Tom has made the biggest improvement because he is much more extroverted than when he first came to the program
	Did not see much change with Terry, she can only do very contained repetitive tasks
<b>People who do not have self-confidence are afraid to try new things because they assume they will fail</b>	
<b>Encouragement and verbal praise regardless of failed attempts leads to positive changes</b>	Students felt safe to fail, and hence were able to try new things without feeling they may face negative consequences
<b>Having one on one staff to student support helped the students to get the attention and support they needed.</b>	
<b>Empathy, flexibility, innovation are characteristics of adult staff that impact level of support to students</b>	
<b>Unsure of the extent to which simulation of independent living skills were addressed in the curriculum</b>	

**Concept Table 3: Summary of Concepts that Developed from Interviews with Internship Supervisors**

<b>Concept Labels developed from interviews with the internship supervisors/mentors</b>	
<b>Concepts that pertain to the interviewee</b>	<b>Concepts that pertain to the student Intern</b>
<b>Presence of a job coach (a familiar person/presence) facilitated ease of transition to the internship</b>	
<b>Public image and company’s social responsibility a motivation for offering internship opportunities</b>	
<b>Personal conviction to support young adults with disabilities</b>	
<b>Lack of knowledge of the role of the Job coach</b>	Lack of knowledge transfer after initial instruction “Rote Learning”
<b>Job Coaches could have taken more initiative to support the student interns</b>	Recognition of positive changes in Tina- she did not have any outbursts or challenging behavior during her first days in the internship
	Challenges with social skills

	Tina had attitude problems during the first days of the internship but tremendously improved by the end of the internship
	Recognizing home environments could impede on progress (Environments shape behavior and social skills)
<b>Providing actual work realism supported development of realistic understanding of employment</b>	
<b>Awareness/understanding of student create a sense of tolerance on the job site</b>	
<b>The internship was created to fill a position that was required or to do work that was necessary and appreciated</b>	
<b>Lack of skills to communicate non-verbally impeded level of interaction between supervisors and intern</b>	
	Tina worked independently
<b>Feeling of inadequacy to support the student intern</b>	
	Consistent routine helped Terry know and follow job expectations
<b>The more severe the disability the more challenging it was to support the intern</b>	
<b>Offering the internship broadened understanding and acceptance of individuals with disabilities</b>	Staff know Tom and Tim by name
	Tina initiated conversation with Amy
	Tina was timid and shy at the beginning of internship
	Tina did work independently without a job coach after she became comfortable with the internship responsibilities
	Tina got frustrated with questions from clients at the beginning of her internship
	Other interns who worked in the computer lab only worked with their job coaches
	Interaction with other people was beneficial to all the interns
	Tom observed to always be outgoing and loud, but grew quieter with more participation in the internship
<b>Being patient and listening to the interns helps the mentors to know how to support the interns; "They know what is best"</b>	
	Tina learned through modeling (e.g. learned to give compliments to her supervisor regarding work-appropriate clothing)
<b>When meaningful work is given to interns, it helps them feel valued</b>	
	At first Tina was not social, we started slow
	Tina later began to teach people how to use the scanner
	Repetition of tasks helped Tina to be familiar with the equipment she worked with in the computer lab
	Familiarity led to more confidence and better social skills for Tina
<b>Kept in mind that the intern was not an adult but a child, had to be talked to as a kid</b>	
	Tina had challenges with self-regulation when corrected for sleeping while on the job

	Tina displayed challenges in self-regulation on a day she did not want to return home
	The biggest change was in social skills
	Observed that each intern is different – some shy like Tina, some loud like Tom
	Example of self-determined action - Tina was able to verbally express that she did not like to clean men’s bathrooms because they smelled
	Tina was taking initiative by adding new tasks without being instructed
	Example of self-determined action – Tina did not like it when others helped her, she verbally expressed what her job was in the cafeteria
<b>Providing direct instruction and modeling helped the mentor to teach work expectations</b>	
	Repetition and consistency helped to build a sense of competency for Tina
	The more familiar she was with the tasks, the more independent she became
	Using socially-appropriate manners to talk to students or people that came around her work environment
<b>Sense of personal like and pride in the intern (calls her TT)</b>	
<b>An attitude of tolerance and acceptance</b>	
<b>Having family with disability motivated commitment to support the PS interns</b>	
<b>Supported all student in PS</b>	
<b>Understanding students’ strengths and needs guides the mentor to provide appropriate support and accommodations that enable student to be successful</b>	
<b>Provides small reinforcements (rewards e.g. soda, bag of chips, etc.) for recognizing effort done on the job as motivation</b>	
	Tom was motivated to work because of the tangible rewards (soda, chips, etc.)
<b>Does not like to work with job coaches in order to create a trusting relationship between intern and the mentor/supervisor</b>	
<b>Believes job mentors/supervisors as valuable part of the program success</b>	
<b>Recognizes that not all businesses on the campus were willing to support the program as an impeding factor for participation of the students in work training</b>	
<b>Observed some job coaches not doing their jobs and just roaming through the campus with the interns as impeding to creating an accepting community at the university site</b>	
<b>Sense of pride in his work (I was asked to teach them what I d)</b>	
	Ted is a pretty good worker, he showed a lot of success

<b>There is more that the job coach could have done for Ted</b>	
	Ted needed constant reminders to stay focused on his work
	Ted had a tendency to want to touch and take what he should not
	Ted needed constant one-on-one supervision
<b>Giving clear instructions and providing opportunities to implement the instructions was a successful strategy for Ted</b>	
	Sometimes Ted felt intimidated to do things for fear of losing privileges
<b>Job responsibility to mentor was thrown at her</b>	
<b>The mentoring responsibility was easy because she naturally enjoys kids</b>	
<b>Did not know what to do with the student interns</b>	
	Ted's first internship in the cafeteria was hard because he did not have anyone to follow after, unlike Tina who came after Ted to work in the cafeteria
<b>Job coaches showed they cared for the students</b>	
	Ted should have been given opportunities to mess up and learn from his mistakes
<b>The response of the job coaches to Tina's outbursts was appropriate, unlike with Ted</b>	
<b>Patience and open minded attitude helps the mentor to understand the interns and provide appropriate support</b>	
<b>Internship opportunity was accepted because it was non-intrusive to the work of the site</b>	
	Tom demonstrated improvement in self-control/regulation - he follows directions and knows that they are in the library to work unlike the beginning of his internship when he did not listen to anyone
<b>After months of implementing the PS, sounds of screaming no longer heard in the library from the basement where PS was located</b>	Evidence of smooth integration of the students to the university community
	Evidence of positive changes in self-regulation --Tina is able to take turns use the public resources in the library (scanning) when she has big documents to scan
	Observes Tom interacts with people – says hello
	Unsure if Ted wants to interact or not, he is very shy and quiet
<b>Ensures staff makes eye contact and greet people coming to the facility</b>	
<b>All students require a job-coach/adult staff within sight</b>	
<b>The longer the students' participation in the program, the more the adult staff allowed certain levels of independence for the students</b>	

**Concept Table 4: Summary of Concepts Developed from Interviews with Parents of the Student Interns**

<b>Concept Labels Developed from Parent Interviews</b>	
Concepts that pertain to the interviewee	Concepts that pertain to the student Intern
<p>Tina’s placement decision guided by the school district personnel responsible for Tina’s case</p>	
<p>A sense of trust in the school district personnel responsible for Tina (“he knows all the trials and tribulations and problems that she was experiencing...”</p>	
	<p>Believed Tina was a good candidate for a functional skills curriculum rather than an academic curriculum.</p>
	<p>Tina had a history of difficulties in regular school participation (behavior, constantly suspended, paranoia, fights)</p>
<p>Past history of suspensions and challenging behavior impeded success</p>	
	<p>Tina is learning to apologize when wrong</p>
	<p>Evidence of learning (discipline, work skills)</p>
	<p>Tina beginning to understand the concept of work</p>
	<p>Opportunities to have different Internship rotations has helped her to understand different types of job options – and learning what she likes or not</p>
<p>Participation in the internships has given Dorcas a premise to encourage Tina to think in realistic terms about becoming an independent young adult</p>	
<p>Goals for are to help Tina be able to adjust to community living as a responsible and productive citizen</p>	
<p>She lets natural consequences become opportunities for learning decision making</p>	
<p>She provides structure to support Tina understand boundaries ( e.g. where to put things, how to organize her things by providing cubbies)</p>	<p>Tina has challenges with organization of her belongings</p>
<p>Understands the importance of collaborating with the program as a way of supporting Tina to be successful</p>	
<p>Recognizes the importance of teaching students to be aware of differences and accepting of diversity</p>	
<p>Educators who choose to teach children with disabilities should have tolerance and commitment to their work in order to provide meaningful support</p>	
<p>3 years has been the longest foster placement for Tina (Change occurs too frequently???)</p>	
<p>A set of pride in setting high expectations for her daughter Terry – She wanted a program that was challenging for Terry</p>	
	<p>Terry is able to break down specific tasks required to do a</p>

	specific job like cleaning an apartment
	Terry is able to navigate the university campus getting to and from her internship site
<b>Florence has the same goals for her children regardless of ability – to be productive, independent, responsible (to be self-determined)</b>	
	Terry enjoys Project SEARCH as demonstrated by the way she walks to the program, enthusiasm when she wakes up in the morning, she shows a lot of behavior that demonstrates liking of the program
	Evidence of self-determined action – Terry does not want to get help when she is trying to accomplish a task. She will say, “knock it off,” she will push you away, or she will stare disapprovingly at you.
	Visual supports provide a guide and directions of work expectations for Tina
	Terry tries very hard to be independent in doing things – she is driven to do that
	Consistency of expectations between the home and school program is supportive of autonomous behavior for Terry
<b>Giving Terry enough time to do things helps her have opportunity to do things independently and experience success</b>	
	Terry demonstrates autonomy in problem solving and decision making – ex. She takes initiative to collect things that require recycling at home, when she loads up her hands and gets to the door, she will decide how to manipulate the recycle materials in her hand and manages to open the door without assistance; she independently prepares the dog for walking, knows to feed him after the walk, etc.
<b>Give Terry opportunities to make choices with visual supports: at restaurant, what to wear, etc.</b>	
<b>Applied behavior analysis strategies utilized at home to support Terry</b>	
	Terry demonstrates challenging behavior often as a means of expressing discomfort or pain
	Terry expresses autonomous choice making on leisure activities such as movies, TV programs, sports (likes to swim), etc.
<b>Florence believes parents should start to teach their children to be self-determined while young and make it a life-long goal</b>	
<b>Connecting to resources and reading guides parents on best practices for supporting children with disabilities</b>	
<b>Raise your child with a disability with the same thoughts as your other children</b>	
<b>Wishes PS led to employment</b>	
	Tom was burnt out on school in the self-contained autism program and needed a functional curriculum
	Since Tom’s participation in the program, it is easier to re-

	direct his behavior
<b>The instructional Director understands Autism hence she is able to provide appropriate support for Tom</b>	
	High expectations support Tom’s success – the instructor does not give him any slack
	Tom shows positive changes in his ability to recall events, and engaging with other people
	Tom does not make choices, he manipulates
<b>At home rewards are not used like they do at school</b>	
	Tom responds well to the economy system of behavior support
<b>Lack of resources for guiding parents on transition options for children with autism is a challenge</b>	
<b>Tom’s case worker was supportive in guiding Tom and his mother to find PS</b>	
	Following PS tom was going to be placed in another similar program
<b>Opportunity to work from home enabled Kanisha to take Tom home when behavior challenges were too much for the program to handle</b>	
<b>Ted ’s Case manager guided the family on placement for Ted in PS</b>	
<b>Ted ’s mother was not aware of options for transition to work for her son Ted</b>	
<b>Carrie was concerned about the changes from secure school to unfamiliar transition program</b>	
	Ted missed friends from his previous school and expressed the feelings by trying to pretend like his friends from the previous school
	Ted was placed in a group home for four and half years
<b>Ted ’s placement in a group home impeded the mother’s ability to monitor behavior or support positive changes</b>	
	Change impacts Ted negatively
	Ted ’s participation in PS shows positive changes as demonstrated in attempts to do chores at home
<b>Mother recognizes the need to learn other independent skills</b>	
<b>Carrie’s self-determination goals for Ted are that he knows to make the right decisions regarding his personal safety and advocate for himself</b>	
	Ted has unrealistic career goals - he wants to be a security guard
<b>A sense of nervousness and uncertainty about her son’s ability to work</b>	
	Ted had a negative experience in a group home
<b>Feels she made a good decision to remove Ted from a group home</b>	



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<b>Carrie intends to equip siblings to take care of Ted after she and her husband are unable to take care of Ted</b>	
<b>Still searching for resources (doctors, programs) to assist Ted</b>	Ted has opportunities to participate in leisure activities like baseball
<b>Feels state-run programs do not provide the appropriate support for youths with disabilities</b>	
<b>Feels most programs are misleading, what they advertise is not what they do</b>	
<b>A feeling of helplessness in managing and controlling her son's challenging behavior ("it was easier when he was young")</b>	Ted's childhood years were easier than the puberty years with managing challenging behavior ("Explosive years")
<b>Consistency and firm expectations helpful in management of challenging behavior</b>	
	Ted has difficulties showing appropriate emotions
<b>Parents need to know intervention options available for their children with autism and challenging behavior</b>	
<b>Teachers should have knowledge of options available for parents in order to provide guidance</b>	
	The academic work in school was redundant for Ted, he needed functional skills practical for living

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**Appendix E: Sample Transcript Coding Table**

Possible Category	Group of Transcripts	Concept Label		Location of the Concept (Line Number)	
		Concepts that pertain to the interviewee	Concepts that pertain to the student Intern		
<b>Job Coaches (JC)</b>		Transcript #9 – Interview with Charity			
				Name of Intern	
		Job coaching is assisting interns with specific job skills		Tina & Terry	JC-Cb52-55;
			Gradual fading of one-on-one coaching supported autonomy	Tina	JC-Cb63-68; JC-Cb71-75; JC-Cb76-79
			Autonomy in personal hygiene	Tina	JC-Cb87-90; JC-Cb93-95; JC-Cb101-103; JC-Cb106-108;
<b>Lack of Collegiality</b>	Inadequate collaboration efforts with supporting team		Challenges in self-regulation	Tina	JC-Cb87-90; JC-Cb115-122; JC-Cb124-125; JC-Cb43-143;
			Autonomy in making career choice	Tina	JC-Cb111-113
					JC-Cb131-132; JC-Cb274-277; JC-Cb291-294;
			Recognition of positive changes	Tina & Terry	JC-Cb135-140; JC-Cb287-290; JC-Cb299-301;
			Feeling of competency increased with familiarity of job tasks	Tina	JC-Cb135-140; JC-Cb176-177;
			Challenges with peer interactions	Tina	JC-Cb148-153;
			Challenges with social skills	Tina	JC-Cb148-153; JC-Cb158-161;
			Work opportunities supportive to development of autonomous behavior	Tina	JC-Cb176-177
			Inadequate life skills instruction		JC-Cb183-185; JC-Cb193-197;
			Past experiences beneficial to job coaching role		JC-Cb204-211
	Passion for work motivates job coaching		JC-Cb230-235		
	Awareness of student strengths and needs supports or impedes coaching		JC-Cb237-247; JC-Cb262-255; JC-Cb281-284; JC-Cb299-301;		

## Appendix F: Transcription Protocol

Transcript #

Place:

Date of interview:

Time of interview:

Purpose:

To analyze factors that support or those that impede, the development of self-determination behavior of young adults diagnosed with Autism Spectrum Disorders who participate in a school-to-work transition program

- What aspects of the school-to-work transition program contribute to achievement of positive changes in self-determination?
- What aspects of the school-to-work transition program impede achievement of positive changes in self-determination?

**Interviewer:** Ambumulire Itimu-Phiri

**Interviewee:** (use Pseudonym)

**Note:** To aid in preservation of original tone and to ensure an accurate representation of the words used in the interview, the following techniques are adopted:

[ ] square brackets provide interviewer's interpretive explanations intended to add clarity

( ) non-verbal responses are indicated in parenthesis

"" quotation marks indicate reported speech

– An em dash indicates a change in thought in mid-sentence.

! an exclamation mark is used to indicate a raised intonation

? a question mark is used to indicate a question

, a comma indicates a brief pause

CAPITAL letters reflect vocal emphasis of a word or phrase

... indicates moments within the interview in which the audio recorder was muffled or the interviewee spoke much too softly to hear

A – precedes words spoken by Interviewer

I – precedes the words spoken by the Interviewee/Participant

Notes to myself are presented in square brackets [], in **bold** and *italics*

Context of the Interview:

Beginning the Interview:

## Appendix G: Data collection Tools (Interview and Observation Guides)

### INTERVIEW GUIDE PROGRAM STAFF

#### Brief overview of the study and purpose of the Interview

This study is being conducted to understand factors that support or impede the development of self-determination behavior of young adults diagnosed with autism spectrum disorders (ASD) who participate in a school-to-work transition program. Specifically, by conducting this study, I would like to learn:

- What aspects of the school-to-work transition program contribute to achievement positive changes in self-determination?
- What aspects of the school-to-work transition program impede achievement of positive changes in self-determination?

#### Statement about confidentiality

The information collected through this interview will be treated as confidential. The researcher, Ambumulire Nellie Itimu-Phiri, will compile the information and report it in summarized form as a group or using a pseudonym. No personal identifying information will be used in the summarized report.

#### Prior to recording of the interview

I appreciate your time and the opportunity to hear your views regarding factors that support or impede self-determination of young adults diagnosed with Autism Spectrum Disorders (ASD). Would you mind if we tape this interview, as it will help me listen carefully to what you have to say, as I keep an accurate record of this discussion?

Feel free to answer the questions to the best of your knowledge, if at any point you feel uneasy to respond to a question, you may freely ask me to skip and move to the next question. You may also feel free to opt out or withdraw from the study at any point during this interview. This interview should take us at least 45 minutes.

Do you have any questions before we begin?

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#### **First Interview:**

General Questions on Environmental Influences that support or impede positive changes in self-determination

1. Would you please describe your role with PS?
2. How does your role in this program support the young adults to become independent decision makers?

Probe: Being decision makers in areas such as:

- a. Personal care appropriate for work
- b. Employment options
- c. Personal conduct at work
- d. Interaction with other young adults in the program
- e. Advocating for their personal needs

**Probe further:** Give examples of scenarios where the above may occur in the program e.g. dressing appropriately for work/ requesting a bathroom break etc.

3. In your opinion, what are some things present or missing in your program that may impede the young adults from becoming independent decision makers?
4. In your opinion, what are some things that are provided through your direct work with the young adults that support them to become independent decision makers?
5. Do you feel that you do enough in your work capacity to offer support for the young adults to become independent decision makers?
6. What suggestions can you offer that would assist other practitioners working with the population of young people with Autism Spectrum Disorders, as far as supporting them to become independent decision makers?
7. Can you think of times/situations when the young adults with whom you work considered a choice, weighed their options, and made decisions without external influences?

**Follow-up questions for question 7:**

- a. Was the young adult happy/satisfied with the decision?
- b. How often would you let a young adult with whom you worked make such a decision?
- c. How do you measure the level of support necessary to help the young adult to make a decision?
- d. Given a similar situation, how would you support the young adult in a situation where he/she was frustrated/ unhappy with the outcomes of his/her decision?

**Second Interview: Outcome Questions**

The goal of the second interview is to know more about a particular young adult from the perspective of the staff member working with him/her.

**Autonomous Behavior**

1. Is the intern able to care for him/herself? Yes \_\_\_\_\_ No \_\_\_\_\_
2. How does the intern show that he/she is able to care for himself?
3. How does the intern interact with friends?
4. Does the intern express personal needs?
5. What examples of personal or general needs does the intern express?

**Self-Regulation**

1. How does the intern deal with difficult situations?
2. What would you describe as difficult situations?
3. What things help the intern to manage difficult situations?

4. How do you provide supports to help the intern manage difficult situations?
5. What goals does the intern have regarding life after graduation from the program?
6. On a scale of 1 to 5, 1 being unsure and 5 being sure, how sure is the intern on accomplishing goals after graduation?

#### Psychological Empowerment

1. What does the intern like to do during leisure time?
2. Who usually guides the leisure time activities?
3. How good is the intern in making new friends?
4. When among friends, does the intern act as a leader or a follower?
5. How does the intern deal with difficult situations with friends?

#### Self- Realization

1. Do you think the intern is aware of his/her strengths and weaknesses?
2. In your opinion, how does the intern view his/her disability?
3. Is the intern able to advocate for him/herself in a new situation?
4. Can you give examples of when you found the intern advocating for him/herself?
5. What things do you do to help the intern advocate for him/herself?

Do you have anything you can add on to this interview regarding your knowledge about the intern?

**Thank you very much for your time.**

## **INTERVIEW GUIDE**

### **Parent Interview**

#### **Brief overview of the study and purpose of the Interview**

This study is being conducted to understand factors that support or impede the development of self-determination behavior of young adults diagnosed with autism spectrum disorders (ASD) who participate in a school-to-work transition program. Specifically, by conducting this study, I would like to learn:

- What aspects of the school-to-work transition program contribute to achievement positive changes in self-determination?
- What aspects of the school-to-work transition program impede achievement of positive changes in self-determination?

#### **Statement about confidentiality**

The information collected through this interview will be treated as confidential. The researcher, Ambumulire Nellie Itimu-Phiri, will compile the information and report it in summarized form as a group or using a pseudonym. No personal identifying information will be used in the summarized report.

#### **Prior to recording of the interview**

I appreciate your time and the opportunity to hear your views regarding factors that support or impede self-determination of young adults diagnosed with Autism Spectrum Disorders (ASD). Would you mind if we tape this interview, as it will help me listen carefully to what you have to say, as I keep an accurate record of this discussion?

Feel free to answer the questions to the best of your knowledge, if at any point you feel uneasy to respond to a question, you may freely ask me to skip and move to the next question. You may also feel free to opt out or withdraw from the study at any point during this interview. This interview should take us at least 45 minutes.

Do you have any questions before we begin?

- 
1. How long has your son/daughter/ward participated in PS?
  2. Does your son/daughter/ward enjoy participating in PS?
  3. What evidence do you see that shows his/her level of enjoyment in the program?
  4. What is the value of the PS for your son/daughter/ward's future?
  5. What are the goals for your child's participation in PS?
  6. In general, how would you describe your child in the area of decision-making for matters that pertain to his/her personal life, e.g., choice of what to wear, choice of future employment, choice of friends, or choice of what to eat.
  7. What things are necessary to ensure that your child is able to plan, choose, and act on their interest/goal?
  8. What things make it difficult for your child to be able to plan, choose, and act on his/her interest/goal?
  9. In your opinion, how does PS offer support to your child, so that s/he becomes an independent decision maker?

10. Can you give examples of things that you have observed that support your child's ability to plan, choose and act on his/her interest/goal as a result of participating in PS?
11. What work does your child do at PS?
12. How helpful do you think that work will be to your child's future goals?
13. Does PS help your child to become an independent decision maker?
14. What changes have you observed since your child started participating in the program?
15. What would you like to see at PS that fully supports your child in becoming an adult who is able to plan, choose, and act on his/her choice without external influences?

Thank you for your participation.



## INTERVIEW GUIDE

### Internship/Job Site Supervisors/Managers

#### **Brief overview of the study and purpose of the Interview**

This study is being conducted to understand factors that support or impede the development of self-determination behavior of young adults diagnosed with autism spectrum disorders (ASD) who participate in a school-to-work transition program. Specifically, by conducting this study, I would like to learn:

- What aspects of the school-to-work transition program contribute to achievement of positive changes in self-determination?
- What aspects of the school-to-work transition program impede achievement of positive changes in self-determination?

#### **Statement about confidentiality**

The information collected through this interview will be treated as confidential. The researcher, Ambumulire Nellie Itimu-Phiri, will compile the information and report it in summarized form as a group or using a pseudonym. No personal identifying information will be used in the summarized report.

#### **Prior to recording of the interview**

I appreciate your time and the opportunity to hear your views regarding factors that support or impede self-determination of young adults diagnosed with Autism Spectrum Disorders (ASD). Would you mind if we tape this interview, as it will help me listen carefully to what you have to say, as I keep an accurate record of this discussion?

Feel free to answer the questions to the best of your knowledge, if at any point you feel uneasy to respond to a question, you may freely ask me to skip and move to the next question. You may also feel free to opt out or withdraw from the study at any point during this interview. This interview should take us at least 45 minutes.

Do you have any questions before we begin?

- 
1. Tell me about your work.
  2. Why did you provide an opportunity for PS interns to participate in your work site?  
**If talking to a mentor ask as an alternate to question 2:** Why did you accept to offer mentorship to the PS intern?
  3. How long has your internship site offered opportunities for PS young adults?
  4. When the young adult comes to start work, how do you offer support to ensure that the young adult learns of his/her work and responsibilities?
  5. How does PS staff offer support for the work experience made available to the young adults?
  6. Would you please share aspects of this internship partnership that you have with PS that you have learned regarding the development of the interns to become self-determined/independent workers who are able to make decisions regarding their lives?
    - What are the benefits of this work experience?
    - What are the challenges of this work experience?
    - What can be improved to better support the interns to achieve the goals of the work experience?

7. Are there any success stories that you can share regarding your experience with the PS interns?
8. What other insights can you offer as lessons in the field regarding supports for the interns, as the program strives to support their becoming self-determined or independent young adults?

Thank you

## **INTERVIEW GUIDE**

### **Intern Interview Protocol**

#### **Brief overview of the study and purpose of the Interview**

This study is being conducted to understand factors that support or impede the development of self-determination behavior of young adults diagnosed with autism spectrum disorders (ASD) who participate in a school-to-work transition program. Specifically, by conducting this study, I would like to learn:

- What aspects of the school-to-work transition program contribute to achievement of positive changes in self-determination?
- What aspects of the school-to-work transition program impede achievement of positive changes in self-determination?

#### **Statement about confidentiality**

The information collected through this interview will be treated as confidential. The researcher, Ambumulire Nellie Itimu-Phiri, will compile the information and report it in summarized form as a group or using a pseudonym. No personal identifying information will be used in the summarized report.

#### **Prior to recording of the interview**

I appreciate your time and the opportunity to hear your views regarding factors that support or impede self-determination of young adults diagnosed with Autism Spectrum Disorders (ASD). Would you mind if we tape this interview, as it will help me listen carefully to what you have to say, as I keep an accurate record of this discussion?

Feel free to answer the questions to the best of your knowledge, if at any point you feel uneasy to respond to a question, you may freely ask me to skip and move to the next question. You may also feel free to opt out or withdraw from the study at any point during this interview. This interview should take us at least 5 to 10 minutes.

Do you have any questions before we begin?

---

**(If the interview I taking place at the end of the day, rephrase the questions to be reflective of their day's experience)**

What happened today/this week that made you feel successful?

What do you plan to do to feel successful today/the rest of the week?

What happened today/this week that did not make you feel successful?

What do you think should happen tomorrow/next week to make you feel successful?

Who will be responsible for helping you feel successful?

How will the person responsible help you to feel successful?

How will you know that you have been successful?

Thank you

## **Modified Interview for the Student Interns**

Student interviews

Context of the interviews

1. How much do you like coming to PS? A lot, A little, Not at all
2. What skills have you learned at PS?
3. What do you like BEST about PS here?
4. What do you like LEAST (what do you not like) about PS?
5. What makes you happy when you think about your future job?
6. Why do you want to work in a job once you graduate from high school?

**A Rubric for Field Observation**

Place:

Date of observation:

Beginning time of observation:

Ending time of observation:

Participant being observed (use Pseudonym)

Purpose: To analyze factors that support or those that impede, the development of self-determination behavior of young adults diagnosed with Autism Spectrum Disorders who participate in a school-to-work transition program

- What aspects of the school-to-work transition program contribute to achievement of positive changes in self-determination?
- What aspects of the school-to-work transition program impede achievement of positive changes in self-determination?

**Instructions:**

Record a narrative of events as they occur during the observation using the above protocols to ensure accurate depiction of observed events. At the end of the narrative, summarize evidence of actions that show examples of self-determination: behavioral autonomy, self-regulation, psychological empowerment, and self-realization.

<b>Time</b>	<b>Actions That Show Evidence of Behavioral Autonomy</b>	<b>Actions that Show Evidence of Self-Regulation</b>	<b>Actions that Show Evidence of Psychological Empowerment</b>	<b>Actions that Show Evidence of Self-Realization</b>

**Appendix H: Letters of Approval and Consent forms****Office of Research Administration**

One University Boulevard  
 St. Louis, Missouri 63121-4499  
 Telephone: 314-516-5899  
 Fax: 314-516-6759  
 E-mail: ora@umsl.edu

**DATE:** May 29, 2013

**TO:** Ambumulire Nellie Itimu-Phiri, MA  
**FROM:** University of Missouri-St. Louis IRB

**PROJECT TITLE:** [418968-2] An analysis of factors that support or impede the development of self-determination behavior of young adults diagnosed with autism spectrum disorders who participate in a school-to-work transition program.

**REFERENCE #:**  
**SUBMISSION TYPE:** Amendment/Modification

**ACTION:** APPROVED  
**APPROVAL DATE:** May 29, 2013  
**EXPIRATION DATE:** May 29, 2014  
**REVIEW TYPE:** Full Committee Review

This proposal was approved by the University of Missouri-St. Louis IRB for a period of one year starting from the date listed above. The University of Missouri-St. Louis IRB must be notified in writing prior to major changes in the approved protocol. Examples of major changes are the addition of research sites or research instruments.

An annual report must be filed with the committee. This report should indicate the starting date of the project and the number of subjects since the start of project, or since last annual report.

Any consent or assent forms must be signed in duplicate and a copy provided to the subject. The principal investigator is required to retain the other copy of the signed consent form for at least three years following the completion of the research activity and the forms must be available for inspection if there is an official review of the UM-St. Louis human subjects research proceedings by the U.S. Department of Health and Human Services Office for Protection from Research Risks.

This action is officially recorded in the minutes of the committee.

If you have any questions, please contact Carl Bassi at 314-516-6029 or bassi@umsl.edu. Please include your project title and reference number in all correspondence with this committee.



College of Education  
One University Blvd.  
St. Louis, Missouri 63121-4499  
Telephone: 314-516-7763  
E-mail: anirm8@umsl.edu

Education Director  
[REDACTED]\_School /PS

Dear [REDACTED]

I request permission to conduct a study on factors that support or impede the development of self-determination of young adults diagnosed with Autism Spectrum Disorders (ASD) participating in a school-to-work transition program.

My name is Ambumulire N. Itimu-Phiri. I am a PhD candidate in the Department of Elementary, Early Childhood, TESOL and Special Education. As part of my program, I am interested in conducting the above mentioned study to understand factors that support or impede the development of self-determination of young adults with a diagnosis of ASD. Since your program, situated at the [REDACTED], offers school-to-work transition support for young adults with ASD, I request your permission to conduct this study. The data will be collected from May to June, 2013.

The study will involve interviewing parents/guardians and interns participating in the program, and PS staff, as well as internship site managers/mentors working with the young adults enrolled in the program. Part of the data collection will also require that I look for supporting information in data already collected by the program, such as daily evaluations, self-determination scales, as well as work samples of the interns.

I am aware of the vulnerability position of the young adults participating in the program. As a result, I have acquired human subject protection training. I will send my research protocols under scrutiny of a dissertation committee, the Institutional Review Boards of the University of Missouri-St. Louis, the Director of Graduate Studies, and the Graduate School Dean, for approval of the appropriateness of the study and its methodological approaches.

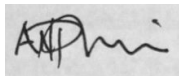
Participation in the study is voluntary. If you approve this request, letters of consent will be sent home to parents/guardians of the young adults, as well as the other staff participants who choose to volunteer in the study. As I have specialized training and experience with working with individuals with Autism Spectrum Disorders, conscientious measures will be taken to protect the interests and rights of the participants. Participants have the freedom to withdraw their participation at any point during the study. If the intern tells me that they are being mistreated by a caregiver, the University requires that I report.

I will focus on studying what is naturally happening in the program, and there will be no alteration of the program practices to accommodate the research interests. No personal identifying information will be used in all the research writing. Interviews will be recorded by way of digital voice recorders, and transcriptions will be identified by a code number, or by a pseudonym only known to me. Portions of the documents collected from the study will be blackened, if a name or any personal identifying information is labeled. All research data will be stored in a locked filing cabinet, where I will be the only person to have access. Written information regarding the subjects of the research will be saved on password protected documents. Field notes and theoretical memos will not be accessed by anyone in the PS program except by me. When the data collected is presented to the dissertation committee, pseudonyms will be used to refer to the participants.

Neither your school, nor the program will not be identified by name, nor will the individual participants be identified in the data or write-up of the study. At the end of the study, when the dissertation is complete and approved, the digital voice files and all the written data will be destroyed in a safe and orderly manner.

Further details of the data collection and research processes, and additional information is included in the consent forms enclosed. With additional questions, please be directed to my academic and dissertation supervisor: Dr. Patricia Kopetz, via email at [kopetzp@umsl.edu](mailto:kopetzp@umsl.edu) or via telephone on 314-516-6557.

Sincerely,



Ambumulire N. Itimu-Phiri





Department of Elementary, Early Childhood, TESOL and Special Education

College of Education  
 One University Blvd.  
 St. Louis, Missouri 63121-4499  
 Telephone: 314-516-7763  
 E-mail: anirm8@umsl.edu

**Assent to Participate in Research Activities**

**The impact of school-to-work transition program on self-determination of young adults diagnosed with Autism spectrum disorders.**

1. My name is Ms. Nellie Itimu-Phiri
2. I am asking you to take part in a research study, because we are trying to understand how young people who have a diagnosis of Autism learn job skills prior to their graduation from high-school. The study results help support students to become more independent and make decisions that matter in their lives.
3. As you know, PS work-transition program assists young adults (17-21years) who have a diagnosis of autism spectrum disorder to have on-job training and support.
4. This study will last from May to June 2013. If you agree to be in this study I will:
  - a. Observe your daily routines as you participate in your internship/job site. The observations may help me to learn how you participate and receive support in the program. I will write down notes about the observations to remind myself what I learn, but I will be the only person to have access to the observation notes;
  - b. Interview you about what you like or do not like to do at PS and how it helps you to think about your future activities after this program; the interviews will be recorded by way of a digital voice recorder;
  - c. Ask you to share with me some of your written work that you have done at PS;
  - d. Talk with the staff and your internship managers/mentors to find out more about the work you are learning to do; and
  - e. Talk with your parents/guardians to learn more about your interests and things that you and your parents plan for you to work on as you grow up.
5. Do you have any questions any questions about this process?
6. Your name will not be shared and will be removed from all the information that I collect in this study. However, by agreeing to participate, you understand and agree that your data may be shared with other researchers and educators in the form of presentations and/or publications. In all cases, your identity will not be revealed. At the end of the study, when I complete writing my paper, the information collected will be destroyed safely.
7. If you don't want to be in this study, you don't have to participate. Remember, being in this study is up to you, and no one will be upset if you don't want to participate, or if you change your mind later, and want to stop. You can also decide to stop your participation in the study at any point during the study. If you change your mind, please tell me or your PS staff.
7. When we talk about PS and your future goals, you may sometimes feel uncomfortable to talk about your feelings or your future goals. You may ask one of your staff members to sit with you when I talk with you; or you may ask him/her to sit away from us, so that you feel freer to talk with me. And if our conversation makes you feel sad or agitated, it is okay. You can feel free to ask me to stop, and I would stop.

8. You might find that the study may teach you to think some things about your future goals, and interests, as well as what you like to do at PS. This may help you learn more about yourself. The information that you share with me will also help me write a report that will help to guide other teachers and parents who are working to support young people with Autism and other disabilities. If you tell me that you are being mistreated by your caregiver, the University requires that I report.
9. What questions do you have about this study? If you have a question later that you didn't think of now, you can call me at 314-516-7763.
10. Signing your name at the bottom means that you agree to be in this study. You will be given a copy of this form after you have signed it.

---

Participant's Signature

---

Date

---

Participant's Printed Name

---

Participant's Age

---

Grade in School



Department of Elementary, Early Childhood, TESOL and Special Education

College of Education  
One University Blvd.  
St. Louis, Missouri 63121-4499  
Telephone: 314-516-7763  
E-mail: anirm8@umsl.edu

**Informed Consent for Child Participation in Research Activities  
Parents/Guardians**

**The impact of school-to-work transition program on self-determination of young adults diagnosed with Autism spectrum disorders.**

Participant \_\_\_\_\_

HSC Approval Number \_\_\_\_\_

Principal Investigator: Ambumulire N. Itimu-Phiri PI's Phone Number 314-516 7763

Your son/daughter/ward who is a PS intern is invited to participate in a research study conducted by Ambumulire N. Itimu-Phiri (Project Director) and Dr. Patricia Kopetz (Academic Adviser/Supervisor)

The purpose of this research is to identify factors that support or challenge young adults diagnosed with autism spectrum disorders to become self-determined or independent decision makers as they transitioned from high school to work (competitive employment).

PS work-transition program assists young adults (17-21years) who have a diagnosis of autism spectrum disorder to have on-job training and support.

The PS intern's participation will involve:

- Being observed as they participate in PS. The observations may help me to learn how interns participate and receive support in the program's activities as they become self-determined or independent decision makers. Observation notes will be written and be accessed by the researcher only.
- Sharing with the researcher some work samples, documents and relevant information that explain how the PS intern is being supported in the program to meet the goals of becoming a self-determined or independent decision maker. The documents and relevant information will include earlier and current scores monitored by PS school-to-work transition program using the ARC Self-Determination Scale.
- One-to-one informal interview – lasting from 5 to 15 minutes. Participation in the interviews will be no greater than three times in a month (between May and June 2013). The interviews will not remove your child from participating in program activities. The interviews will be conducted during a period when your child is on break on his/her internship site; in the morning before the program instruction commences; or at the end of the day when they wait for their transportation to arrive. The interviews will be conducted during the months of May and June 2013. The researcher will consult with the program instructor to identify appropriate interview times. Information collected through interviews will be recorded by way of a digital voice recorder.

Up to 6 young adults participating as interns in PS; up to 6 parents/guardians; and up to 10 PS staff members may be involved in this research.

Considerable effort will be made to make participation in this study an enjoyable experience for the intern; however, feelings of anxiety or agitation may occur in some instances during the course of the study. Since the researcher is trained and experienced with working with individuals with Autism Spectrum Disorders, extreme sensitivity and

consideration will be exercised to help the intern enjoy his/her participation of the study. Feelings of anxiety or agitation will be minimized by seeking consent for participation any time the researcher intends to observe, interview or talk with the intern or his/her staff regarding factors that support or impede positive changes in self-determination/towards becoming an independent decision maker.

Depending upon desire and enthusiasm level expressed by the intern the 5-to-15 minute time period for participation in one-on-one informal interviews may be reduced or adjourned to the next day. If any slight hint of anxiety or agitation is observed, the interview may be discontinued and effort to calm and re-assure the intern will be made. Adult support staff responsible for working with the intern will be present or within close proximity during the interview to provide additional re-assurance and support when needed. The intern will be allowed to choose to have his/her staff present during the interview or to have them sit away, but within close proximity while he/she participates in the interview. The researcher will also provide appropriate reinforcement and appreciative comments for the participation of the intern during the study.

At the end of the study, all data collected in form of notes or audio files will be destroyed in a safe and orderly manner in order to protect those participating.

There are no direct benefits for your child's participation in this study. However, your child's participation may contribute to the knowledge and the practice of education and support of individuals with an Autism Spectrum Disorder diagnosis who participate in similar school-to-work transition programs.

Your child's participation is voluntary, and you may choose not to let your child participate in this research study, or to withdraw your consent for your child's participation at any time. Additionally, the intern may choose not to answer any questions that he or she does not want to answer. You and your child will NOT be penalized in any way should you choose not to let your child participate, or if you or your child wishes to withdraw from this study.

We will do everything we can to protect your child's privacy. By agreeing to let your child participate, you understand and agree that your child's data may be shared with other researchers and educators in the form of presentations and/or publications. In all cases, your child's identity will not be revealed. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection). That agency would be required to maintain the confidentiality of your child's data. If your child tells me that he/she is being mistreated by caregiver, the University requires that I report.

If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, (Ambumulire N. Itimu-Phiri - 314-516-7763) or the Faculty Advisor, (Dr. Patricia B. Kopetz and 314-516-6557). You may also ask questions or state concerns regarding your child's rights as a research participant to the Office of Research Administration, at 314-516-5897.

**I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my child's participation in the research described above.**

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 Parent's/Guardian's Signature

---

 Date

---

 Parent's/Guardian's Printed Name

---

 Child's Printed Name

---

 Signature of Investigator or Designee

---

 Date

---

 Investigator/Designee Printed Name



Department of Elementary, Early Childhood, TESOL and Special Education

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 One University Blvd.  
 St. Louis, Missouri 63121-4499  
 Telephone: 314-516-7763  
 E-mail: anirm8@umsl.edu

**Informed Consent for Participation in Research Activities  
 Internship/Job Site Managers/Mentors**

**The impact of school-to-work transition program on self-determination of young adults diagnosed with Autism spectrum disorders.**

Participant \_\_\_\_\_

HSC Approval Number \_\_\_\_\_

Principal Investigator: Ambumulire N. Itimu-Phiri

PI's Phone Number 314-516 7763

You are invited to participate in a research study conducted by Ambumulire N. Itimu-Phiri (Project Director) and Dr. Patricia Kopetz (Academic Adviser/Supervisor). The purpose of this research is to identify factors that support or challenge young adults diagnosed with autism spectrum disorders to become independent decision makers as they transition from high school to work (competitive employment).

PS is work-transition program assists young adults (17-21years) who have a diagnosis of autism spectrum disorder to have on-job training and support.

Your participation will involve:

- Up to two formal interviews (of approximately 30 to 45 minutes) during the course of the study (May to June 2013) which will help us understand factors that support or challenge young adults diagnosed with autism spectrum disorders to become independent (self-determined) decision makers as they transition from high school to work (competitive employment). The interviews will be recorded using a digital voice recorder to help me further gain insights into your perspectives on the topic discussed. These audio tapes will be kept under my protection until finalization of written reports, after which they will be destroyed in a safe and orderly way in order to protect those participating.
- Observing how interns interact with you during their internship. The observations may help me to learn how interns participate and receive support in the program's activities as they become self-determined or independent decision makers. Notes will be written following observations as guided by the research. Only the researcher will have access to these notes, no personal identifying information will be included in the notes. Upon completion of the research report, all observation notes will be destroyed in a safe and orderly way in order to protect those participating in this study.

Prior arrangements for observations will be made in advance. Considerable efforts will be made to make this experience both convenient and purposeful for you. Unanticipated visits will never occur.

Up to 6 young adults in PS; up to 6 parents/guardians; up to 10 PS staff members; and up to 5 Job site managers may be involved in this research.

The amount of time involved in your participation will be no greater than two 30-to-45 minutes of formal interviews between the months of May and June 2013. Observations, which do not take you away from your work, will be scheduled on an as needed basis throughout the study (May to June 2013) to observe how the young adults participate during their internships.

There are no anticipated risks associated with this research. In some cases, sensitive information that requires sharing of factors that support or impede positive changes in self-determination/behavior may be requested. In such cases, I will keep your information confidential. No personal identifying information regarding you or the interns will be collected. I will be the only one to have access to this information. At the end of the study, all data collected in form of notes and audio files will be destroyed in a safe and orderly manner in order to protect those participating.

There are no direct benefits for you participating in this study. However, your participation may help contribute to knowledge of how young adults diagnosed with autism spectrum disorders may be meaningfully included in the society as individuals benefiting from improved self-determination skills.

Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

By agreeing to participate, you understand and agree that your data may be shared with other researchers and educators in the form of presentations and/or publications. In all cases, your identity will not be revealed. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection). That agency would be required to maintain the confidentiality of your data. In addition, all data will be stored on a password-protected computer and/or in a locked office. If the intern tells me that they are being mistreated by a caregiver, the University requires that I report.

If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, (Ambumulire N. Itimu-Phiri - 314-516-7763) or the Faculty Advisor, (Dr. Patricia B. Kopetz and 314-516-6557). You may also ask questions or state concerns regarding your rights as a research participant to the Office of Research Administration, at 516-5897.

**I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.**

---

 Participant's Signature

---

 Date

---

 Participant's Printed Name

---

 Signature of Investigator or Designee

---

 Date

---

 Investigator/Designee Printed Name



Department of Elementary, Early Childhood, TESOL and Special Education

College of Education  
One University Blvd.  
St. Louis, Missouri 63121-4499  
Telephone: 314-516-7763  
E-mail: anirm8@umsl.edu

### Informed Consent for Participation in Research Activities Parents/Guardians

#### **The impact of school-to-work transition program on self-determination of young adults diagnosed with Autism spectrum disorders.**

Participant \_\_\_\_\_ HSC Approval Number \_\_\_\_\_  
Principal Investigator: Ambumulire N. Itimu-Phiri PI's Phone Number 314-516 7763

You are invited to participate in a research study conducted by Ambumulire N. Itimu-Phiri (Project Director) and Dr. Patricia Kopetz (Academic Adviser/Supervisor). The purpose of this research is to identify factors that support or challenge young adults diagnosed with autism spectrum disorders to become independent decision makers as they transition from high school to work (competitive employment).

PS work-transition program assists young adults (17-21years) who have a diagnosis of autism spectrum disorder to have on-job training and support.

Your participation will involve:

- One formal interview (of approximately 30 to 45 minutes) during the course of the study which may help us understand factors that support or challenge young adults diagnosed with autism spectrum disorders to become independent (self-determined) decision makers as they transition from high school to work (competitive employment).
- Having the interview audio-tape recorded using a digital voice recorder to help me further gain insights into your perspectives on the topic discussed. I will be the only person to have access to the audio file of the interviews. These audio tapes will be kept under my protection until finalization of written reports, after which they will be destroyed in a safe and orderly way.

Prior arrangements for interviews will be made in advance. Considerable efforts will be made to make this experience both convenient for you. Unanticipated visits will never occur.

Up to 6 young adults in PS; up to 6 parents/guardians; up to 10 PS staff members; and up to 5 Job site managers may be involved in this research.

The amount of time involved in your participation will be no greater than one 30-to-45 minutes of formal interview. The interviews will be carried out between the months of May and June 2013.

There are no anticipated risks associated with this research. In some cases, sensitive information that requires sharing of factors that support or impede positive changes in self-determination/behavior may be requested. In such cases, I will keep your information confidential. No personal identifying information regarding you or the interns will be collected. I will be the only one to have access to this information. At the end of the study, all data collected in form of notes and audio files will be destroyed in a safe and orderly way in order to protect those participating. If the intern tells me that he/she is being mistreated by a caregiver, the University requires that I report.

There are no direct benefits for you participating in this study. However, your participation may help contribute to knowledge of how young adults diagnosed with autism spectrum disorders may be meaningfully included in the society as individuals benefiting from improved self-determination skills.

Your participation is voluntary and you may choose not to participate in this research study, or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

By agreeing to participate, you understand and agree that your data may be shared with other researchers and educators in the form of presentations and/or publications. In all cases, your identity will not be revealed. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection). That agency would be required to maintain the confidentiality of your data. In addition, all data will be stored on a password-protected computer and/or in a locked office.

If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, (Ambumulire N. Itimu-Phiri - 314-516-7763) or the Faculty Advisor, (Dr. Patricia B. Kopetz and 314-516-6557). You may also ask questions or state concerns regarding your rights as a research participant to the Office of Research Administration, at 314-516-5897.

**I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.**

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 Participant's Signature

---

 Date

---

 Participant's Printed Name

---

 Signature of Investigator or Designee

---

 Date

---

 Investigator/Designee Printed Name





**Department of Elementary, Early Childhood, TESOL and Special Education**

College of Education  
 One University Blvd.  
 St. Louis, Missouri 63121-4499  
 Telephone: 314-516-7763  
 E-mail: anirm8@umsl.edu

**Informed Consent for Participation in Research Activities  
 Program Staff**

**The impact of school-to-work transition program on self-determination of young adults diagnosed with Autism spectrum disorders.**

Participant \_\_\_\_\_

HSC Approval Number \_\_\_\_\_

Principal Investigator: Ambumulire N. Itimu-Phiri PI's Phone Number 314-516 7763

You are invited to participate in a research study conducted by Ambumulire N. Itimu-Phiri (Project Director) and Dr. Patricia Kopetz (Academic Adviser/Supervisor). The purpose of this research is to identify factors that support or challenge young adults diagnosed with autism spectrum disorders to become independent decision makers as they transition from high school to work (competitive employment).

PS work-transition program assists young adults (17-21years) who have a diagnosis of autism spectrum disorder to have on-job training and support.

Your participation will involve:

- Permission to allow me to observe activities of PS school-to-work transition program. The observations may help me to learn how interns participate and receive support in the program's activities as they become self-determined or independent decision makers. Written notes of the field observations will only be accessed by the researcher (Ms. Ambumulire N. Itimu-Phiri).
- Two formal interviews (of approximately 30 to 45 minutes) and 5 to 10 minute informal/adhoc interviews during the course of the study which will help us understand factors that support or challenge young adults diagnosed with autism spectrum disorders to become independent (self-determined) decision makers as they transition from high school to work (competitive employment).
- Having interviews audio-tape recorded using a digital voice recorder to help me further gain insights into your perspectives on the topic discussed. These audio tapes will be kept under my protection until finalization of written reports, after which they will be destroyed in a safe and orderly way in order to protect those participating.
- Sharing with me some of your evaluation notes regarding your work with the program participants. This information will provide greater insight into factors that support or challenge the young adults diagnosed with autism to become independent (self-determined) decision makers.

Prior arrangements for observations will be made in advance. Considerable efforts will be made to make this experience both convenient and purposeful for you. Unanticipated visits will never occur.

Up to 6 young adults in PS; up to 6 parents/guardians; up to 10 PS staff members; and up to 5 Job site managers may be involved in this research.

The amount of time involved in your participation will be no greater than two 30-to-45 minutes of formal interviews and some 5-to-10 minute informal/adhoc interviews when need arise to clarify an observation or conversation in prior interviews. The interviews will be carried out between the months of May and June 2013. Observations, which do not take you away from your work, will be scheduled on an as needed basis throughout the study (May to June 2013).

There are no anticipated risks associated with this research. In some cases, sensitive information that require sharing of factors that support or impede positive changes in self-determination/behavior may be requested. In such cases, I will keep your information confidential. No personal identifying information regarding you or the interns will be collected. I will be the only one to have access to this information. At the end of the study, all data collected in form of notes and audio files will be destroyed in a safe and orderly way in order to protect those participating.

There are no direct benefits for you participating in this study. However, your participation may help contribute to knowledge of how young adults diagnosed with autism spectrum disorders may be meaningfully included in the society as individuals benefiting from improved self-determination skills.

Your participation is voluntary and you may choose not to participate in this research study, or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

By agreeing to participate, you understand and agree that your data may be shared with other researchers and educators in the form of presentations and/or publications. In all cases, your identity will not be revealed. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection). That agency would be required to maintain the confidentiality of your data. In addition, all data will be stored on a password-protected computer and/or in a locked office. If the intern tells me that he/she is mistreated by the caregiver, the University requires me to report.

If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, (Ambumulire N. Itimu-Phiri - 314-516-7763) or the Faculty Advisor, (Dr. Patricia B. Kopetz and 314-516-6557). You may also ask questions or state concerns regarding your rights as a research participant to the Office of Research Administration, at 516-5897.

**I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.**

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 Participant's Signature

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 Date

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 Participant's Printed Name

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 Signature of Investigator or Designee

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 Date

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 Investigator/Designee Printed Name