

**Vocational Rehabilitation Employment Outcomes and Interagency Collaboration for  
Youth with Disabilities**

BY

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## **LIST OF ABBREVIATIONS**

ADA	Americans with Disabilities Act
CBT	Community Based Transition
CPS	Chicago Public Schools
CRP	Community Rehabilitation Provider
DD	Developmental Disability
DRS	Division of Rehabilitation Services
IDD	Intellectual/Developmental Disability
IDEIA	Individuals with Disabilities Education Improvement Act
IEP	Individualized Education Program
IPE	Individualized Plan for Employment
IRB	Institutional Review Board
ITP	Individual Transition Plan
LD	Learning Disability
MD	Mental Disability
MTP	Model Transition Program
NCD	National Council on Disability
NLTS-2	National Longitudinal Transition Study-2
ODEP	Office of Disability Employment Policy
OST	Occupational Skills Training
PETS	Pre-Employment Transition Services
RSA	Rehabilitation Services Administration
SOP	Summary of Performance

## **LIST OF ABBREVIATIONS (continued)**

SPP	State Performance Plan
STEP	Secondary Transitional Experience Program
TBI	Traumatic Brain Injury
TOP	Transition Outcomes Project
VCM	Virtual Case Management System
VR	Vocational Rehabilitation
WAGES	Working at Gaining Employment Skills
WIOA	Workforce Innovation and Opportunity Act

## SUMMARY

This study examines post-school outcomes of youth with disabilities that were served by the Illinois vocational rehabilitation (VR) agency while in Chicago Public Schools (CPS) through a mixed methodology research design. In order to understand how outcomes differ among the study population, a large-scale dataset of the employment outcomes of these youth with disabilities was analyzed based on demographic variables and services received ( $N=4,731$ ). In addition, semi-structured interviews were conducted to expand on the results of the quantitative data analysis with CPS transition specialists ( $n=2$ ), Division of Rehabilitation Services administrators ( $n=2$ ), VR transition counselors ( $n=2$ ), and University of Illinois at Chicago interagency collaboration facilitators' ( $n=2$ ). Lastly, the perspectives of these stakeholders were examined to understand the interagency collaboration initiative's affect on the employment outcomes of youth with disabilities.

Results revealed individual and systemic challenges in supporting youth with disabilities transitioning to adulthood. Employment outcomes were worse for females, African American youth, and youth with mental disabilities. In contrast, males, Latino(a) youth, and youth with intellectual/developmental disabilities fared well in the VR system. Further, the analysis of the VR status progression system showed that few students were receiving services and more than half of students were eligible but did not receive any services. Conversely, students were more likely to have a successful employment outcome when they received vocational rehabilitation and guidance, job placement services, or job search assistance.

Study results suggest eight key themes for youth with disabilities transitioning from CPS services to VR services. In relation to the employment outcomes of youth with disabilities: (1) family involvement and support; (2) resources, opportunities, and services; (3) community and

## **SUMMARY (continued)**

agency supports; and (4) systemic barriers emerged. Themes for the interagency collaboration partnership included: (1) basic requirements of interagency collaboration; (2) systemic challenges; (3) the current partnership; and (4) future partnership goals.

As a result of this research, implications for practice, policy, and research were developed. Within practice and policy, implications for the education system, vocational rehabilitation agency, and interagency collaboration were suggested. Major study implications identified include the necessity for continuing education for vocational rehabilitation professionals, the creation of a policies and procedures manual for serving youth with disabilities, and stakeholder unification around the vision and future evolution of the interagency collaboration partnership in order to benefit youth with disabilities transitioning to adulthood.

## I. INTRODUCTION

### A. Transition Outcomes for Youth with Disabilities

Transition from high school to adulthood is a step that every student must take, but this can be more difficult and less successful for students with disabilities. People with disabilities comprise 18.7% of the population, with approximately 10% (~5.7 million) being youth ages 15-24 (Brault, 2012). Furthermore, the Office of Disability Employment Policy (ODEP, 2016b) reported that for youth 16 to 19 years old, the employment rate was 24.4% versus 34.4% for youth without disabilities. These employment disparities increase between the ages of 20 to 24; however there are large discrepancies in employment between youth with disabilities (46.1%) and youth without disabilities (70.9% [ODEP, 2016b]). In addition, Newman et al. (2011) report that 8-years after high school, 60.1% of youth with disabilities continued their education (67.4%). While youth with and without disabilities have similar percentages of attendance, youth with disabilities were more likely to attend vocational/technical or associates programs (76.5%) than their non-disabled peers (40.9% [Newman et al., 2011]). Moreover, only 18.8% of youth with disabilities attended 4-year universities whereas 40.2% of youth without disabilities attended (Newman et al., 2011). Compared to youth without disabilities (59.0%), 44.7% of youth with disabilities were living in their own residence (Newman et al., 2011). Importantly, 74% of youth with disabilities made less than \$25,000 per year (Newman et al., 2011). The low income of youth with disabilities may lead to difficulties being financially stable and therefore issues living independently. The employment, postsecondary education, and independent living status of youth with disabilities are concerning for their future adulthood outcomes.

B. **Transition Planning Mandates**

Due to the poor post-school outcomes of youth with disabilities, the Individuals with Disabilities Education Act of 1990 mandated transition supports in order to increase their ability to successfully enter adulthood. The Individuals with Disabilities Education Improvement Act (IDEIA, 2004) requires that transition programming start at 16 years old, though Illinois begins services at age 14.5. According to the IDEIA (2004), students with disabilities are required to have an Individual Transition Plan (ITP). The IDEIA (2004) states:

The term ‘transition services’ means a coordinated set of activities for a child with a disability that—“(A) is designed to be within 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 post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation; “(B) is based on the individual child’s needs, taking into account the child’s strengths, preferences, and interests; and “(C) includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation. (20 U.S.C. § 602, p. 2658)

Further, IDEIA (2004) says that transition planning and service delivery is “a results-oriented process,” which includes “measureable postsecondary goals” that are based upon “age appropriate assessments” (20 U.S.C. § 614, p. 2709). That is, the transition plan must explain activities and expectations related to the students’ needs to reach transition goals such as

employment, education, and independent living (National Secondary Transition Technical Assistance Center, 2010). Through an extensive literature review, Test et al. (2009b) predicted that in-school activities related to employment, postsecondary education, and independent living increase outcomes for youth with disabilities. Furthermore, as an important aid for school systems and the Division of Rehabilitation Services (DRS), the National Technical Assistance Center on Transition developed a comprehensive list of resources for best and promising practices linked to positive post-high school outcomes for youth with disabilities in each of the three areas. Ultimately, the legislation and research literature suggests that youth with disabilities are more likely to be successful when transition planning includes goals for employment, postsecondary education, and independent living (optional state-by-state, but required in Illinois).

C. **Outcomes of Youth with Disabilities: Interagency Collaboration**

For legal and practical reasons, the school system and outside professionals must work together in serving youth transitioning to adulthood. The school system and VR have served youth with disabilities for many years; however, the research shows that the outcomes of these students are not yielding optimal rates of success (Awsumb, Balcazar, & Alvarado, 2016; National Council on Disability, 2008; Oertle, Plotner, & Trach, 2013; Plotner et al., 2014). While many researchers have analyzed large-scale databases of youth with disabilities, and particularly secondary datasets (Curtis, Rabren, & Riley, 2009; Fabian 2007; Gold, Fabian, & Luecking, 2013; Newman et al., 2011), this study's analysis of raw VR employment outcome data for youth being served by VR is unique. In addition, analyzing the outcomes of youth with disabilities is an important factor to helping stakeholders of the partnership explore the reasons for differences in

employment outcomes and whether there are changes that need to occur within the partnership to increase students' successful entrance into adulthood.

In particular, when looking at the employment outcomes of youth with disabilities, multiple factors must be assessed. That is, it is essential to understand if certain demographic groups have disproportionately poorer employment outcomes than others. The large body of research on demographic differences show that age, gender, race/ethnicity, types of disability, income/socioeconomic status, and family involvement have an impact on the employment outcomes of youth with disabilities. In particular, factors related to a decreased employment success rate for youth with disabilities include being female (Balcazar et al., 2013; Fabian, 2007; Gold et al., 2013; Lindstrom et al., 2011; Rabren et al., 2002), a member of a minority group (Awsumb et al., 2016; Balcazar et al., 2013; Flexer et al., 2011; Hasnain & Balcazar, 2009; Sima, Wehman, Chan, West, & Luecking, 2015; Wagner et al., 2014), having more severe disabilities (Awsumb et al., 2016; Carter et al., 2011; Fabian, 2007), and being from low-income communities (Hasnain & Balcazar, 2009; McDonald et al., 2007; Murray & Naranjo, 2008; Parish et al., 2010; U.S. Department of Education, 2010). It is important to continually examine demographic and personal characteristics as they relate to employment outcomes to evaluate areas for improvement in service delivery.

Oertle and Trach (2007) examined the interagency collaboration literature for transition-age youth with disabilities from 1980-2006 to gain an understanding of the importance of and factors leading to successful outcomes for youth with disabilities. Their literature review showed that an interdependent relationship between school systems, rehabilitation professionals, and youth with disabilities is a must. Reviewing the literature to identify these factors is an important start to better understand how to implement interagency collaboration strategies. Riesen,

Morgan, Schultz, and Kupferman (2014) electronically surveyed teachers and outside agencies and found that poor interagency collaboration is a barrier to successful transition for students with disabilities, particularly impacting long-term outcomes. Further, “panel members also indicated that there was a lack of a clear definition and process for collaboration between agencies” (Riesen et al., 2014, p. 41). The National Council on Disability (NCD) (2008) examined Vocational Rehabilitation (VR) service delivery and outcomes for transition-aged youth with disabilities. An examination of VR data from 2000 to 2005 revealed that VR services were being utilized more by 2005, but still by less than 10% of people with disabilities, suggesting that many people with disabilities that need services are not being served (NCD, 2008). Findings showed that while VR was contacted, counselors only participated in Individualized Education Program (IEP) meetings less than 15% of the time. Additionally, the results suggested that students and families were not educated regarding the role of VR for their transitioning child. NCD (2008) explained that there was a lack of qualified and dedicated staff. These findings help explain the limited effectiveness of VR and the interconnected qualities of interagency collaboration. That is, when agencies are employing undedicated, under qualified employees, it is reasonable to expect that there would be limited involvement or attempts to become involved in the transition of youth with disabilities.

As stated above, it is clear from the existing research that interagency collaboration is not effectively implemented for the benefit of youth with disabilities and needs improvement. When implemented appropriately, interagency collaboration may create a foundation for seamless transition that is critical to successful adulthood outcomes for youth with disabilities (Certo et al., 2003; Fleming, Del Valle, Kim, & Leahy, 2013). That is, successful interagency collaboration between the school system and outside agencies ensures students continue to receive services as

they exit the secondary school system and enter adulthood (Certo et al., 2003). The importance of interagency collaboration must be further examined in the literature in order for students and families to benefit from services started in high school that can carryover and support the students into adulthood.

1. **The role of the school system in youth with disabilities' secondary transition education**

The public school system is the entity primarily responsible for the delivery of educational services to high school students with disabilities. Moreover, schools are responsible for the financial costs of public education for youth with disabilities. That is, federal funding is given to each State, and each State distributes the funding to school systems to aid in delivering these services (Aron & Loprest, 2012). Furthermore, the public school system is legally obligated to cover the financial costs of implementing transition services while youth with disabilities are in high school (IDEIA, 2004).

Beyond financial responsibility, the IDEIA (2004) requires that the public school systems hire educators, in particular, special educators that meet qualification standards. The IDEIA (2004) mandates that:

A state shall adopt a policy that includes a requirement that local educational agencies in the State take measurable steps to recruit, hire, train, and retain highly qualified personnel to provide special education and related services under this part to children with disabilities. (20 U.S.C. § 612, p. 2686)

Included under “special education and related services” is the ITP for youth with disabilities, which is required to be developed and implemented by school professionals.

Unfortunately, many teachers report no formal preparation for transition planning and implementation (Benitez, Morningstar, & Frey, 2009; Morningstar & Benitez, 2013). Benitez et al. (2009) found that only half of the teachers reported taking at least one transition course. While teachers frequently planned transition services, implementation of the services was reported from occasionally to rarely (Benitez et al., 2009). Moreover, the limited literature on teacher preparation in transition suggests that educators require and desire more formal training in transition planning and implementation, rather than on-the-job training (Benitez et al., 2009; Wandry et al., 2008).

According to the IDEIA (2004), students with disabilities must be connected to outside agencies, with the most common being the Illinois' Vocational Rehabilitation (VR) agency. Participants in a transition personnel preparation study described the importance of learning about and developing skills for interagency collaboration to better serve their youth with disabilities (Morningstar, Kim, & Clark, 2008). Interagency collaboration provides youth with disabilities the opportunity to access agencies outside of the school system as an employment resource in order to practice work-based learning skills in applied settings. For example, Test et al. (2009b) examined the correlational transition literature and predicted successful adulthood outcomes for youth that held employment while in high school. The research shows that when implemented effectively, interagency collaboration as a method for service delivery increases the successful adulthood outcomes of youth with disabilities (Test et al., 2009b).

2. **The role of vocational rehabilitation in youth with disabilities' life during and after high school**

The Illinois VR is an agency that provides employment and post-high school vocational and educational training services to people with disabilities. The VR works in

partnership with the public school systems throughout the state to provide assistance in attaining adulthood goals through a collaborative transition program (Department of Human Services, 2013). The school system refers students to the VR system where they are assigned a VR counselor. The student then progresses through the VR system and may receive services if eligible. Once eligibility has been established, youth are provided with individualized services based on their needs, goals, and interests. These services may include “guidance and career counseling, information and referral, opportunities for career exploration, participation in paid work experiences, job training and placement, supported employment services, independent living services, and coordination of post-secondary education and training” (Department of Human Services, 2013, p. 2).

Furthermore, VR provides funding directly to the school systems to aid in the interagency collaboration process. DRS covers the cost of hiring personnel including transition specialists and job developers. In coordination with DRS, the Chicago Public Schools (CPS) interagency transition team works with youth with disabilities in planning and delivering employment and postsecondary educational transition services. The job developers aid youth with disabilities in seeking and securing work during high school and ideally, these are positions connected to their postsecondary education goals. That is, the school system has traditionally been paid to help students obtain and maintain employment (60 calendar days and 240 hours) during high school. However, as of the beginning of this 2017 fiscal year, VR will only provide funding to CPS to refer 2,000 students with disabilities. VR contracted five community rehabilitation providers (CRPs), who will act as job developers to aid students in gaining employment while in high school (90 calendar days and 240 hours). The CRP agencies will help students with disabilities attain employment in positions that fit their interests, needs, and postsecondary goals. In

addition, while it is not common practice, DRS can provide services to students while in high school on a case-by-case basis such as technology or software, on-the-job training, and vocational rehabilitation and guidance. Finally, the agency can also cover the costs for vocational and educational training after graduation once additional sources of support are exhausted (e.g., scholarships such as Pell grants).

D. **Research Problem**

Students with disabilities may not be receiving effective services to transition successfully from secondary school to employment. Low employment rates (19.8%) for people with disabilities suggest that more needs to be done in order to increase the likelihood of youth with disabilities transitioning successfully to adulthood (Office of Disability Employment Policy, 2016a). An important consideration is that schools are mandated under the IDEIA to provide services and supports to youth with disabilities while in school, but these services and supports disappear after students graduate or age-out of school (at 22 years). All services after high school have to be actively pursued by the youth and/or her/his family. This implies that they need to know what services are available and where to get them. The legislation mandates outside agency connections, which allows the school system to create a bridge from secondary to postsecondary employment or education making it the school's responsibility to initiate this contact; yet, it is unclear if this is commonly occurring. Interagency collaboration is suggested to be a key element in the transition to adulthood for youth with disabilities (Kohler, 1996; Kohler & Field, 2003; Landmark, Ju, & Zhang, 2010; Noonan, Morningstar, & Gaumer-Erikson, 2008; Oertle & Trach, 2007). However there is an absence of evidence in the research literature suggesting its effectiveness and importance to the transition process. That is, of the research focused on interagency collaboration, the relationships being evaluated are short-term (Johnson

et al., 2003; Luecking & Luecking, 2015; Noonan et al., 2008, 2012; Oertle et al., 2013), or provide few strategies, but multiple barriers to successful partnerships (Agran, Cain, & Cavin, 2002; National Council on Disability, 2008; Oertle & Trach, 2007; Plotner et al., 2014; Riesen et al., 2010). This research is intended to help policymakers, VR professionals, and school professionals collaborate through the implementation of more effective strategies to increase youth adulthood employment. This study aims to add to the extant literature by examining a raw database of the outcomes of youth with disabilities served by the CPS system and the Illinois VR agency to gain a better understanding of the resulting employment outcomes. Additionally, this study takes an in-depth look into the members of an interagency collaboration initiative between VR, the University of Illinois at Chicago (UIC), and CPS by asking each member to examine the outcomes of youth with disabilities and reflect on the status of the interagency partnership. This research asks the overarching question, does the current status of VR and CPS transition programming and interagency collaboration aid youth with disabilities and their families in attaining effective services for adulthood outcomes?

## **II. LITERATURE REVIEW**

In the following section, a review of the literature on the transition to adulthood for youth with disabilities leaving high school will be conducted. Specifically, the review includes relevant policy, the current status of employment for persons with disabilities, personal and demographic characteristics that affect transition outcomes, the role of vocational rehabilitation, and interagency collaboration as a strategy and barrier to transition to adulthood outcomes.

### **A. Transition Policy**

While the IDEIA is the primary legislation to ensure the rights of transition age students with disabilities, multiple pieces of legislation impact the way in which students are served in secondary school and as adults after high school. Here, transition specific and post-school indicators of success will be discussed in relation to the IDEIA. Additionally, the Workforce Innovation and Opportunity Act (2014) will be examined in relation to the requirements for transition age-youth with disabilities. Finally, the implications of the Americans with Disabilities Act (2008) for youth entering adulthood and no longer covered under the IDEIA will be examined.

#### **1. The individuals with disabilities education improvement act (2004)**

The IDEIA has gone through many revisions since its inception in 1975, each one leading to further accountability on the part of the school system. Specifically, four important revisions that affect students during school and post- high school are the transition plan, indicator 13, indicator 14, and the Summary of Performance (SOP). Each of these components is crucial to planning for the future adulthood success of students with disabilities.

The transition plan (a component of the IEP) is a document developed with the school system, student and their family, and outside agencies that focuses on equipping students with

the skills necessary to transition effectively into adulthood (employment, education, and independent living) (IDEIA, 2004). The transition plan should be developed based on the adulthood goals of students with disabilities. The transition plan is required to be measurable, specific, step-by-step, and must include services and supports that students can access (National Dissemination Center for Children with Disabilities, 2011). Transition plans have multiple domains leading to a better understanding of the needs of transition-age youth with disabilities. These domains include “instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation” (IDEIA, 34CFR § 300.43, p. 2658).

With a focus on results, the IDEIA was amended in 2004 adding that each State must create a State Performance Plan (SPP), which must be reported to the US department of education on an annual basis (U.S. Department of Education, 2016). Within the SPPs three requirements of particular interest were developed: indicator 13, indicator 14, and the summary of performance (SOP). Indicator 13 and indicator 14 are measures of secondary school accountability. Indicator 13 is a checklist designed to ensure compliance with the transition requirements in the IEP (Gaumer-Erickson, Noonan, Brussow, & Giplin, 2013). Indicator 14 is a measure of adulthood (employment, training, and education) outcomes collected within one year after high school graduation (Gaumer-Erickson et al., 2013). The purpose of indicator 13 and 14 is to ensure that students’ ITPs are complete and ultimately yield employment and/or education outcomes that are a result of effective seamless transition services. These indicators establish performance measurements that were previously absent in the legislation in order to understand the effectiveness of documented service delivery by secondary school systems. Additionally, the IDEIA (2004) added the requirement that students with disabilities have a SOP completed when

graduating from high school. The purpose of the SOP is to summarize the performance of each student based on the guidelines laid out in the IEP, as well as provide guidelines for achieving outcomes related to employment, postsecondary education, and independent living goals (IDEIA, 2004). This document is the culmination of a student's high school career and provides valuable information for the student to understand their needs, as well as for postsecondary educational institutions (Test & Grossi, 2011).

2. **The workforce innovation and opportunity act (2014)**

The Workforce Innovation and Opportunity Act (WIOA) was enacted in July of 2014 in order to increase preparation/education and supports related to employment for low-income, at-risk, vulnerable populations (WIOA, 2014). WIOA holds specific provisions for serving youth with disabilities while in high school from ages 14-21. That is, of Federal VR special education funding received, 50% must go towards youth with disabilities, with a focus on youth with significant disabilities (WIOA, 2014). This is of particular importance as VR has not traditionally supported youth with more significant disabilities, but are now required to make more efforts to ensure the successful adulthood outcomes of these youth. Further, the State Vocational Rehabilitation (VR) agency must allocate 15% of its total federal funding to pre-employment transition services (PETS) for high school students with disabilities. PETS are services related to training, internships, or education that will ultimately lead to better opportunities for stable employment (WIOA, 2014). Under WIOA (2014), pre-employment transition services are defined as:

- (1) Job exploration counseling; (2) work-based learning experiences, which may include in-school or after school opportunities, or experience outside the traditional school setting (including internships), that is provided in an integrated

environment to the maximum extent possible; (3) counseling on opportunities for enrollment in comprehensive transition or postsecondary educational programs at institutions of higher education; (4) workplace readiness training to develop social skills and independent living; and (5) instruction in self-advocacy, which may include peer mentoring. (29 U.S.C. § 733, p. 1658)

Additionally, WIOA (2014) requires the school system and VR to work in partnership in planning and delivering PETS to students with disabilities by age 16 in accordance with the IDEIA. The partnership between VR and the school system and the coordination of delivering PETS serves the purpose to “promote high-quality employment outcomes for individuals with disabilities” (29 U.S.C. § 414, p. 1655). The importance of standards for employment outcomes cannot be overstated because PETS provides youth with disabilities with training they may not have previously received, resulting in more qualified workers with more fulfilling and higher paying employment options. While WIOA (2014) has many purposes, of importance here is the goal:

To provide workforce investment activities, through statewide and local workforce development systems, that increase the employment, retention, and earnings of participants, and increase attainment of recognized postsecondary credentials by participants, and as a result, improve the quality of the workforce, reduce welfare dependency, increase economic self-sufficiency, meet the skill requirements of employers, and enhance the productivity and competitiveness of the Nation. (29 U.S.C. § 2, p. 1429)

### 3. **The Americans with disabilities act (2008)**

After exiting the secondary school system, youth with disabilities transition from protection under the IDEIA to the Americans with Disabilities Act (ADA, 2008). The ADA is the main piece of legislation protecting people with disabilities in employment, covering both publicly and privately funded organizations. Based on the ADA, employers are required to provide reasonable accommodations. However, this law requires that people with disabilities self-identify their disabilities and needed accommodations. Shaw (2006) notes that many people with disabilities feel that they do not require accommodations or do not identify as having a disability. Some of these reasons include a lack of necessity for accommodations or modifications to perform the functions required by the job or fear of disclosure. Moreover, youth with disabilities exiting the high school system often do not know they must self-identify, do not understand the accommodations or modifications they need on the job, or fear the stigma surrounding their disability in an employment setting. While employers are expected to provide services based on mandates in the ADA, there are no formal enforcement or documented plans such as the ITP, requiring the employer and employee to decide or compromise on accommodations that may be needed (Stodden, Jones, & Chang, 2002; Shaw, 2006).

### 4. **Summary of policy affecting transition-age youth**

While in high school, youth with disabilities are protected under the IDEIA (2004) until exiting high school where they are covered under the ADA (2008). Within the IDEIA, students must receive transition services and become linked with an outside agency before graduating. WIOA (2014) increases the outside agency requirement of the IDEIA through the mandate of school system and VR collaboration for planning and delivering PETS. When youth with disabilities transition to protection under the ADA, it is necessary that they

understand their rights and support needs. In particular, youth with disabilities need to learn how to communicate their needed accommodations to future employers. Through education from school personnel and service providers, the transition from IDEIA to ADA can be successful.

## B. **Postsecondary Employment**

There are employment discrepancies between young adults with disabilities and without disabilities. In order to better understand why youth with disabilities have poor postsecondary employment outcomes, the research-based literature will be reviewed for factors related to successful and unsuccessful transition outcomes. The following section will discuss employment outcomes of youth with disabilities, examine demographic and personal characteristics as they relate to employment, and review the VR literature related to serving youth with disabilities.

### 1. **Employment outcomes of youth with disabilities**

Chambers et al. (2009) looked at similarities and differences in outcomes of students with and without disabilities. Chambers et al. (2009) compared 192 students with disabilities and 202 students without disabilities one-year after graduation from schools participating in the *Alabama Transition Initiative*. Data were collected using the Alabama Post-School Transition Survey including demographic information and adulthood goals and outcomes (Chambers et al., 2009). The main findings showed that one-year post-graduation, students with and without disabilities were employed at the same rate (74% and 73% respectively). However, students with disabilities attend postsecondary education programs at a substantial lower rate than youth without disabilities (Chambers et al., 2009).

One study sought to better understand the status of students with disabilities' successful or unsuccessful postsecondary education and employment outcomes. The authors examined the results of school system surveys disseminated to 1,888 post-high school youth one year after

graduation (Curtis, Rabren, & Reilly, 2009). The survey contained categories that overlapped between the Alabama Post-School Transition Survey and the surveys used in the National Longitudinal Transition Study-2 (NLTS-2). The post-school categories used in this study were “employment, postsecondary education, living, and quality of life” (Curtis et al., 2009, p. 34). Curtis et al. (2009) found that almost 70% of students with disabilities were employed (60% full-time); however, less than 30% attended any type of postsecondary educational program (Curtis et al., 2009). The authors also conducted a focus group interview with four youth with disabilities and seven of their parents. The focus group questionnaire contained the categories of “(a) current life circumstances of the young adults, (b) vocational status and circumstances of the young adults, and (c) areas that constitute life satisfaction and concerns for young adults with disabilities” (Curtis et al., 2009, p. 35). Results revealed that youth with disabilities were satisfied with their adulthood outcomes, while their parents were less satisfied (Curtis et al., 2009).

In a study conducted by Flexer, Daviso, Baer, Queen, and Meindl (2011), a survey design was utilized where teachers conducted a three-part survey with 1,540 students. The survey included a review of secondary records, an interview at the time of graduation, and an interview 1-year after graduation regarding the effects of demographic, secondary education, and transition variables on postsecondary outcomes. Flexer et al. (2011) discovered that students taught in general education classrooms had better odds of postsecondary outcomes than segregated students; that students who participated in a minimum of three semesters of employment training were significantly more likely to find employment by the 1-year follow-up; and that students participating in work-study experiences had moderately greater odds of employment at follow-

up. This study suggests the importance of inclusion and employment training for transition-age youth with disabilities.

In a review of the transition literature, Cobb and Alwell (2009) sought to better understand the outcomes of youth with disabilities based on the amount and types of services received. The literature revealed the importance of transition programs to help youth with disabilities pinpoint their vocational interests. In addition, without goal setting, employment may not be long-term or even meaningful. With regards to supports to obtain long-term employment goals, the authors found that the literature repeatedly discussed the importance of collaboration within the school system, families, and service providers (Cobb & Alwell, 2009). Test et al. (2009b) systematically reviewed the (22 articles total) transition research literature to identify predictors that are correlated with post-school outcomes such as further education and employment. The authors utilized a systematic review design and applied statistical analysis techniques to synthesize the research findings. The results suggested that youth with successful employment outcomes were involved in the community, graduate from high school, have family support, had a curriculum tailored for post-school employment skills, and were employed while in high school (Test et al., 2009b). In a recent follow up to the Test et al. review, Mazzotti et al. (2015) identified additional predictors of employment including: “(1) parental expectations; (2) youth autonomy/decision making; (3) travel skills; and (4) goal setting” (p. 17). These two literature reviews support the need for targeted transition programs to increase successful adulthood outcomes of youth with disabilities.

Murray and Doren (2013) implemented an experimental intervention to increase the likelihood of students with disabilities attaining successful transition outcomes through skills development using the *Working at Gaining Employment Skills* (WAGES) curriculum. The

curriculum was implemented with 122 students with disabilities and compared to a control group ( $n=100$ ) receiving the typical classroom curriculum. Further, the authors used pre and post self-report Likert-scale surveys measuring students reported “vocational outcomes expectations, occupational skills, and social skills” and teachers reported measures of engagement with the WAGES curriculum (Murray & Doren, 2013, p. 98). The authors looked at group differences between intervention groups and a randomly assigned control group with regards to growth pertaining to postsecondary employment skills based on the training curriculum. Murray and Doren’s intervention results showed that group means increased from pre to post test for the intervention transition curriculum groups.

Fabian (2007) examined a secondary database provided by the *Marriott Bridges Program*, which contained the results of survey information on personal variables and employment outcomes of 4,571 participants from 2000 through 2005. The author found that Marriott’s employment placement rate was 68.0%; however, three factors including being female, receiving government assistance, and lacking previous employment experience (while in high school) predicted poor employment outcomes. In addition, students with emotional/behavioral disabilities or those who were African American earned less money when employed (Fabian, 2007). Given that most of the youth in this study were minorities from low-income backgrounds, the employment outcomes in this study suggest that transition programs are essential.

Similarly, in another secondary database analysis, Gold, Fabian, and Luecking (2013) looked at personal and program factors and in-program employment for 5,847 students in the *Marriott Bridges Program*. Results from Gold et al. (2013) showed that students participating in the Marriott Bridges training program had generally positive employment outcomes. However, it

results showed that females, youth with intellectual disabilities, and females with any type of disability had poorer outcomes. Further, when program location was controlled, females, youth with intellectual disabilities, students with emotional/behavioral disabilities, and students in cities with poor economies had lower rates of employment while in the program (Gold et al., 2013).

One study looked at factors predicting both postsecondary education and employment outcomes of students with disabilities based on participation in a transition program (Karpur, Brewer, & Golden, 2014). This causal comparative research design analyzing secondary databases (the Model Transition Program [MTP] and the NLTS-2) compared 4,063 program participants and 2,343 students from the NLTS-2. Information included in the databases related to demographic, transition program, and service variables, with the outcome variable being employment status (Karpur et al., 2014). MTP participants were found to have better adulthood outcomes compared to those from the NLTS-2. Important mediating effects on successful adulthood outcomes while in high school included having a job, setting IEP post-high school education goals, and partaking in skills development activities (Karpur et al., 2014).

Finally, the initial program outcomes of 14,377 students with disabilities from an MTP database were analyzed to explore what predictors (demographic, postsecondary education, and employment preparation) could be linked to in-school employment and referral to VR (Brewer et al., 2011). Findings revealed that 80% of students were involved in employment training, 60% in development of self-determination skills, and 40% in postsecondary education preparation (Brewer et al., 2011). Additionally, older students and students partaking in employment preparation had higher odds of working while in school. Finally, students were more likely to have a case with VR if they were further along in their education (Brewer et al., 2011). This

large-scale analysis provides insights into the importance of transition preparation for youth with disabilities exiting high school.

## 2. **Summary of employment outcomes for transition-age youth with disabilities**

Though youth with disabilities often need more services to attain successful adulthood outcomes, the literature suggests that students are capable of achieving their goals. Exploratory studies show that while long-term gaps in employment exist, youth with disabilities are employed at a rate similar to their same-age peers without disabilities after exiting high school (Chambers et al., 2009; Curtis et al., 2009; Newman et al., 2011). Moreover, youth with disabilities that receive employment training or are employed while in high school have better adulthood employment outcomes (Brewer et al., 2011; Cobb & Alwell, 2009; Fabian, 2007; Flexer et al., 2011; Gold et al., 2013; Karpur et al., 2014; Murray & Doren, 2013; Test et al., 2009b). In addition, setting postsecondary goals for employment was commonly identified as vital to the success of youth with disabilities (Cobb & Alwell, 2009; Karpur et al., 2014; Mazzotti et al., 2015). Overall, the literature suggests that transition programs may aid youth with disabilities in finding and sustaining employment.

## C. **Demographic and Personal Characteristics**

Demographic and personal characteristics affect the way in which different youth with disabilities experience their transition to adulthood. In order to gain a foundational understanding of factors related to positive or negative employment outcomes, variables such as age, gender, race/ethnicity, type of disability, income level, and family support in transition must be examined. Examining these basic characteristics allows us to understand why certain groups commonly have different employment outcomes. Fifteen articles were reviewed to better

understand how demographic and personal characteristics are related to the employment outcomes of youth with disabilities.

1. **Age**

The IDEIA (2004) requires that documented transition planning begin at 16 years of age (14 in some states). While transition is a lifelong process, this requirement suggests that a minimum, learning skills for adulthood is important at a young age. In the transition literature, age has been discussed as a demographic factor affecting adulthood outcomes of youth with disabilities. That is, amongst adults, Dutta et al. (2008) found that of all age groups, people with disabilities between the ages of 16 to 34 had the lowest employment outcomes. Fabian (2007) discovered that minority youth participating in the Marriott Bridges program between the ages of 17 and 19 experienced the best transition outcomes. On the other hand, the results of several studies suggested that age does not significantly influence transition outcomes (Awsumb, Balcazar, & Alvarado, 2016; Balcazar, Oberoi, & Keel, 2013; Carter, Austin, & Trainor, 2012; Wehman et al., 2014). However, given that studies looking at transition youth with disabilities often use an age range restriction, it may be important to further explore this variable.

2. **Gender**

Gender was examined at length in the literature both as a facilitator and a barrier to successful student postsecondary education and employment outcomes. Balcazar et al. (2013) concluded through a secondary state-wide database analysis, that males were more likely to engage in competitive employment while females were more likely to enroll in postsecondary education programs. A recurrent finding across the literature was that females with disabilities have lower employment rates (Balcazar et al., 2013; Fabian, 2007; Gold et al., 2013; Hasnain & Balcazar, 2009; Rabren, Dunn, & Chambers, 2002). Lindstrom, Doren, and Miesch (2011)

conducted qualitative interviews of adults with disabilities ten years after high school graduation and discovered that employed females with disabilities had difficulty transitioning to adulthood as a result of health, family, and inflexible work environments. However, in the same study, the authors explained that men were more likely to experience career stagnation. As can be seen in these studies, gender appears to be a factor that must be addressed to better understand the adulthood outcomes of youth with disabilities, particularly females.

### 3. **Race/ethnicity**

Race played a role in the range of factors leading to different outcomes for youth with disabilities. For both postsecondary education and employment options, African Americans with disabilities fared worse than other groups (Awsumb et al., 2016; Balcazar et al., 2013; Flexer et al., 2011). Specifically, Wagner, Newman, and Javitz (2014) and Sima, Wehman, Chan, West, and Luecking (2015) revealed that African American and Latino youth with disabilities were less likely to be employed and Hasnain and Balcazar (2009) found in addition that these groups had lower postsecondary attendance rates. Further, one study suggested that race and gender overlap in that Latina females with disabilities experienced less success in obtaining employment (Fabian, 2007). Overall, these findings suggest that minority youth with disabilities have less success than their same-age White peers with disabilities. Conversely, many studies have shown that connections to outside agencies such as VR or CRPs in obtaining employment opportunities during high school acts as a mitigating factor for the role of race/ethnicity (Balcazar et al., 2012; Gold, Fabian, & Luecking, 2013; Luecking & Luecking, 2015).

#### 4. **Type of disability**

For students with disabilities, the research shows that there are differences in outcomes based on the type and severity of the disability. Multiple studies reported discouraging findings for students with intellectual disabilities such as unemployment one year after high school completion (Rabren, Dunn, & Chambers, 2002), low rates of graduation, poor college or training program attendance, and low employment rates (Wagner, Newman, & Javitz, 2014). Balcazar et al. (2012) implemented an intervention with low-income minority youth with disabilities and found that participating youth with more severe disabilities had less successful outcomes (part-time and lower compensation). Moreover, Hasnain and Balcazar (2009) examined a secondary database, which revealed that African American students with more severe developmental disabilities were more likely to be working in sheltered workshops. However, multiple research studies suggested that students with learning and behavioral disabilities have more successful outcomes than other disability groups (Awsumb et al., 2016; Carter et al., 2011; Fabian, 2007). These findings are important as they suggest that not only do certain disability groups have worse outcomes, but that these outcomes overlap across these demographic factors.

#### 5. **Income/socioeconomic status**

Income is a factor that affects youth with disabilities in obtaining employment and upward mobility as an adult. In particular, four studies discovered that there is a higher likelihood that youth with disabilities will live in poverty, and that in relation to minority youth, there is a higher likelihood of poverty, which was linked with failure to complete high school and unemployment (Hasnain & Balcazar, 2009; McDonald, Keys, & Balcazar, 2007; Murray & Naranjo, 2008; Parish, Rose, & Andrews, 2010). Additionally, the U.S. Department of Education

(2010) reported that youth with disabilities living in poverty are overrepresented in special education classrooms. On the other hand, Wagner, Newman, and Javitz (2014) found that importantly, socioeconomic status alone did not sufficiently predict poor outcomes. Moreover, multiple studies suggest that youth with disabilities receiving government financial assistance were more likely to face lower rates of postsecondary education program enrollment and attendance, and to experience underemployment, and unemployment (Dutta et al., 2008; Fabian, 2007; Luecking & Wittenburg, 2009). Unfortunately, these studies suggest that minority youth are more likely to receive government assistance. Ultimately, factors related to income as well as minority status are reported numerous times throughout the literature as barriers to post-high school achievement.

#### 6. **Family involvement**

For students with disabilities, the importance of family involvement cannot be overstated. Family involvement has been long mentioned as an important factor for student success in-school and post-high school endeavors (Murray & Naranjo, 2008; Povenmire-Kirk et al., 2010; Powers et al., 2009; Trainor, 2008). In addition, the importance of family involvement for youth from low-income African American youth cannot be overstated. To that end, Williams, Sánchez, and Hunnell (2011) conducted semi-structured interviews with African American parents and school personnel and found that the approach to family involvement needs to change to be a positive reciprocal relationship between the family and the school system therefore turning family involvement into a partnership between the school and family. Moreover, the limited literature base on Latino families support for youth with disabilities' transition to adulthood suggests that there is a high level of family involvement (Hogansen, Powers, Greenen, Gil-Kashiwabara, & Powers, 2008; Keel, Cushing, & Awsumb, in press; Landmark et al., 2007;

Povenmire-Kirk et al., 2010; Rueda, Monzo, Shapiro, Gomez, & Blacher, 2005; Shogren, 2012). Though, there were also many barriers to effective family involvement within the school system revolving around culture and language capacity. Beyond family involvement, one qualitative study revealed that students with immediate family members that did not finish their secondary education might be at higher risk for dropping out of high school themselves (Murray & Naranjo, 2008). From the literature, it is clear that family involvement is essential in the transition process; however, barriers to working with and involving families must be acknowledged in order to create change.

#### 7. **Summary of demographic and personal characteristics**

Overall, the literature suggests that there are a variety of demographic and personal characteristics that affect the adulthood employment outcomes of youth with disabilities. The research showed that the age of the youth does not have a large impact on their adulthood outcomes, but that transition programs and services are important to their success (Awsumb et al., 2016; Balcazar et al., 2013; Carter et al., 2012; Wehman et al., 2014). Conversely, it appears that employment outcomes are more difficult for females (Balcazar et al., 2013; Fabian, 2007; Gold et al., 2013; Lindstrom et al., 2011; Rabren et al., 2002); African American youth (Awsumb et al., 2016; Balcazar et al., 2013; Flexer et al., 2011; Hasnain & Balcazar, 2009; Sima et al., 2015; Wagner et al., 2014); Latino youth (Balcazar et al., 2013; Flexer et al., 2011; Hasnain & Balcazar, 2009; Sima et al., 2015; Wagner et al., 2014); youth with severe disabilities (Awsumb et al., 2016; Carter et al., 2011; Fabian, 2007); low-income youth (Hasnain & Balcazar, 2009; McDonald et al., 2007; Murray & Naranjo, 2008; Parish et al., 2010; U.S. Department of Education, 2010); and youth receiving government assistance (Dutta et al., 2008; Fabian, 2007; Luecking & Wittenburg, 2009). However, given the large prevalence

of learning and behavioral disabilities, it is encouraging to see that these youth are faring the best in terms of employment outcomes (Awsumb et al., 2016; Carter et al., 2011; Fabian, 2007). Additionally, the literature suggests that more successful employment outcomes are possible when students are supported through family involvement (Hogensen et al., 2008; Keel et al, in press; Landmark et al., 2007; Murray & Naranjo, 2008; Povenmire-Kirk et al., 2010; Powers et al., 2009; Rueda et al., 2005; Shogren, 2012; Williams et al., 2011) and connections to outside service agencies (Balcazar et al., 2012; Gold et al., 2013; Luecking et al., 2015). While the literature suggests there are many discrepancies in outcomes based on personal and demographic characteristics, many opportunities exist to implement effective programming to increase the employment outcomes of youth with disabilities.

D. **The Vocational Rehabilitation System**

The leading outside agency serving people with disabilities in seeking and gaining employment and providing supports to attend postsecondary education is Vocational Rehabilitation (VR). Additionally, IDEIA (2004) and WIOA (2014) require VR to work in partnership with the school system to serve youth with disabilities. Plotner, Trach, and Strauser (2012) explored VR counselors' self-reported service delivery abilities related to transition and found that their involvement in the transition process was limited. Community Rehabilitation Providers (CRPs) deliver services to students with disabilities, but do so in community settings and under contract with VR agencies. Oertle, Plotner, and Trach (2013) reported that CRPs had significantly less involvement in the student transition process than VR counselors. Issues of involvement are occurring in both directions as "It appears that educators, youth and their parents/guardians may not be making contact with rehabilitation professionals as early or frequently as necessary, and that rehabilitation professionals lack suitable information to be

effective once they are involved” (Oertle et al., 2013, p. 32). This is of particular concern as it is clear that VR counselors are not involved enough and often struggle to serve students when they are.

Professional development is an important strategy for promoting exemplary services to students with disabilities. Noonan (2014) recommends that all stakeholders should attend professional development sessions on transition services both sponsored by the secondary school system and within the community. This is supported throughout the literature, which has shown that rehabilitation providers are lacking sufficient secondary transition knowledge to effectively serve youth with disabilities (Oertle et al., 2007; Oertle et al., 2013; Plotner et al., 2012; Plotner et al., 2014). Further, it is clear that rehabilitation professionals need more education about their own function in the transition process. Plotner et al. (2014) reported that VR counselors participating in their study were unsure of the services they could provide and pay for. This is of particular importance as one study found that less funding from rehabilitation service providers predicted lower employment and postsecondary outcomes (Dutta et al., 2008).

In an attempt to better understand VR consumer outcomes based on demographic and service-level variables, Dutta, Gervev, Chan, Chou, and Ditchman (2008) examined data from the Rehabilitation Service Administration. The authors performed a logistic regression model using age, race, type of disability, and types of services to see how they affected consumer outcomes. That is, being younger, African American or Native American, having sensory disabilities, and not receiving employment-related services predicted poorer outcomes (Dutta et al., 2008). Examining the outcomes of consumers receiving services from VR allows for an important exploration of the successes and failures of the system. That is, by examining large scale outcomes, considerations for changes in future service delivery can be made.

Plotner, Trach, and Strauser (2012) looked at VR professionals' perceptions of their own abilities across seven transition domains. These domains include capacity to: "(a) Provide Career Planning and Counseling, (b) Provide Career Preparation Experiences, (c) Facilitate Allocation of Resources, (d) Build and Maintain Collaborative Partnerships, (e) Promote Nonprofessional Support and Relationships, (f) Promote Access and Opportunity for Student Success, and (g) Coordinate Program Improvement Activities" (Plotner et al., 2012, p.137). The authors found that VR counselors reported insufficient preparation and frequency of implementation of services in each of these areas. It is important to note that the participants felt these areas were important, but there seems to be a disconnect between belief of significance and actual practice (Plotner et al., 2012).

In an examination of the RSA-911 national database of VR agencies across the U.S., Honeycutt, Thompkins, Bardos, and Stern (2014) found that students and recently graduated youth with disabilities receiving services from VR had lower rates of dependence on government benefits and many who were working no longer qualified for these benefits. That is, of the youth with disabilities receiving government assistance, 44% were employed through VR services and approximately 14% were no longer receiving benefits (Honeycutt et al., 2014). These increases in employment and decreases in dependence on benefits suggest the importance of VR's relationship with the school system to create the linkage for adult services.

Hayward and Schmitt-Davis (2000) examined transition VR consumers' outcomes from 1994 to 1996. Outcomes among youth with disabilities differed based on the education setting the youth attended. The students received an average of eight VR services, with more than sixty percent becoming employed. Of these, approximately 80% of the youth educated in special education classrooms were competitively employed, whereas almost all youth receiving the

general education curriculum found competitive employment (Hayward & Schmitt-Davis, 2000). Results of this longitudinal study suggest that VR plays an important role in the successful employment outcomes of youth with disabilities.

1. **Summary of the vocational rehabilitation literature**

The literature suggests that VR is the primary entity and an important agency in aiding youth with disabilities to attain employment outcomes. Unfortunately, the literature shows that VR is not reaching its full potential in serving youth with disabilities (Oertle et al., 2007; Oertle et al., 2013; Plotner et al., 2012; Plotner et al., 2014); however, it is also suggested that VR is making better efforts in schools to help youth achieve their full potential (Hayward & Schmitt-Davis, 2000; Honeycutt et al., 2014). The overarching theme of the VR literature was a lack of education in understanding the role of a VR counselor in the life of youth with disabilities and knowing how to serve youth with disabilities (Noonan, 2014; Oertle et al., 2007; Oertle et al., 2013; Plotner et al., 2012; Plotner et al., 2014). Ultimately, many improvements need to occur before the benefits of VR services will reach all youth with disabilities.

E. **Interagency Collaboration**

The minimal empirical research literature suggests that interagency collaboration may be an effective transition strategy leading to positive adulthood outcomes for students with disabilities (Balcazar et al., 2012; NCD, 2008; Noonan et al., 2008; Riesen, Morgan, Schultz, & Kupferman, 2014). In this section, a review of research studies on the essentiality of interagency collaboration will be conducted looking at key elements. The following review includes literature relating to barriers and strategies to successful interagency collaboration.

To begin to examine interagency collaboration in the transition process, the term must first be defined. Interagency collaboration is an ongoing process that involves key stakeholders

working towards a common goal (Mattessich, Murray-Close, & Monsey, 2001). That is, interagency collaboration is not a place, but rather a process that takes place over time. Noonan (2014) defines interagency collaboration in five stages:

1. *Networking*: “occurs as team members discover a wide-range of services available in their community and are able to make referrals to other agencies” (p. 3);
2. *Cooperation*: “involves two-way communication between parties and somewhat defined collaborative roles” (p. 3);
3. *Coordination*: “is an ongoing process that involves sharing information and resources, establishing defined roles, and communicating frequently” (p. 3);
4. *Coalition*: “is characterized by shared decision-making responsibilities, accountability, and trust” (p. 4); and
5. *Collaboration*: “when agencies collaborate, they work within one shared system to solve problems, share decision-making responsibilities, and merge resources” (p. 4);

Bringing together individuals, groups, agencies, and systems based on a common goal is challenging, time-consuming, and delicate, yet it is essential to make meaningful progress in the transition planning process.

1. **Barriers to successful interagency collaboration**

Landmark, Ju, and Zhang (2010) conducted a literature review of best practices in secondary transition planning and service delivery and identified 29 articles on evidence-based transition practices. Landmark et al. (2010) only identified two studies that suggested that collaboration is an important factor for individuals with disabilities to be employed after high school. While collaboration has been suggested as an important and effective strategy leading to successful adulthood outcomes, there is very little empirical research to support this claim. It is

unclear why there is a paucity of research related to interagency collaboration; however, it is clear that collaboration is challenging, but is an important process and as such, must be further explored in the research literature.

Evidence-based practice is emphasized as crucial to secondary transition planning and service delivery; therefore, Test and Cease-Cook's (2012) review of evidence-based practices in secondary transition and predictors of success is necessary for improving service delivery in VR. Based on the literature (63 articles), the authors found 16 secondary predictors for postsecondary achievement. Of particular interest here is interagency collaboration which, when implemented appropriately was identified as a successful predictor of positive adulthood outcomes in education and employment with more linkages and services leading to better outcomes (Test & Cease-Cook, 2012). Further, the literature review showed that "some of the predictors most easily used by VR counselors involved in transition planning could be career awareness, community experience, interagency collaboration, paid employment/work experience, self-determination, and work study" (Test & Cease-Cook, p. 36). It is clear that within the list of evidence-based practices and predictors for implementation by VR professionals, interagency collaboration is the underlying theme. Without interagency collaboration between the school and VR, it would be nearly impossible for VR to work with high school students to implement any of these practices.

Agran et al. (2002) surveyed 54 special educators and 62 rehabilitation professionals through the mail to determine the level of participation by these outside agencies. Special educators and rehabilitation professionals received similar surveys regarding agency participation and the role of rehabilitation professionals. However, educators were asked about their "satisfaction with the counselors' involvement," whereas rehabilitation professionals were

asked if “students were being adequately prepared for transition” (Agran et al., 2002, p. 144). The surveys consisted of multiple choice and Likert-scale questions and were analyzed using descriptive statistics (Agran et al., 2002). The authors found that a majority of rehabilitation professionals did not attend any IEP meetings or only attended infrequently and were rarely invited to participate. Further, more than half of the rehabilitation professionals reported feeling like a nonessential piece in the secondary transition planning puzzle. Special educators were less than satisfied with the rehabilitation professionals in general, as well as with their knowledge of youth with disabilities (Agran et al., 2002). Moreover, rehabilitation counselors reported that students were not appropriately prepared for services after high school graduation (Agran et al., 2002). School and rehabilitation professionals must increase the knowledge of parents and students about the importance of vocational rehabilitation including how to work with the VR agency. Finally, the size of the counselors’ caseloads was noted as a hindrance to attending IEP meetings (Agran et al., 2002). Overall, it is clear that there must be a partnership between the school system and rehabilitation systems while students are still in school in order to continue to receive effective postsecondary services.

VR agencies serve many students with disabilities across the United States; therefore, in order for these students to be appropriately served by VR, a relationship must be developed between rehabilitation professionals, the youth with disabilities and their families, and the school system. Oertle, Plotner, and Trach (2013) electronically surveyed 93 rehabilitation professionals regarding interagency collaboration expectations in transition. The authors utilized descriptive statistics and found that better service delivery must occur by increasing secondary transition education for the rehabilitation professionals. Further, the authors concluded that key stakeholders must engage in a mutual relationship including better communication (Oertle et al.,

2013). The participation from students with disabilities and their families, secondary school professionals, and rehabilitation professionals is crucial to attaining successful adulthood outcomes for youth with disabilities.

VR counselors serve adults or youth with disabilities, and given their expertise should only serve one or the other. Therefore, Plotner, Trach, Oertle, and Fleming (2014) sought to better understand the differences between these two types of counselors. Specifically, they looked at counselors' perceptions regarding "(a) the importance of transition activities, (b) their level of professional preparation for providing transition services, and (c) the frequency with which they engage in transition activities with their transition-age consumers" (Plotner, et al., 2014, p. 110). The authors gathered data from 224 adult VR counselors and 67 transition-specific counselors using a Likert scale survey, the Vocational Rehabilitation-Transition Activity Inventory (Plotner et al., 2014). Their analyses suggest that overall, both transition-specific counselors and general VR counselors perceive these domains to be imperative, but were less prepared to serve and were limited in the amount of interaction with youth with disabilities. Of particular importance to this study was that general VR counselors did not rate interagency collaboration as essential, though both sets of participants ranked interagency collaboration relatively low (Plotner et al., 2014). This study presents initial findings suggesting that there are differences in the delivery of transition services for youth with disabilities based on the type and experience of the VR counselor.

In a study looking at barriers for youth transitioning to employment, Riesen, Morgan, Schultz, and Kupferman (2014) sought to answer the question, "What do secondary special educators, vocation rehabilitation counselors, and community rehabilitation providers consider to be moderate to high impact school-to-work barriers?" (p. 34). Riesen et al. (2014) utilized the

Delphi method in collecting their survey research asking 27 teachers and rehabilitation professionals to first identify barriers, second to evaluate the impact of barriers in the compiled list, and thirdly, based on results of the second round, to rate each barrier again. The results revealed significant barriers in the categories of employability skills, the involvement of the family in the transition process, and collaboration amongst school systems and outside agencies (Riesen et al., 2014). These results suggest that while these agencies are required to work together to serve transition-age students, many barriers exist that must be addressed before students receive the assistance needed.

a. **Summary of barriers to successful interagency collaboration**

Unfortunately, the research literature largely shows that the present status of involvement of outside agencies and VR in particular, in the transition process is not aiding youth in achieving their postsecondary education and/or employment goals (Agran, Cain, & Cavin, 2002; Balcazar et al., 2013; Oertle et al., 2013; Plotner et al., 2014; Riesen et al., 2014). The research suggests that common barriers to successful interagency collaboration relationships include lack of communication, dedication, and knowledge (Agran et al., 2002; NCD, 2008; Oertle et al., 2013; Plotner et al., 2014; Riesen et al., 2014). While the literature makes it clear that there are many barriers to interagency collaboration, promising strategies exist and will be discussed in the following section.

2. **Strategies leading to successful interagency collaboration**

Johnson, Zorn, Tam, Lamontagne, and Johnson (2003) conducted semi-structured interviews with 33 agency staff involved in interagency collaboration efforts. The interviews were conducted in the workplace of the participants and questions pertained to successes and barriers to effective interagency collaboration. Once interviews were completed, each was

transcribed and analyzed by two coders using a content analysis framework to develop theme categories (Johnson et al., 2003). The authors found strategies that could be linked to successful collaborations such as partner buy-in, safe spaces to speak openly, guidance from decision-makers, respecting the climate of each agency, resource allocation, teaming preparation, and “minimizing turf issues” (Johnson et al., 2003, p. 201). Interviewing key stakeholders provides insight into the interagency collaboration process in order to begin to understand how to improve these partnerships.

To better understand effective strategies for interagency collaboration, Noonan, Morningstar, and Gaumer-Erickson (2008) interviewed staff in school districts successfully serving students with disabilities through the use of partnerships. The authors collected qualitative individual interviews (seven participants) and focus groups (six sets of participants) pertaining to “action-oriented strategies and interventions perceived to be effective for interagency collaboration” (Noonan et al., 2008, p. 134). Data were transcribed then coded by the three authors. Many themes emerged that can be connected to successful interagency collaboration, such as the importance of operating outside of the normal school day, acting as a facilitator to agency connections, local and state support for networking, linkages to agencies and funding, and providing informational sessions for students with disabilities and their families on the transition process (in-school and post-school) (Noonan et al., 2008). Perhaps the three most important themes for interagency collaboration were that the school district personnel had knowledge of and rapport with multiple agencies, engaged in professional development including the school district staff and outside agencies, and held collaborative meetings (Noonan et al., 2008). This study is an example of how interagency collaboration can successfully occur;

however, this is a time-consuming process that is challenging and requires open-minded partners with the ultimate goal of helping students with disabilities have successful adulthood outcomes.

Two studies evaluated the changes over time in interagency partnerships at the state-level (Noonan, McCall, Zhen, & Gaumer-Erickson, 2012) and community-level (Noonan, Gaumer-Erickson, & Morningstar, 2013). The community-level partnership assessed collaboration status one-year after implementation. Prior to implementation, sixteen cohorts (73 participants) comprised of school system staff and VR professionals among other agencies were created (Noonan et al., 2013). These cohorts attended three trainings on important practices for interagency collaboration. Participants were surveyed before and after the intervention regarding the increase in use of “indicators of high-quality interagency collaboration strategies” developed based on the findings from Noonan et al. (2008; Noonan et al., 2013, p. 100). This pre-post intervention was analyzed to understand the change from baseline to follow-up using non-parametric statistics primarily due to the ordinal nature of the data (Noonan et al., 2013). Overall, the results revealed that partners’ utilization of the interagency collaboration practice skills increased at post-intervention. Moreover, as a result of the partnership, the school personnel and VR professionals connected more effectively and frequently with families and better appreciated the importance of working with each other (Noonan et al., 2013).

Likewise, a state-level partnership was examined three years after implementation involving ten participants from different agencies that serve youth with disabilities. During team meetings, participants completed a rating scale pertaining to their degree of partnership pre and post formation and participated in a focus group to expand on responses to the rating scale (Noonan et al., 2012). As a result of the partnership, agencies felt they had increased competency to serve students with disabilities, developed an interagency packet for use by students, and

developed long-lasting relationships with members of other agencies (Noonan et al., 2012). Further, four strategies proved important for this initiative including: physically touring partner agencies, team strategic planning, interagency professional development sessions, and an increased ability to disseminate information to students or knowledge of an agency contact (Noonan et al., 2012). Overall, this interagency collaboration relationship continued to grow and improve over the years as demonstrated by the dedication and active involvement of each agency. Additionally, a focus group was conducted with ten members of the team to understand the formation, competency, and approaches to creating a successful partnership that can serve students with disabilities transitioning to adulthood (Noonan et al., 2012). To analyze the focus group transcript, one researcher performed detailed coding, collapsed codes that were similar and based on the literature, followed by coding and consensus by all of the researchers which resulted in common themes. The resulting themes included capacity building such as multi-agency partnerships, positive rapport between team members, developing a team mission statement, and creating a team of leaders rather than having a “boss”. Moreover, the overarching theme of strategies produced the themes visiting each member’s organization and professional development sessions (Noonan et al., 2012). These two examples of successful interagency partnerships suggest important strategies that can be utilized by agencies attempting to change the current status quo of students with disabilities.

Balcazar et al. (2012) designed a quasi-experimental intervention program to improve low-income minority youth with disabilities’ transition capacity, as well as, to promote interagency collaboration between a secondary school system, VR, and a postsecondary school system through the use of case managers as collaboration liaisons. The program utilized four main activities for building transition capacity including: “outreach and training, post-secondary

support, job development, and on-the-job support” (Balcazar et al., 2012, p. 118). Students participating ( $n=164$ ) in the intervention group received a transition curriculum to aid in transition preparation, whereas control group participants ( $n=26$ ) only engaged in services available to all other students with disabilities such as connections with outside agencies. Further, the survey contained questions related to outcomes of students participating in the study and were analyzed using chi-square tests (Balcazar et al., 2012) As a result of the program, almost 75% of students in the intervention group gained employment after the program whereas no students in the control group became employed. Similarly, over 50% of the students in the intervention group enrolled and completed a postsecondary education program, while control group participants that did enroll were not able to finish their programs (Balcazar et al., 2012). The case managers were essential to this process in terms of individualizing student plans for service, but also for bringing together the school system and service providers to serve students during and after high school.

As a part of this mixed-methods transition intervention program, Balcazar et al. (2012) asked, “What are the most relevant services and supports case managers provide to intervention participants?” (p. 119). The goal of the qualitative portion of this study was to better understand the views of the two case managers leading the program efforts. The authors conducted ten semi-structured interviews with each case manager reviewing ten student cases. The interview protocol asked participants to give a detailed report of their role and participation with each student. Data were analyzed by transcribing the script, coded by two researchers, consensus development between the coders and the lead researcher, and coding and consensus was repeated to ensure full identification of themes (Balcazar et al., 2012). The outcome suggested that

detailed supports and services received helped youth attain their goals with three overarching themes of career, postsecondary education, and community and family (Balcazar et al., 2012).

Certo et al. (2003) implemented the *Transition Service Integration Model* focusing on the interagency collaboration of three entities including the school, VR, and the developmental disabilities (DD) system in delivering transition services. Fourteen School systems partnered with private non-for-profit agencies to provide services to students with developmental disabilities while in the final year of high school. Once a student graduated, the private agency worked with VR and the DD system to share service delivery. For this one-shot case study, information on student outcomes was gathered and examined through the use of basic descriptive statistics (Certo et al., 2003) As a result, 63% of these students were employed after high school and 88% experienced no service interruption in transferring from student to adult case (Certo et al., 2003). The employment rate found in this study is similar to that of people without disabilities at 68.5% (ODEP, 2014). This model is important given a lack of staffing, funding, and flexibility within the public school system leading to an inability to fulfill the extent of services and supports needed to adequately prepare students with severe disabilities for future competitive employment. While, VR services officially begin once students formally exit the public school system, the link must be made while students with disabilities are in secondary school. Approaching transition should seamlessly incorporate both systems, which each has unique professional knowledge and competencies (Certo et al., 2003). Though this article focused on students with more significant transition needs, this model is transferable to the needs of many different students with disabilities.

Gaumer, Morningstar, and Clark (2004) sought to create a more refined understanding of the status of Community-Based Transition (CBT) programs. The authors electronically surveyed

101 CBT programs to gather data on the characteristics of each program. This descriptive design study analyzed frequencies and means and found that interagency collaboration emerged as a theme (Gaumer et al., 2004). Specifically, students who were involved in CBT programs during high school were often supported by these programs throughout their transition into postsecondary education. Students who worked with their school and outside service agencies seamlessly transitioned to adulthood. Moreover, almost half of the teachers credited collaboration with outside agencies as an important factor for student success. This study is an important step to better understanding the value of connecting students with outside agencies during high school.

Muthumbi (2008) conducted an evaluation study of a partnership program across systems developed in response to the Workforce Investment Act (1998) between the New York school systems, employment agencies, community businesses, and the community to increase post-high school employment outcomes for youth with disabilities in the State. The authors found that when working in partnership, programs have increased resources and referral options for students with disabilities. Importantly, positive systems change across partners included: students and families gained knowledge of and an understanding of how to access available services, employers developed awareness of accommodation needs, school systems created work experiences for students, and students engaged in post-school connections with outside agencies (Muthumbi, 2008). Conversely, there were systemic barriers that affected the outcomes of students with disabilities. For example, agencies such as one-stop centers are variable in programs offered and ability to serve people with disabilities; and VR provides services only to students during junior and/or senior year of school, which was ineffective for many students (Muthumbi, 2008).

In an exemplary five-year partnership study, Luecking and Luecking (2015) sought to bring together VR and other outside agencies to implement a transition program to aid youth with disabilities transitioning to adulthood in eleven school districts. The goal was for each student to have VR and CRP services and postsecondary employment or education enrollment (Luecking & Luecking, 2015). To get to this point, students explored their own interests and goals, were exposed to work opportunities, were employed and paid in work settings, received a VR case, and were connected with outside postsecondary supports. As an interesting factor, this model included a component of education and involvement of families, which allowed for more active participation in their child's life (Luecking & Luecking, 2015). In terms of short-term outcomes, all youth had a VR case, a majority were connected with other outside agencies, and a majority had postsecondary education or employment outcomes based on their own interests (Luecking & Luecking). While this study has yet to be able to report long-term outcomes, the short-term outcomes can only be described as a success and should be used as a potential model for future collaboration efforts.

Flannery, Yovanoff, Benz, and Kato (2008) looked at the Occupational Skills Training (OST) program and resulting employment outcomes of youth with disabilities. This certificate program attempts to aid youth with disabilities in developing employment skills in partnership with VR, schools, employers, and postsecondary universities (Flannery et al., 2008). One-hundred and seventy-six participants were recruited for the program through VR (Flannery et al., 2008). This study looked at extant data collected by each program and utilized a correlational design. Employment outcomes data was analyzed using descriptive and multivariate statistical techniques and revealed that student participation for the duration of the program resulted in a higher average hourly pay (Flannery et al., 2008). One-year after completion of the program,

employment was significantly more likely. Results suggest that vocational training programs, like OST, are useful for youth with disabilities who are not on the typical college path (Flannery et al., 2008). This training program further supports the importance of outside entities providing services to students with disabilities in collaboration with the school systems at both the secondary and postsecondary levels.

Lindstrom, Flannery, Benz, Olszewski, and Slovic (2009) used a case study design to understand the benefits of a partnership program between an employment skills development program and Vocational Rehabilitation (VR) for students with disabilities transitioning to employment. Specifically, the authors used semi-structured interviews (individual and group), document review, and a survey to understand what services were delivered to students as well as the growth of the partnership. Participants were from four training program sites containing 99 partnership members including VR counselors, educators, staff, and youth with disabilities (Lindstrom et al., 2009). The authors utilized the same analysis methods as Lindstrom et al. (2007). The findings revealed that as a result of the partnership, students received services tailored to their individual employment needs and the partnership impacts included “(a) increased awareness of and access to community college program; and (b) improved ability to navigate and succeed within the community college system” (Lindstrom et al., 2009, p. 195).

An evaluation study of the *Transition Outcomes Project* (TOP) sought to understand the effectiveness of the program in increasing compliance with the IDEIA (2004). Finn and Kohler (2010) used a case study design conducting semi-structured interviews with eight teachers regarding their perceptions of the successes of the TOP program, as well as any challenges incurred. Interviews were audio taped, transcribed, coded by one researcher and checked by a separate researcher resulting in six main overarching themes. The results of the program based

on the teacher interview findings include: student and family inclusion, an increased understanding of transition policy, more interagency participation; however, funding, implementation time, and a lack of support from school leadership were noted as challenges in implementing TOP (Finn & Kohler, 2010).

a. **Summary of strategies leading to successful interagency collaboration**

The research concludes that strategies leading to successful interagency collaboration include degree of commitment to the partnership (Johnson et al., 2003), flexibility and resource allocation (Johnson et al., 2003; Noonan et al., 2008), open communication between parties (Johnson et al., 2003; Noonan et al., 2008, 2012, 2013), and professional development (Noonan et al., 2008, 2013). Conversely, differences arise in the conclusions of many of the studies. Johnson et al. (2003) found that removing issues of invasion of space was related to successful partnerships. Finally, one study revealed that a successful interagency collaboration intervention led to an increased ability to disseminate information to students or at a minimum, the knowledge of the appropriate agency to contact after high school completion (Noonan et al., 2012).

Over the past two decades, the research on interagency collaboration has increased; however, there are only approximately fifteen research studies that have been published, with few focusing exclusively on interagency collaboration. Every article reviewed states the need for more research around interagency collaboration as it can only at best be currently described as a promising practice. The importance of the improvement of interagency collaboration between the school system and VR is justified as it has been largely shown to be ineffective (Agran et al., 2002; Balcazar et al., 2013; Oertle & Trach, 2007; Plotner et al., 2014; Riesen et al., 2014).

Given these findings, the current study, of which one aspect will focus on an interagency collaboration initiative between the Illinois VR and the CPS system, is essential.

F. **Summary of the Literature**

This review of the literature included policy that affects youth with disabilities transitioning to adulthood, current postsecondary outcomes focused on employment, how these postsecondary outcomes are different based on demographic and personal characteristics, the role of VR in serving youth transition from secondary school to adulthood, and collaboration between VR, other outside agencies, and the school system as a critical practice to improve adulthood employment outcomes. While it is clear from the literature that researchers see the benefit of examining barriers and strategies to increasing postsecondary employment outcomes of youth with disabilities, the results suggest a bleak future for youth with disabilities without effective transition services and supports.

The literature on outcomes explicitly state the necessity of transition programming involving goal setting, attainment of employment skills, and working while in school as the most important factors for post-high school employment (Brewer et al., 2011; Cobb & Alwell, 2009; Fabian, 2007; Flexer et al., 2011; Gold et al., 2013; Karpur et al., 2014; Mazzotti et al., 2015; Murray & Doren, 2013; Test et al., 2009b). Additionally, the appallingly poor outcomes of females, minorities, low-income youth, and youth with severe disabilities require further research to understand how to improve employment status (Awsumb et al., 2016; Balcazar et al., 2013; Carter et al., 2011; Fabian, 2007; Flexer et al., 2011; Gold et al., 2013; Hasnain & Balcazar, 2009; Lindstrom et al., 2011; McDonald et al., 2007; Murray & Naranjo, 2008; Rabren et al., 2002; Sima et al., 2015; Wagner et al., 2014). Within the literature base on VR, resoundingly the literature calls for additional education and participation within the secondary and postsecondary

lives of youth with disabilities (Noonan, 2014; Oertle et al., 2007, 2013; Plotner et al., 2012, 2014).

Finally, much of the research literature related to transition and the use of interagency collaboration focuses on existing partnerships (Johnson et al., 2003; Noonan et al., 2008, 2012; Oertle et al., 2013), programs designed to create partnerships (Balcazar et al., 2012; Certo et al., 2003; Muthumbi, 2008; Noonan et al., 2013), indirectly looked at interagency collaboration (Flannery et al., 2008; Gaumer et al., 2004), or examined barriers to collaboration (Agran et al., 2002; NCD, 2008; Riesen et al., 2014).

Given the results of this literature review, the current study will focus on: (a) the outcomes of youth with disabilities being served the VR; (b) partners in an interagency collaboration initiative's understanding of the outcomes of youth with disabilities employment based on their demographic, personal characteristics, and system-level services; and (c) how this partnership is evolving to better serve these youth with disabilities referred from the CPS school system to VR while in high school. Many strategies have been identified as outcome-driven best practices in serving youth with disabilities transitioning to adulthood. Kohler's (1996), *The Taxonomy for Transition Programming*, serves as the conceptual framework for the current study because of its comprehensive foundation for in-school transition planning, service delivery, and its focus on future prosperous outcomes for youth with disabilities.

## TAXONOMY FOR TRANSITION PROGRAMMING 2.0



Figure 1. Taxonomy for transition programming 2.0 (2016). “Taxonomy for transition programming 2.0: A model for planning, organizing, and evaluating transition education, services, and programs,” by P. D. Kohler, J. E. Gothberg, C. Fowler, and J. Coyle, 2016, Retrieved from [http://www.transitionta.org/sites/default/files/Tax\\_Trans\\_Prog\\_0.pdf](http://www.transitionta.org/sites/default/files/Tax_Trans_Prog_0.pdf).

Moreover, woven throughout this framework is the idea of collaboration among the student, family, school, community, and outside agencies. Kohler and Field (2003) state that, “the purpose of these collaborative activities is to implement an integrated system that addresses the lifelong learning and support needs of a community’s member” (p. 178). That is, each student is a member of a community, and once exiting the legally mandated services from a public school system, will become an adult member of the community in which an outside agency can now address her or his needs. Thus, once students with disabilities are no longer entitled to supports

and services under the IDEIA, outside agencies can provide assistance to these young adults with disabilities based on eligibility and availability.

Kohler, Gothberg, Fowler, and Coyle's (2016) updated taxonomy identified five categories of essential transition practices, including: (1) student-focused planning, (2) student development, (3) interagency collaboration, (4) family engagement, and (5) program structure attributes. Student-focused planning is concerned with developing an applicable ITP, including the student in their own transition process, and strategies for planning such as encouraging and allowing the student and her/his family to take the lead in the decision making process (Kohler, 1996; Kohler & Field, 2003; Kohler, Gothberg, Fowler, & Coyle, 2016). The student development category revolves around a multitude of aspects of a student's life including "assessment, academic skills, life, social, and emotional skills, employment and occupational skills, student supports, and instructional content" (Kohler et al., 2016, p. 5-6). This category is not only focused on the student's preparation while in school, but also in giving the student practical skills and supports for post-school life.

Family engagement is critical to the transition process as the families of youth with disabilities hold the primary role of raising and ensuring the success of their children. Here family engagement necessitates that the family become actively involved in their child's education process through information sharing, IEP and transition plan meeting attendance, and development and implementation of the plan. School personnel have to give the family respect through cultural understanding and listening and addressing family members' questions and concerns (Kohler et al., 2016). Additionally, family members need to be empowered through mutual respect, student information sharing, and assistance in planning for the future as needed (Kohler et al., 2016). Lastly, all aspects of family engagement require that the school take steps

to ensure that the family is equipped to participate while their child is in school and post-school (Kohler et al., 2016). For each student with a disability to have the best possible adulthood outcomes, the school system must focus on "...efficient and effective delivery of transition-focused education and services, including philosophy, planning, policy, evaluation, and resource development" (Kohler & Field, 2003, p. 179). That is, Kohler and Field (2003) discuss the importance of how the philosophies and policies held by schools and outside agencies inform the development and implementation of transition practices.

In terms of interagency collaboration, critical to this category is the coordination and delivery of secondary transition services and the development of a process for how this collaboration will function. Further, interagency agreements can identify the parties responsible for each piece of the student's transition planning and service delivery (Kohler, 1996; Kohler & Field, 2003). Students and families are key stakeholders and as such, successful participation in the secondary transition process involves their inclusion in the planning and service delivery process and being empowered through participation and input (Kohler, 1996; Kohler & Field, 2003; Kohler et al., 2016).

This study focuses on the involvement of VR in the transition process for CPS students with disabilities as a means to improving adulthood outcomes. As the taxonomy suggests, interagency collaboration plays a role in each of the five categories. However, studies utilizing the theoretical framework suggest that while much research has been conducted in four of the categories, no evidence-based practices have been developed for interagency collaboration (Mazzotti, Test, & Mustian, 2014; Test et al., 2009a). Though evidence-based practices have not emerged in regard to interagency collaboration, the importance is supported by the research, which suggests that when implemented effectively, youth with disabilities experience more

successful adulthood outcomes (Test & Cease-Cook, 2012; Test et al., 2009b). This framework focuses on the role of and collaboration between school providers, students and families, and outside agencies and therefore serves as the theoretical foundation for the current study.

Situated within the *Taxonomy for Transition Programming*, this research will add to the extant literature in two ways: (1) through an analysis of a raw VR dataset of youth with disabilities that attended CPS which will allow for the examination of the (2) interagency partnership that is occurring between the country's third largest public school and the leading service agency. That is, while there are many data based studies of youth outcomes, most examine secondary data sources. Moreover, there are no current large-scale studies on the adulthood outcomes of youth with disabilities exiting CPS. Additionally, current literature has contributed to the knowledge-base about interagency collaboration in transition; however, there is a very small amount of research literature focusing exclusively on interagency collaboration as an effective strategy to increase positive adulthood outcomes of youth with disabilities. This creates a unique opportunity to examine interagency collaboration in depth to add to the extant data. That is, based on the current state of the research literature, interagency collaboration can only be considered a promising practice. Aside from adding to the existing literature, this study seeks to form actionable recommendations that can be practically implemented within the school system, VR system, and partnership to plan and deliver effective transition supports and services to increase the positive adulthood employment outcomes of our youth with disabilities. The following chapter details the methodology utilized for this research including the research design, research setting and participants, measures and data collection procedures, and data analysis.

## G. **Purpose, Research Questions, and Hypotheses**

The purpose of this study was to understand what happens when youth with disabilities are referred to VR for services while in high school through the examination of their outcomes, personal characteristics, and key stakeholders' perspectives. More specifically, this research sought to understand what demographic and service level characteristics were linked to successful or unsuccessful adult employment outcomes, stakeholders' understanding of student success in the system or lack thereof, and their opinions regarding the benefits of the interagency collaboration partnership designed to improve the outcomes of these youth with disabilities. This chapter explains the study research questions, research design, research setting and participants, measures and data collection procedures, and data analysis.

### 1. **Research questions and hypotheses**

Research question 1. Are there any differences in the VR status progression outcomes of youth with disabilities from the Chicago Public School system whose cases were referred to the Illinois VR system during fiscal years 2005-2012 based on demographic variables (age, gender, race/ethnicity, and type of disability)?

*Null hypothesis.* There are no differences across the status progression outcomes of youth with disabilities based on age, gender, race/ethnicity, and type of disability from fiscal years 2005-2012.

*Alternative hypothesis.* There are differences across status progression outcomes of youth with disabilities based on demographic variables from fiscal years 2005-2012. That is, youth with disabilities will be disproportionately represented (based on demographics) in the different status progression outcome categories.

*Research question 1a.* Given the results of the status progression outcomes analysis, what are stakeholders' explanations about the ways in which age, gender, race, and disability type relate to the different status progression outcomes?

Research question 2. Do demographic (age, gender, race/ethnicity, type of disability) and case level (VR services) variables predict employment outcomes for youth with disabilities who received VR services during fiscal years 2005 to 2012?

*Null hypothesis.* Age, gender, race/ethnicity, type of disability, and VR services received do not predict employment outcomes for youth with disabilities.

*Alternative hypothesis.* Youth with disabilities that transition at a younger age, are male, white, have a high-incidence disability, and receive VR services will have better employment outcomes. Moreover, youth that receive information and referral, vocational rehabilitation and guidance, and job-related services such as job placement, job readiness, job search assistance, on-the-job supports, and on-the-job training, will have the highest successful rehabilitation outcomes.

*Research question 2a.* Given the results of the rehabilitated and non-rehabilitated outcomes analysis, what are stakeholders' explanations for the reasons why some youth with disabilities' receive services but are not rehabilitated?

Research question 3. How did the collaborative relationship between the Chicago Public Schools system, the University of Illinois at Chicago, and the Illinois Vocational Rehabilitation agency affect the outcomes of youth with disabilities served by VR and CPS?

### III. METHOD

#### A. Research Design

A mixed method research design was utilized to examine the post-school VR employment outcomes of youth with disabilities, stakeholder explanations for youth outcomes, and the impact of interagency collaboration. The quantitative portion of the design incorporated descriptive and correlational methods to investigate youth outcomes based on analyses of demographic and case-level variables. Semi-structured individual interviews were conducted for the qualitative segment to gain an in-depth understanding of key stakeholders' perspectives about the employment outcomes of youth with disabilities and the collaborative relationship between DRS-UIC-CPS that was created to increase the successful employment of youth with disabilities.

This mixed methodology framework was selected because each piece supplements and strengthens the other. The descriptive and correlational quantitative design assists in identifying relationships between variables associated with these outcomes (Creswell, 2012; Mertens, 2010). Conducting in-depth individual semi-structured interviews results in more depth and breadth of findings to best address the proposed research questions (Patton, 2002). By employing this sequential mixed methodology research design, which is particularly well suited for complicated educational settings, the qualitative portion was able to complement the quantitative portion. That is, the quantitative portion was important to understanding the large scale outcomes of youth with disabilities, while the qualitative methods provided an additional level of knowledge regarding this study topic that would otherwise be impossible to acquire (Mertens, 2010). By utilizing this mixed methodology approach, a better understanding of how interagency collaboration works within this relationship will be gained. This could lead to future

interventions within the partnership for the ultimate benefit of youth with disabilities transitioning to adulthood.

**B. Analysis of the Vocational Rehabilitation Database**

**1. Research settings and participants**

The quantitative VR data were pre-collected and de-identified prior to the researcher getting the information on the youth with disabilities receiving services while in high school. Moreover, access to the database was gained through a data sharing agreement between the University of Illinois at Chicago and the Illinois Division of Rehabilitation Services. The information within the quantitative dataset included demographic, service, and outcome variables and contained 4,731 cases collected between fiscal years 2005 and 2012. The information to be analyzed comes from youth with disabilities that were enrolled in CPS and received services from VR who also have outcomes in the VR system as adults. The youth in this data set are ages 14-21 ( $M=17.42$ ) with 37.52% female and 62.44% male. For both race/ethnicity and disability, each variable was run as a yes or no in order to give the fullest picture of the race/ethnicity and disability type that each youth identified with, particularly when they identified with multiple races/ethnicities and multiple disability types. By separating each race/ethnicity and disability type in this manner, this allowed for a fuller picture of each as combining race/ethnicity and disability type with a “multiple” variable would have mislead the reader into believing that certain races/ethnicities and disability types were barely represented or fully missing from the CPS referral system. Therefore, the final percentages were greater than 100%. Of the youth with disabilities in the VR system, 60.16% were African American, 40.03% were White, 20.99% were Latino(a), and 2.79% were Other. Of the youth with disabilities in this dataset, 46.37% had a learning disability (LD), 38.87% had an intellectual/developmental disability (IDD), 6.51% had

a mental disability (MD), 1.20% had a deaf/hearing disability, 1.04% had a physical/orthopedic disability, 0.68% had a traumatic brain injury disability (TBI), and 0.38% had a blind/visual disability.

## 2. **Measures and data collection procedures**

### a. **Variables**

A detailed description of variables was developed to explain the application of each in the analyses. Independent variables included demographic and case level characteristics, comprised of age, gender, race/ethnicity, type of disability, and VR services received (research question two only). Rehabilitation outcomes of youth with disabilities served as the dependent variable. Below is a description of the association of each variable to the research questions.

- *Independent variables.*
  - Research Question One:
    - Age: ages 14 to 21 (continuous)
    - Gender: male and female
    - Race/ethnicity: White vs. not-White, African American vs. not African American, Latino/a vs. not-Latino/a, and Other vs. not-Other ((Asian Americans, Native Americans and Alaskan Natives, and Hawaiian and Pacific Islanders)
    - Type of Disability: Blind/visual disability vs. no-blind/visual disability, deaf/hearing disability vs. no-deaf/hearing disability, intellectual/developmental disability vs. no-intellectual/developmental disability, learning disability vs. no-learning disability, mental disability

vs. no mental disability, physical/orthopedic disability vs. no physical/orthopedic disability, traumatic brain injury disability vs. no traumatic brain injury disability

- Research Question Two:
  - Age
  - Gender
  - Race/ethnicity
  - Type of disability
  - VR services received (total number): assessment, augmentative skills, college/university training, reader services, information and referral, interpreter services, job placement assistance, job readiness, job search assistance, literacy training, maintenance, miscellaneous training, occupational/vocational training, on-the-job supports, on-the-job training, personal attendant, rehabilitation technical/assistive device, technical assistance, transportation, treatment, vocational rehabilitation/guidance, and other services.
- *Dependent variables.*
  - Research Question One:
    - Closure Statuses: status 01 (ineligible from referral), status 03 (ineligible from application), status 07 (ineligible from trial work), status 26 (rehabilitated), status 28 (non-rehabilitated after services), status 30 (non-rehabilitated no IPE), status 38 (closure from waiting list)

- Research Questions Two:
  - Outcomes: Rehabilitated (status 26) or non-rehabilitated (status 28)
    - Rehabilitated is employment (competitive or competitive-supported) for a minimum of 90 days after CPS-VR transition program completion (240 hours and 60 calendar days while in school).
    - Non-rehabilitated means a consumer received an IPE, but did not meet the minimum 90 days of employment.

b. **Characteristics of the vocational rehabilitation system**

The progression of consumers through the VR service system and the different closure statuses is complex and therefore is explained in detail (Figure 2, Appendix A). Participants enter the VR service system at the referral stage (status 00). After the referral has been made, consumers continue onto either the application stage (status 02), or are closed from referral (status 01) because of ineligibility. If a consumer continues on to application, she/he will either move forward in the system to the accepted stage (status 10) or be closed from application (status 03) because of ineligibility. Next, some participants will move into the certified eligible stage (status 04), which is a waiting list; however, most consumers end up being closed cases (status 38). Alternatively, VR may decide that trial work (status 06) is necessary to determine if consumers are eligible to work, but again, most of these consumers are closed after trial work (status 07). The other three options after the accepted stage are to be closed before receiving an individualized plan for employment (IPE [status 30]), closed after the IPE (status 28), and closure after rehabilitation (status 26). Non-rehabilitated (status 28) is a specific closure status of students who were formally accepted for VR transition services and received an IPE, but were

closed before being rehabilitated. Rehabilitated participants are closed as status 26 when she/he has been employed for a minimum of 90 days in either competitive or competitive-supported employment settings after going through the CPS-VR transition program while in high school. During high school, students that participate in the DRS-CPS transition program are required to work for a minimum of 60 calendar days and 240 hours to receive a contractual transition outcome. That is, a student must work for a minimum of 60 calendar days and meet the 240 hours, though the 240 hours do not have to be completed within the 60 day time period. If a student is successful in high school and maintains employment post-high school for 45 days, the VR counselors may close the case as status 26, successful rehabilitation.

c. **Data collection procedures**

VR counselors and special education case managers and teachers collected the data about the youth with disabilities. Student data were entered into the DRS Virtual Case Management system (VCM), which allows counselors to input and organize consumer information. Data entered by the counselors included demographic characteristics, case history, types of services, and employment outcomes. Counselors collected data from youth with disabilities in person and most data were collected within each student's respective high school, though some of the data were collected in the VR offices. Much of the data entered into the VCM were taken directly from the students' IEP documents.

d. **Data cleaning procedures**

The Vocational Rehabilitation Quality Assurance team at UIC conducted the initial cleaning of the VCM data during 2014. The data were originally received in a multiple database format with variables scattered over numerous tables. One or more specific identifiers connected each table. As the first cleaning step, a case was defined as a person receiving one full

cycle of VR services from referral to closure status. Next, using each case's unique identification number, relevant variables were extracted. Overall, the last entry for each case was used for extraction. However, for certain variables, the first entry was taken. For example, education at the time of referral required the extraction of the first entry rather than the last entry. There were many occasions where the information was missing. To minimize this problem, database tables with more available information were used whenever the variable was contained in more than one table. Originally, there were 160,688 consumers in the dataset. Based on a variable that identified youth with disabilities in the transition program and living in the State's largest city, 4,731 transition youth with disabilities were identified and analyzed.

### 3. **Data analysis**

Quantitative analyses focused on basic descriptives and exploration of differences across employment outcomes for youth with disabilities. Data were analyzed using SPSS to examine descriptive and inferential statistics with an alpha level set at .05. The first research question utilized a simple frequency table to better understand the difference in closure statuses of youth with disabilities over the years of the initiative. Chi-square tests for categorical independent variables and *t*-tests for continuous variables and a logistic regression model to examine variables that predict rehabilitated or non-rehabilitated outcomes for youth with disabilities were conducted to address research question two. For chi-square tests, assumptions that were met include independent observations and 80% of the cells had a minimum of five cases. For *t*-tests, data were on an interval or ratio scale, included independent observations, had a normal distribution, and homogeneity of variances. Finally, examined and fulfilled assumptions for the logistic regression model included a dichotomous dependent variable, a minimum of one independent variable, independent observations, and a linear relationship between continuous

variables and the transformed dependent variable (Cohen, Cohen, West, & Aikmen, 2003; Keppel & Wickens, 2004).

### C. **Stakeholder Perspectives**

#### 1. **Research settings and participants**

Research was conducted within the DRS system, CPS system, and UIC.

Interviews were collected within DRS offices, at the homes of CPS professionals, and on-site at UIC. The researcher had access to participants from each agency as a result of a former working relationship.

A total of 11 participants were contacted to participate in this study, with 8 agreeing to participate ( $N=8$ ). Participants included DRS administrators ( $n=2$ ), VR counselors ( $n=2$ ), CPS transition specialists ( $n=2$ ), and former DRS-UIC-CPS transition project facilitators from UIC ( $n=2$ ). The average age of the participants was 48.88 years with 5 being female and 3 being male. Of the 8 participants, 4 identified as African American/Black, 2 identified as Hispanic/Latino, and 2 identified as White. Finally, the group of participants all held graduate degrees with 5 holding one or more Master's Degree and 3 holding a doctorate.

#### 2. **Recruitment procedures**

Recruitment utilized purposeful sampling of participants that were involved in the DRS-UIC-CPS partnership before the interview. Secondary recruitment criteria required that participants (1) serve youth with disabilities in either DRS or CPS and/or (2) were involved in the DRS-CPS partnership at the time of the interview. Purposeful sampling is useful in qualitative research given the importance of selecting participants that are experts on the topic being examined (Creswell, 2012; Mertens, 2010; Patton, 2002).

As a next step in the recruitment process, the researcher developed and submitted all necessary Institutional Review Board (IRB) and Research Review Board documents. The UIC IRB approved the de-identified quantitative dataset as exempt research (Appendix B). Qualitative interview procedures were approved through UICs IRB using expedited procedures (Appendix B). The researcher was granted permission to interview CPS personnel through the CPS Research Review Board (Appendix B). Participants were contacted initially by phone with follow-up emails occurring as necessary. Participants received a consent form explaining the procedures, anonymity, risks, and benefits of the study (Appendix C). They also received a copy of their signed consent form. Stakeholders from DRS, VR, and CPS were compensated \$50 for their participation. Moreover, a semi-structured interview script was used to interview all participants (Appendix D). Interviews were audio recorded and transcribed verbatim. Member checks were conducted with participants to ensure accuracy of the transcripts. Member checking gives the participant the opportunity to comment on the transcript and the researcher's assessment of the interview (Brantlinger et al., 2005).

### 3. **Measures and data collection procedures**

#### a. **Semi-structured interview protocols**

Once the quantitative data analysis was complete, the qualitative interview protocols were developed. A semi-structured interview protocol was developed and tailored to each distinct group of participants (DRS administrators, VR counselors, CPS transition specialists, and UIC facilitators). While each protocol asked participants to answer similar questions, these questions were customized to best fit each organization. Originally, the researcher planned to conduct a focus group with the VR counselors; however, only two of the potential five counselors agreed to participate, which altered the research plan to semi-structured

individual interviews with the two VR counselors. Interview questions were developed based on the purpose of the study, the quantitative data results, and the literature on interagency collaboration (Johnson et al., 2003; Noonan et al., 2008, 2012, 2013; Oertle et al., 2013; Plotner et al., 2014; Riesen et al., 2014). That is, the results of the data analysis directly guided the development of interview questions for research questions 1a and 2a. Additionally, items for research question three were created as a result of the literature review, which showed strategies and barriers to interagency collaboration.

A UIC post-doctoral fellow, with expertise in special education and transition, and the researcher met to refine the conversational aspects of the interview and expand the questions posed to each participant during the individual interviews. Again, these questions were developed based on the purpose of the study, analyzed data, and interagency collaboration literature. Two experts in transition (one employee of UIC and a UIC post-doctoral fellow) reviewed the interview scripts until consensus was reached. The interview scripts were written so that all participants could understand the content regardless of their level of statistical expertise.

b. **Data collection procedures**

Individual interview data were collected in July of 2016. Participants were contacted by phone or through email and asked if they would be interested in participating in the study. If a participant agreed to participate, a date was scheduled to meet at the preferred interview location.

The results of the quantitative data analysis were synthesized into three worksheets for the qualitative interviews (Appendix E). Worksheets included (1) the outcome statuses breakdown worksheet, worksheet 1 correlating to research question 1, and worksheet 2, which was data for research question 2. The purpose of the worksheets was to create easily read and

digestible data for each participant. In addition, a doctoral student in biostatistics that was also familiar with the dataset was asked to review the worksheets for participants to ensure accuracy.

Prior to each interview participants received each worksheet through email. Upon arrival, participants were consented and given an opportunity to ask any questions regarding the interview or data. On average, the interviews lasted for 68 minutes (range=46-95 minutes). At the conclusion of the interview, DRS, VR, and CPS participants received \$50 and signed a document acknowledging the compensation. In addition, participants were asked to complete a short demographic questionnaire including their date of birth, gender, race/ethnicity, and highest education degree received.

#### 4. **Data analysis**

After data collection was completed, qualitative interviews were analyzed in multiple phases. To prepare for analysis, data were transcribed verbatim using a transcription service. Additionally, the researcher reviewed each transcript with the audio recording to correct any errors and created a two-column coding table. Next, transcripts were de-identified and participants were assigned aliases. Interviews were examined based on Braun and Clarke's (2006) thematic analysis approach. According to Braun and Clarke, "Thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within data" (2006, p. 79). This seminal work provides a framework, which is a common approach for analyzing qualitative data, and is well suited for this research given the flexibility it provides in analyzing multiple types of data focusing on various disciplines (Braun & Clarke, 2006).

According to Braun and Clarke (2006), the first step is to become well acquainted with the collected data. This was carried forth while collecting the data, listening to the audio recording, and organizing the transcripts. Braun and Clarke's (2006) next step was to create

initial transcript codes. To begin, 20% of the interviews were analyzed with a UIC post-doctoral fellow to ensure inter-coder reliability. Based on Braun and Clarke (2006), the second coder was instructed to read through the transcripts at least once before beginning coding. Next she was asked to stay close to the data while also taking into account the research questions and to develop codes for as many patterns as arose. Finally, the second coder was expected to code the data inclusively and to not overthink the initial codes. After initial coding of the first two interviews was completed, the researcher met with the second coder on two separate occasions when disagreements were discussed until consensus could be reached. Miles and Huberman (1994) provide the formula for intercoder reliability (p. 64):

$$\text{Intercoder Reliability} = \frac{\text{Number of agreements}}{\text{Total number of agreements + disagreements}}$$

Intercoder reliability averaged 91.88% (range, 91.34% to 92.41%). The researcher using the same guidelines coded the remainder of the interviews. After initial coding was complete, codes were compiled for each participant by question. Codes that were similar across participants were combined into one document to form a list of codes across participants for each research question.

The third step in Braun and Clarke's (2006) schema was to analyze codes and create themes. At this point in the analysis, codes were examined for patterns that emerged. That is, frequently repeated codes and codes that had great similarity or fell into the same category. In order to successfully complete and organize this phase, themes and sub-themes were developed using a mind map with codes placed below each theme and sub-theme (Appendix A, Figures 3 through 4). Mind maps provide the opportunity to graphically represent the connection between themes and sub-themes. Following the initial creation of themes, a review of the identified

themes was conducted as the fourth step (Braun & Clarke, 2006). During this phase, themes were removed, merged, or divided into multiple themes as necessary. This required a review of the codes to ensure proper categorization under the identified themes and sub-themes and whether or not the identified themes, sub-themes, and codes fit within the research questions (Braun & Clarke, 2006). The fifth and final step of the analysis process was to “define and refine” the themes (Braun & Clarke, 2006, p. 22). This is the final check of the themes to ensure they make sense, can be describe concisely, are as mutually exclusive as possible, and can be linked back to the research questions (Braun & Clarke, 2006). This was an essential last phase to successfully conclude the analysis and ensure that the research questions were appropriately answered. A mind map was developed for the final themes as they related to each research question (Appendix A, Figure 6).

#### 5. **Trustworthiness**

During the data collection and analysis process researcher reflexivity, member checking, and peer debriefing were utilized as indicators of trustworthiness. Given that the researcher is invested in this research and was also a former facilitator in the interagency collaboration partnership, reflexivity was necessary. According to Brantlinger, Jimenez, Klingner, Pugach, and Richardson (2005) researcher reflexivity requires one to be open regarding our own “assumptions, beliefs, values, and biases” (p. 201). Before conducting an interview, the researcher took notes to write any thoughts down and then checked the notes after the interview in an effort to ensure that personal judgments were not brought into the interview. However, this could never be fully accomplished because the researcher was part of the data collection and analysis and was personally involved in the partnership.

After developing a short summary of each participant's transcript, the researcher contacted the participant by phone. After the summary was read to the participant, there was an opportunity to add to, detract from, or correct any statements that were developed. Member checks were conducted with all eight participants.

Finally, peer debriefing was used throughout the process of instrument development and data analysis. This involved using a UIC post-doctoral fellow in the development of the semi-structured interview protocols, the initial data analysis, and for reviewing the final codes and themes. In addition, intercoder reliability of 91.88% was reached in the initial coding sessions. In short, peer debriefing, member checking and researcher reflexivity were vital to this study and helped to ensure trustworthiness.

#### D. **Summary**

This study employed a mixed methodology research design with sequential quantitative and qualitative portions to better understand (1) CPS youth with disabilities' outcomes as a result of their engagement with the VR system, (2) stakeholders' understanding of these outcomes, and (3) stakeholders' opinions on an interagency collaboration partnership to affect the outcomes of youth with disabilities. Using mixed methodology generated insight into the VR system's raw data on youth with disabilities that were served by CPS and an in-depth understanding from the perspective of service providers and researchers of the reasons youth fared differently based on their demographic and case level variables. Additionally, given the importance of, but lack of research surrounding interagency collaboration, partners' opinions regarding the functionality, practicality, barriers, strategies, and future directions of the partnership and ultimately the potential success or failures of youth with disabilities in these two systems must occur. The research questions were addressed using thematic analyses to examine an existing VR dataset of

4,731 youth with disabilities from CPS and eight newly collected in-depth individual interviews of DRS administrators, VR counselors, CPS transition specialists, and UIC facilitators. Tests for quantitative assumptions and qualitative trustworthiness were conducted throughout the data collection and analyses phases. Quantitative and qualitative results of this research will be presented in the next chapter.

## IV. RESULTS

### A. Analysis of Vocational Rehabilitation Status Progression Outcomes Statistics

Table I summarizes the descriptive statistics of age, gender, race, and type of disability across each VR status progression outcome. The results show that very few youth are being referred to the VR system at age 14 ( $n=14$ ). Moreover, of the youth that do enter the system at age 14, 50.00% were closed as status 3 (ineligible from application) and only 5 (35.72%) received services with only 2 (14.29%) being rehabilitated (status 26). Similarly, 15-year-old youth with disabilities were not often referred to the VR system ( $n=147$ ), with 31.97% ( $n=47$ ) being closed as status 3. Of the 15-year-old youth found eligible for services, 62 (42.18%) were closed before receiving a plan for services (status 30, eligible, no plan developed), with only 22 (14.97%) being rehabilitated. That is, while the numbers are small, of all ages, youth that were referred for VR services at 15 had the highest rate of rehabilitation (57.89%, [ $\text{status 26}/\text{status 26} + \text{status 28}$ ]\*100). Youth that were referred to the VR system between the ages of 16-18 had similar outcomes. However, some differences arose in that youth that were 16-years-old had the highest percentage of closures at status 30 ( $n=470$ , 57.32%). Whereas youth that were 17 and 18 had a higher overall number of status 30 closures ( $n=852$ ,  $n=754$  respectively), but these groups are also entering the VR system more from fiscal years 2005 through 2012 ( $n=1,621$ ,  $n=1,449$  respectively). Additionally, the rehabilitation rates of 16-18 year-olds entering the VR system range from 47.86% to 48.45%. The number of youth entering the VR system while in high school steadily decreases for students ages 19-21. For 19-year-old youth, 61.32% ( $n=252$ ) were found eligible for services, but only 60 youth received an independent plan for employment, and only 30 were rehabilitated. While this is a 50% rehabilitation rate, this is only 7.30% of the 19-year-old youth entering the system.

**TABLE I***Demographic Characteristics by Status Progression Outcomes (N=4,731)*

Status Description	1		3		7		26		28		30		38	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Total Cases	125	2.64	972	20.55	1	0.02	582	12.30	627	13.25	2418	51.11	6	0.13
Age														
14	0	0.00	7	50.00	0	0.00	2	14.29	3	21.43	2	14.29	0	0.00
15	0	0.00	47	31.97	0	0.00	22	14.97	16	10.88	62	42.18	0	0.00
16	5	0.61	88	10.73	0	0.00	123	15.00	134	16.34	470	57.32	0	0.00
17	37	2.29	246	15.18	0	0.00	235	14.50	250	15.32	852	52.56	1	0.06
18	56	3.86	324	22.36	0	0.00	151	10.42	162	11.18	754	52.04	2	0.14
19	16	3.89	140	34.06	0	0.00	30	7.30	30	7.30	192	46.72	3	0.73
20	6	2.86	90	42.86	0	0.00	13	6.19	27	12.86	74	35.24	0	0.00
21	5	8.47	30	50.85	1	1.69	6	10.17	5	8.47	12	20.34	0	0.00
Gender														
Male	81	2.74	616	20.85	0	0.00	394	13.34	382	12.93	1478	50.03	3	0.10
Female	42	2.37	356	20.06	1	0.06	188	10.59	245	13.80	940	52.96	3	0.17
Race														
White	30	1.58	221	11.67	0	0.00	384	20.29	321	16.96	937	49.50	0	0.00
Non-White	93	3.28	751	26.48	1	0.04	198	6.98	306	10.79	1481	52.22	6	0.21
Black	93	3.27	784	27.56	0	0.00	161	5.66	274	9.63	1528	53.69	6	0.21
Non-Black	30	1.59	188	9.98	1	0.05	421	22.36	353	18.75	890	47.27	0	0.00
Latino(a)	62	6.25	235	23.67	0	0.00	126	12.69	96	9.67	473	47.63	1	0.10
Non-Latino(a)	61	1.63	737	19.73	1	0.03	456	12.21	531	14.21	1945	52.06	5	0.13
Other	2	1.52	11	8.33	1	0.76	38	28.79	34	25.76	46	34.85	0	0.00
Non-Other	121	2.63	961	20.90	0	0.00	544	11.83	593	12.90	2372	51.60	6	0.13

**TABLE I (continued)***Demographic Characteristics by Status Progression Outcomes (N=4,731)*

Status Description	1		3		7		26		28		30		38	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Disability														
Blind	2	11.11	3	16.67	0	0.00	2	11.11	5	27.78	6	33.33	0	0.00
Non-Blind	123	2.61	969	20.56	1	0.02	580	12.31	622	13.20	2412	51.18	6	0.13
Deaf	0	0.00	6	10.52	0	0.00	11	19.30	13	22.81	27	47.37	0	0.00
Non-Deaf	125	2.67	966	20.67	1	0.02	571	12.22	614	13.14	2391	51.16	6	0.13
IDD	30	1.63	534	29.04	0	0.00	201	10.93	184	10.01	889	48.34	1	0.05
Non-IDD	95	3.28	438	15.15	1	0.03	381	13.17	443	15.32	1529	52.87	5	0.17
LD	70	3.19	381	17.37	1	0.05	273	12.44	280	12.76	1183	53.92	6	0.27
Non-LD	55	2.17	591	23.30	0	0.00	309	12.18	347	13.68	1235	48.68	0	0.00
Mental	3	0.97	15	4.87	0	0.00	47	15.26	72	23.38	171	55.52	0	0.00
Non-Mental	122	2.76	957	21.64	1	0.02	535	12.10	555	12.56	2247	50.80	6	0.14
Physical	2	4.08	8	16.33	0	0.00	9	18.37	14	28.57	16	32.65	0	0.00
Non-Physical	123	2.63	964	20.59	1	0.02	573	12.24	613	13.09	2402	51.30	6	0.13
TBI	1	3.13	10	31.25	0	0.00	3	9.38	5	15.63	13	40.63	0	0.00
Non-TBI	124	2.64	962	20.47	1	0.02	579	12.32	622	13.24	2405	51.18	6	0.13

Youth with disabilities that were 20 years old when receiving a CPS referral to VR had the lowest rehabilitation rate (32.50%) with 114 youth making it through eligibility (54.29%) and only 6.19% having a rehabilitated employment outcome. Interestingly, 21-year-old youth with disabilities had the second highest rehabilitation rate (54.55%), though only 6 youth out of a total of 59 that entered the system at that age were rehabilitated. Finally, it is of interest that status 3 closures steadily increase as students aged from 10.73% for 16 years olds up to 50.85% for 21 year olds.

There were notable differences between males and females across status progression outcomes. That is, overall, more males are entering the system ( $n=2,954$ ) than females ( $n=1,775$ ). Additionally, males have a higher rehabilitation rate (50.52%) than females (43.42%). Across status progression outcomes, both males and females had similar percentages of closures for status 3 (approximately 20%) and status 30 (approximately 50%).

Many discrepancies were seen across status progression outcomes for youth with disabilities based on race. White youth with disabilities had a rehabilitation rate of 54.47%, whereas youth that identified as African American only had a 37.01% rehabilitation rate, Latino(a) had a 56.76% rehabilitation rate, and youth identifying as other races had a 52.78% rehabilitation rate. When compared to non-White youth, White youth have lower status closures at each progression outcomes status except for status 26 and status 28. That is, youth that are white have a 20.29% status 26 closure whereas all youth not identifying as White are only closed rehabilitated at 6.98%. Moreover, more youth identifying as White received services, but were not rehabilitated (16.96%) than youth that were not White (10.79%). African American youth were closed at higher percentages than youth that did not identify as African American at all statuses except for status 26 and 28. That is, African American youth had higher closures at 3

(27.56%) than non-African American youth (9.98%) as well as higher status 30 closure statuses (African American=53.69%; non-African American=47.27%). Beyond having the lowest rehabilitation rate, African American youth had very low status 26 outcomes ( $n=161$ , 5.66%) when compared to non-African American youth ( $n=421$ , 22.36%). It is important to note, that youth identifying as African American is the largest group within the dataset ( $n=2,846$ ). Latino youth with disabilities had a high percentage of status 1 (ineligible from referral) closures (6.25%) when compared with non-Latino youth with disabilities (1.63%). Moreover, Latino youth with disabilities have a high closure percentage at status 3 (23.67%) versus youth that do not identify as Latino (19.73%). Conversely, youth with disabilities that are Latino are closed as status 30 less than non-Latino youth (47.63%, 52.06% respectively). Finally, other races made up the smallest number of youth with disabilities and consisted of Asian Pacific Islander and Native American youth. Youth within the category of race had less ineligibility closures (status 1, 3, 7) than youth that do not identify as other races. That is, for other races, the closure percentages ranged from .76% to 8.33% for youth that identified as other whereas non-other race youth with disabilities ranged from 0.00% to 20.90%. Further, youth of other races had lower status 30 closures ( $n=46$ , 34.85%), higher status 28 closures ( $n=34$ , 25.76%), and high status 26 closures ( $n=38$ , 28.79%) when compared with their peers that did not identify as other races ( $n=2,372$ , 51.60%;  $n=593$ , 12.90%;  $n=544$ , 11.83% respectively).

The final demographic category descriptively explored was type of disability, which revealed that each disability group had different experiences in the system in terms of status progression outcomes. Blind/visual disability ( $n=36$ ), Deaf/hearing disability ( $n=57$ ), physical/orthopedic disability ( $n=49$ ), and Traumatic Brain Injury disability ( $n=59$ ) entered the VR system during high school in small numbers between fiscal years 2005 through 2012.

Notably, eligibility was found for a majority of youth in these groups including 72.22% of youth with blind/visual disabilities, 89.48% of youth with Deaf/hearing disabilities, and 79.59% of youth with physical/orthopedic disabilities with each of these groups having less than 50% closure at status 30 (closure before IPE). Youth with mental disabilities were rehabilitated at a rate of 39.50% with 55.52% being closed as status 30. Importantly, youth with mental disabilities that enter the VR system while in high school had the highest percentage of eligibility (94.16%) compared to youth that did not have a mental disability (75.46%), but this group only attained employment outcomes 16.21% of the time over fiscal years 2005 through 2012. Youth with IDD ( $n=1,305$ ) and youth with LD ( $n=2,194$ ) were the two disability groups with the largest number of referral to the VR system. Additionally, these two groups had the highest rates of rehabilitation with youth with IDD being rehabilitated at a rate of 52.21% and youth with LD at 49.37%. However, youth with IDD had high percentages of closures at status 3 ( $n=534$ , 29.04%) and status 30 ( $n=889$ , 48.34%). Youth with LD were also often closed at status 3 ( $n=381$ , 17.37%) and status 30 ( $n=1,183$ , 53.92%).

The data suggest that there are differences in the rehabilitation rates of youth with disabilities based on demographic characteristics. That is, the results show that some youth have more success in the VR system than others. For example, youth there were referred to VR at ages 15 or 21, were male, White, Latino(a), identified as other races, had IDD, or LD appeared to have higher rates of employment outcomes. Conversely, youth that entered the system at age 20, were female, African American, had blind/visual disabilities, had a physical/orthopedic disability, had a TBI disability, or mental disability had disproportionately poor rehabilitation rates of less than 45%. Finally, beyond purely rehabilitation rates, more than 50% of all youth were closed as status 30. In particular, youth ages 15 through 17, of both genders, that were

African American, or had a LD or mental disability were closed more than 50% of the time at status 30.

Table II demonstrates the differences in employment outcomes (status 26 versus status 28) for youth with disabilities based on demographic variables through chi-square and t-tests. The results showed gender to be significant with males being significantly more likely to be employed than females,  $\chi^2 (1, N=1,209)=6.02, p=.014$ . In addition, youth that were White were found to have significantly better rehabilitation outcomes than youth that were non-White,  $\chi^2 (1, N=1,209)=27.14, p<.001$ . Conversely, youth who were African American had significantly poorer employment outcomes than those who were Non-African American  $\chi^2 (1, N=1,209)=33.70, p<.001$ . On the other hand, the rehabilitation outcomes of Latino(a) youth with disabilities were significantly better than Non-Latino(a) youth with disabilities  $\chi^2 (1, N=1,209)=8.09, p=.004$ . The only disability type found to have statistical significance was mental disability with these youth having significantly worse employment outcomes than youth without mental disabilities  $\chi^2 (1, N=1,209)=3.95, p=.047$ .

TABLE II

*Demographic Characteristics by Rehabilitation Outcome (Status 26 Versus Status 28)*

Age Description	Rehabilitated (Status 26)		Non-Rehabilitated (Status 28)		<i>t</i> -test ns <i>p</i> -value $\chi^2$
	<i>M</i> 17.17 <i>n</i>	<i>SD</i> 1.09 %	<i>M</i> 17.24 <i>n</i>	<i>SD</i> 1.13 %	
Total Cases	582	42.37%	627	57.63%	
Gender					
Male	394	50.77%	382	49.23%	.014
Female	188	43.42%	245	56.58%	
Race					
White	384	54.47%	321	45.53%	<.001
Non-White	198	39.29%	306	60.71%	
Black	161	37.01%	274	62.99%	<.001
Non-Black	421	54.39%	353	45.61%	
Latino(a)	126	56.76%	96	43.24%	.004
Non-Latino(a)	456	46.20%	531	53.80%	
Other	38	52.78%	34	47.22%	ns
Non-Other	544	47.85%	593	52.15%	
Disability Type					
Blind	2	28.57%	5	71.43%	
Non-Blind	580	48.25%	622	51.75%	
Deaf	11	45.83%	13	54.17%	ns
Non-Deaf	571	48.19%	614	51.81%	
IDD	201	52.21%	184	47.79%	ns
Non-IDD	381	46.24%	443	53.76%	
LD	273	49.37%	280	50.63%	ns
Non-LD	309	47.10%	347	52.90%	
Mental	47	39.50%	72	60.50%	.047
Non-Mental	535	49.08%	555	50.92%	
Physical	9	39.13%	14	60.87%	ns
Non-Physical	573	48.31%	613	51.68%	
TBI	3	37.50%	5	62.50%	
Non-TBI	579	48.21%	622	51.79%	

Table III illustrates the differences in rehabilitation outcomes (status 26 versus status 28) for youth with disabilities based on VR services received. College/university training was associated with statistically significant differences in VR outcomes with youth that receive this services having fewer VR employment outcomes  $\chi^2 (1, N=1,209)=4.32, p=.038$ . Additionally, information and referral significantly improved the ability of youth with disabilities to gain a successful employment outcome  $\chi^2 (1, N=1,209)=12.11, p=.001$ . Youth with disabilities that received job placement services, job readiness training, and job search assistant had significantly higher rehabilitation outcomes  $\chi^2 (1, N=1,209)=50.51, p<.001$ ;  $\chi^2 (1, N=1,209)=9.06, p=.003$ ;  $\chi^2 (1, N=1,209)=53.36, p<.001$ . Moreover, on-the-job supports and on-the-job training were found to be significant in aiding youth with disabilities to gain or retain employment outcomes  $\chi^2 (1, N=1,209)=14.75, p<.001$ ;  $\chi^2 (1, N=1,209)=6.61, p=.01$ . On the contrary, other services (any service that does not fall under the umbrella of the 22 listed services) lead to significantly less rehabilitation outcomes for youth with disabilities  $\chi^2 (1, N=1,209)=10.40, p=.001$ . Youth with disabilities that received treatment as a services had statistically significantly better employment outcomes  $\chi^2 (1, N=1,209)=4.43, p=.035$ . Finally, the most frequently received service by youth with disabilities, vocational rehabilitation and guidance, was found to be significant in leading to more rehabilitated outcomes  $\chi^2 (1, N=1,209)=12.74, p<.001$ .

**TABLE III***Vocational Rehabilitation Services by Rehabilitation Outcomes (Status 26 Versus Status 28)*

Description	Rehabilitated (Status 26)		Non-Rehabilitated (Status 28)		<i>p</i> -value
	<i>M</i> <i>n</i>	<i>SD</i> %	$\chi^2$ <i>n</i>	<i>SD</i> %	$\chi^2$
Total Cases	582	42.37%	627	57.63%	
Services					
Assessment	320	47.98%	347	52.02%	ns
Augmentative Skills	1	25.00%	3	75.00%	
College/University Training	10	30.30%	23	69.70%	.038
Info and Referral	506	50.40%	498	49.60%	.001
Interpreter Services	7	100.00%	0	0.00%	
Job Placement	299	60.40%	196	39.60%	<.001
Job Readiness	167	55.67%	133	44.33%	.003
Job Search Assistance	346	58.94%	241	41.06%	<.001
Literacy Training	1	25.00%	3	75.00%	
Maintenance	240	50.42%	236	49.58%	ns
Miscellaneous Training	28	51.85%	26	48.15%	ns
Occupational Vocational Training	51	49.04%	53	50.96%	ns
On the Job Supports	86	63.70%	49	36.30%	<.001
On the Job Training	69	59.48%	47	40.52%	.01
Other Services	27	31.40%	59	68.60%	.001
Personal Attendant	0	0.00%	0	0.00%	
Reader Services	0	0.00%	0	0.00%	
Rehabilitation Technical/Assistive Device	4	66.67%	2	33.33%	
Technical Assistance	0	0.00%	1	100.00%	
Transportation	66	44.00%	84	56.00%	ns
Treatment	46	59.74%	31	40.26%	.035
Vocational Rehabilitation/Guidance	571	49.18%	590	50.82%	<.001

A logistic regression model was conducted to test the impact of gender, being White, African American, Latino(a), mental disability, receiving college/university training, information and referral, job placement, job readiness, job search assistance, on-the-job-supports, on-the-job training, other services, treatment, and vocational rehabilitation and guidance (Table IV). The reference groups were male, non-White, non-African American, non-Latino(a), no mental disability, and for all services the reference group was not receiving the service. The final model explained % of the variance in statuses 26 and 28. Overall, the model predicted outcomes correctly 63.69% of the time with status 26 being predicted 58.76% versus 68.26% for status 28 ( $OR=.93, p<.001$ ).

**TABLE IV**

*Logistic Regression Model by Rehabilitation Outcome (Status 26 versus Status 28)*

Description	Odds Ratio	S.E.	p-value	CI Lower	CI Upper
Female	.76	.13	.033	.59	.98
White	1.18	.20	ns	.79	1.75
Black	.59	.21	.014	.39	.90
Latino(a)	1.38	.16	.046	1.01	1.91
Mental Disability	.56	.21	.006	.37	.84
College/University Training	.71	.41	ns	.32	1.57
Information and Referral	1.00	.18	ns	.71	1.43
Job Placement	1.71	.14	<.001	1.29	2.26
Job Readiness	1.01	.16	ns	.74	1.38
Job Search Assistance	1.86	.15	<.001	1.40	2.48
On the Job Supports	1.00	.23	ns	.63	1.58
On the Job Training	.98	.24	ns	.61	1.57
Treatment	1.54	.27	ns	.92	2.59
Vocational Rehabilitation/Guidance	2.46	.37	.016	1.18	5.13

The logistic regression model predicted that females are significantly less likely to be rehabilitated in the VR system ( $OR=.76, p=.033$ ). Moreover African American youth with disabilities are more likely to be status 28 than youth that are not African American ( $OR=.59, p=.014$ ). When compared to non-Latino(a) youth with disabilities, those that are Latino (a) are significantly more likely to have a rehabilitated employment outcome ( $OR=1.38, p=.046$ ). When looking at mental disability, it was revealed that having a mental disability predicted significantly lower odds of achieving a status 26 outcome ( $OR=.56, p=.006$ ).

Three services were found to be significant in predicting the success of youth with disabilities. More specifically, receiving job placement services was a significant predictor of a VR employment outcomes for youth with disabilities ( $OR=1.71, p<.001$ ). Further, job search assistance strongly predicted successful rehabilitation outcomes for the youth in this dataset ( $OR=1.86, p<.001$ ). Finally, the model predicted that vocational rehabilitation and guidance predicted successful status 26 outcomes for youth with disabilities ( $OR=2.46, p=.016$ ).

1. **Summary of vocational rehabilitation status progression outcomes**

A descriptive examination of status progression outcomes for youth with disabilities showed that there were frequency differences based on age, gender, race, and type of disability. First, across status progression outcomes, a majority of youth with disabilities were closed as status 30, eligible, but received no services. The closure rates for certain youth were higher than the overall sample (51.11%) including those ages 16,17, and 18, females, African American youth, youth with learning disabilities, and youth with mental disabilities. Similar to status 30, youth with disabilities were closed as status 3 (ineligible from application) more than twenty percent of the time. More specifically, certain youth had a higher frequency of status 3

closures including all ages except youth that were 16 or 17, males, African American youth, Latino(a) youth, youth with IDD, and youth with TBIs.

In regard to age, the highest employment outcomes were seen in youth that were referred at ages 14, 15, 16, and 17. Further, it was seen that more males were entering the VR system than females and had higher percentages of rehabilitation. While African American youth with disabilities were the largest racial/ethnic group in the dataset, these youth had the lowest employment outcomes. Interestingly, youth with blind/visual disabilities, deaf/hearing disabilities, or physical/orthopedic disabilities were moved into eligibility more than other disability groups. Youth with intellectual/developmental disabilities and learning disabilities had the most referrals to the VR system and the most employment outcomes; however, these two disability groups had many status 3 (ineligible from application) closures. Moreover, youth with learning disabilities and mental disabilities were closed at status 30 a majority of the time. Notably, youth with mental disabilities had the highest percentage of youth that were eligible for services.

The VR system calculates rehabilitation rates when reviewing the performance of their employees and reporting outcomes to the Rehabilitation Services Administration (RSA). Therefore, it was essential that rehabilitation rates were examined and presented to the interview participants. Importantly, youth ages 15 and 21 had rehabilitation rates greater than fifty percent. Ultimately, rehabilitation rates reveal that females, African Americans, youth with blind/visual disabilities, mental disabilities, and physical/orthopedic disabilities had more unsuccessful closures after receiving services than employment outcomes. Moreover, for the entire dataset, the rehabilitation rate was less than fifty percent.

Services were found to play an important role in the rehabilitation outcomes of youth with disabilities. In particular, youth that receive college/university training had lower employment outcomes. Additionally, a handful of services were lead to higher employment outcomes. That is, youth that received information and referral, job placement, job readiness, job search assistance, on-the-job-supports, on-the-job-training, other services, treatment, or vocational rehabilitation and guidance had more employment outcomes.

The predictive model revealed that some groups of youth are more likely to be employed than other groups. Males were had a greater likelihood of employment than females. Moreover, African American youth with disabilities had a lower chance of achieving rehabilitation outcomes. However, Latino(a) youth with disabilities were more likely to be employed than youth that did not identify as Latino(a). In regard to disability type, youth with mental disabilities were predicted to have poor employment outcomes when compared to youth without mental disabilities. Finally, three services were found to increase the likelihood of employment outcomes, which include (1) job placement services, (2) job search assistance, or (3) vocational rehabilitation and guidance.

## **B. Perspectives of Stakeholders**

### **1. Research question 1a**

Research question 1a revealed several themes related to the status progression outcomes of youth that entered the VR system relative to the different demographic factors. Based on the results of the data analyses from research question 1, three themes emerged including: (1) family involvement and support; (2) resources and opportunities; and (3) systemic barriers. Figure 3, Appendix A shows a breakdown of the extraction of themes. Under systemic

barriers, two subthemes of systemic VR barriers and systemic school system barriers were identified.

Prior to asking the participants in the qualitative study about the specific research questions, the researcher asked participants to explain the purpose of receiving a VR referral while in high school. Participants 1, 2, 5, 6, 7, and 8 defined the primary purpose of the VR referral during high school as a way to create a link for students with disabilities to adult services for post-high school employment. In addition, participants 3 and 4 (DRS administrators) felt that VR acts as an additional support to the school system for serving youth with disabilities. Moreover, all four DRS-VR participants believed that VR plays an important role in helping youth set realistic career goals and ultimately make the best employment decisions for themselves.

a. **Family involvement and support**

Across participants, family involvement and support was discussed as a crucial variable to student success and a lack of such support to be a reason for failure in the VR system. Participant 6 viewed the likelihood of success for 15 year olds being due to “a support system with them that would help them advocate more as they got ready to age out of school or graduate from high school” (Individual Interview, 7/10/16). Moreover, each participant connected a lack of successful employment outcomes across statuses for African American youth with disabilities to missing family involvement and support. Participant one discussed lack of involvement in relation to all minority students, “They may not care. They may not even understand what the program is. Therefore, there’s no one telling them to make sure you keep your appointments, make sure you do whatever it is you need to do to get connected with that adult VR counselor or that transition counselor in school” (Individual Interview, 7/26/16). While

explaining reasons for status 30 closures, participant 1 explained that the biggest reasons are “...no follow-up, no support first for some of the youth. Mainly African American, which is unfortunate” (Individual Interview, 7/26/2016). One VR administrator examined the intersectionality of race/ethnicity, gender, and disability:

They don't necessarily have the support at home. A lot of black males are in special ed because they may not have gotten that reading assistance, that tutoring, while they were in kindergarten to third or fourth grade. They're behind the eight ball already. The parents might have to work, both parents, if they're working.

That kid is lacking in the resources at home. (Participant 3, Individual Interview, 7/29/2016)

While participants discuss the lack of family involvement specific to African American youth with disabilities, both VR counselors expressed the opposite for youth of Latino(a) and those of Asian descent. That is, one VR counselor explained, “Latino and Asian students, they tend to have more family support. The family tends to be there every step of the way” (Participant 2, Individual Interview, 7/26/2016). Moreover, the other VR counselor noted, “I would say the Latinos and Caucasian are more than likely to follow-up with their services. One is because I think they have a lot of parental support. The parents are involved and make sure that they keep their appointments, and making sure that they're on track” (Participant 1, Individual Interview, 7/26/2016). Finally for theme 1, participants discussed family involvement and support specific to disability type. That is, Participant 1 explained, “The parents come with them to make sure that they are connected” and that in relation to youth with LD parents of youth with IDD are more involved “Versus a student that's just learning disabled” (Individual Interview, 7/26/2016). Based on these statements, there appears to be a belief that youth with LD need less family

supports than youth with IDD. Overall, family involvement was identified as a critical component to success, and according to participants, those lacking family involvement are ultimately closed as ineligible (status 1 or 3) or status 30.

b. **Resources and opportunities**

Participants expressed the importance of resources, and opportunities to the success or lack thereof for youth with disabilities in CPS receiving a referral to VR. In relation to 15-year olds having success in the system, one CPS transition specialist suggested “15-year-olds may do better because they had a case open early. Maybe they came to understand what the purpose of it was, which would possibly help them advocate, or maybe someone as a support system with them would help them advocate more as they got ready to age out of high school” (Participant 6, Individual Interview, 7/10/2016). Participant 7 explained that for youth that are older, specifically those who are 21 with more severe disabilities, “These kids have— because I think they have more specialized services, they have better outcomes because they are receiving more services” (Individual Interview, 7/6/2016). That is, he was examining how older youth in the CPS system often have more severe disabilities necessitating more years of secondary education. Moreover, at age 21, “it’s probably more of a make it or break it type thing...they’ve realized they can’t keep sitting at home” (Participant 6, Individual Interview, 7/10/2016).

Additionally, gender was linked to opportunities specific to a lack of opportunities for females:

There are some schools that are integrating more of the traditional male type of classes and programs, and as this continues to evolve, and hopefully it does, then we’ll begin to see a closing of that gap, but I think that today, our culture

continues to see a lot of these differences. I think many schools and many programs are still not at the point where they offer the same opportunities for a young girl in high school that they do for a young man. Is it discriminatory? I think it's discriminatory. Is it right? I don't think it's right. (Participant 4, Individual Interview, 7/15/2016)

Moreover, one DRS administrator echoed this sentiment adding that females are not equipped with the needed skills to go into "sedentary" job position "It's going to be a little bit more difficult to get them a job, going out working as a clerical staff person, because they don't have the typing skills yet" (Participant 3, Individual Interview, 7/29/2016).

Four participants explored the lack of resources, services, and opportunities of African American youth with disabilities as they related to status 3 and status 30 closures. One reason given was that African American students with disabilities are often concentrated in schools with fewer opportunities to access programs and services necessary for successful transition outcomes. Participant 2 believed that a major reason for African American youth doing so poorly is a "lack of information" regarding adulthood options. One participant took this further saying:

A lot of these kids are living in very depressed communities where they attend the schools, the schools that are under-resourced, and overrepresented in special ed. It's a bad combination of really limited employment opportunities within their own community, too. It's a combination of context that is not favorable. Schools are limited in resources. (Participant 7, Individual Interview, 7/6/2016)

Similarly to Participant 7, Participant 4 believed that minority students have fewer resources and opportunities than non-minority youth:

There is that discrepancy, but I still think it's due to the fact of the deficits in the regions of where the minority students are coming from in terms of the types of schools and those white students are coming from higher level areas in terms of schools that have better programming, better funding, better teacher-to-student ratio, a variety of accessing different types of opportunities to learn and acquire experience which the other students don't have. Yes, I think that that's primarily in the black community and the Latino community where we see a lot of this. For some reason, the Asian community continues to do well, but if you really look at the concentration, they're primarily attending most of the schools where the white community is located, so they're benefitting from that enriched environment, contrary to the inner city youth that are in the schools with fewer opportunities.

(Individual Interview, 7/15/2016)

Two participants spoke specifically to youth with IDD, expressing that there are many community rehabilitation providers and other agencies that serve youth with IDD. When discussing why youth with IDD have more success, the CPS transition specialist said "there are many more prevalent successful community rehab partners that serve those populations...I think it's because there's more agencies that are available to serve somebody with an intellectual disability than there are some of the other pieces" (Participant 5, Individual Interview, 7/19/2016). One DRS transition counselor summarized the importance of resources and opportunities:

There are a number of reasons why this is happening. One, school environment is very important. Sometimes case managers are invested, others are not. Some students get more information than others. Resources. In different areas resources

is different. If you have a poor area that you're working in, those resources are going to be more limited than those who have more funds. That translates into more opportunities for the students if they have more funds. (Participant 2, Individual Interview, 7/26/16)

c. **Systemic barriers**

Within both the VR system and school system, participants discussed a multitude of barriers. As a result, these were identified as subthemes of the overarching theme of systemic barriers.

i. **Systemic vocational rehabilitation barriers**

Almost all participants spoke to systemic barriers within the VR system as a reason for failure. Here participants almost exclusively did not link failure to demographic factors; however, one UIC facilitator believed that while the order of selection policy means that youth with LD may be overlooked in the system, this may not be true because "They are the most employable of the whole group, so that might point also in their favor in terms of the numbers" (Participant 7, Individual Interview, 7/6/2016).

Both VR administrators described the issue of students not being properly informed about the purpose and benefits of VR, so they are often unsure of why they have been referred, which leads to status 30 closures. This is how Participant 4 explained:

We see a great deal of that because the student leaves the high school, not really understanding or knowing what the VR program is. Many times they leave there, they don't even know that they've been referred to the VR program. If any of them met their vocational rehabilitation counselor at their IEP meetings and they

were introduced to that person, I'd be surprised, for those that were closed Status 30. (Individual Interview, 7/15/2016)

Moreover, Participant 3 gave an additional reason for status 30 closures "You had a lot of kids graduating, and the counselor didn't keep up with whether they put a plan in place or not. You had a lot of kids that got closed" (Individual Interview, 7/29/2016). Additionally, when referring to counselors closing cases at status 30, Participant 4 expressed that "If they sent an appointment letter out and if they've made a couple of calls and the student doesn't show up, then unfortunately that's where the case is closed" (Individual Interview, 7/15/2016). Additionally, Participant 3 discussed the transient population within Chicago, "Then we can't find them. We close the case. They go into status 30" (Individual Interview, 7/29/2016). On the other hand, Participant 6 mentioned that some counselors make the assumption that students will not work and so close the students as ineligible or status 30, "It's just saying I don't think-they don't want to do anything when they graduate. I don't know why we're getting all these cases. Because you know every student from such and such high school? You've met this person and they said I don't want to do anything? Well, no. Then why are you saying that?" (Individual Interview, 7/10/2016). One reason for this could be that VR counselors do not understand why they are serving youth with disabilities because "They don't see this population as helping them reach that goal immediately. Maybe they'll see that young person two or three years down the road get a job. They can count them as a 26 and now the counselor feels that he's productive and he can show his supervisor how good he is as a vocational counselor" (Participant 4, Individual Interview, 7/15/2016). Moreover, Participant 6 expanded on this statement explaining "If a counselor works a case up to status 10 and they close it in 30, it doesn't affect their rehab rate" (Individual Interview, 7/10/2016). However, Participant 5 made clear that "the counselor is just

not writing the plan” because these students are already eligible” (Individual Interview, 7/19/2016). Moreover, both CPS transition specialists were explicit about the fact that status 30 closures should not be happening because “Literally, all that’s left is for the counselor to lay eyes on the student and have a conversation about—all the disability is documented. All of those pieces are documented” (Participant 5, Individual Interview, 7/19/2016).

Another barrier was that VR does not always communicate effectively with parents and students. One VR counselor suggested that they need help in effectively communicating with students while suggesting what UICs role could have been:

Maybe that would have helped with you all reaching out. Maybe that would have brought up the numbers of the students that would have understood more clearly about what DRS is, and helped connect, bridge that gap. Because you’re research-based. You will get more into detail like this is why you should participate, this is why you should keep your case open, because this, this and this. Or whatever the case may be. Because you all had the numbers, you can run the numbers.

(Participant 1, Individual Interview, 7/26/2016)

Two specific statements were made regarding barriers to services within the system. First, Participant 7 believes that at status 30, “It’s very high, the number of kids that get dropped at this point. I think it’s a reflection of problems with resources within the VR system because they just need to cut corners, unfortunately” (Individual Interview, 7/6/2016). Finally, in regards to transferring youth to adult services, one UIC facilitator pointed out that many case closures could be due to changing from the IDEA to the ADA:

The final thing that I will say is that because of the difference between IDEA and ADA meaning that under ADA you don’t have to give anyone services. Under

IDEA if we're a teacher in a school or I'm a case manager, I'm an OT or PT and it's written in a student's IEP that they get certain services we are bound by law to provide those services and under the Americans with Disabilities Act it is much, much different. VR doesn't have to give anyone services if they don't want to. The onus is not on them to provide services that they've initially said yes to, the onus is on the student to return the phone calls or pick up the phone or something like that. (Participant 8, Individual Interview, 7/12/2016)

ii. **Systemic school system barriers**

While there were many barriers identified in the VR system, barriers were also identified within the school system that lead to unsuccessful student outcomes across status progression outcomes. One of the biggest reasons for gender discrepancies was that males are identified in special education more than females, which leads to more males entering the VR systems from school referrals and ultimately means that males based on sheer numbers have more successful outcomes. VR counselor 2 stated, "The males, well, I think males are more likely to be rehabilitated because we get a larger number of males that are being referred" (Individual Interview, 7/26/2016). Moreover, one UIC facilitator expanded saying:

The way that disability identification works is that males in really any disability category are identifying at a much higher rate than females. There's a lot of reasoning behind that depending on the type of disability, but for black and white purposes or just being to the point, oftentimes males exhibit behaviors around disability that females will not. (Participant 8, Individual Interview, 7/12/2016)

More specifically, Participant 8 suggested that females are often “lost in the system” because of a lack of self-advocacy (Individual Interview, 7/12/2016). Additionally, Participant 8 spoke to the labeling of African American youth with emotional/behavioral disabilities:

I would say that that would be one reason is that there is a larger population of black guys who are labeled BD. That label alone, we know, statistics show that that label alone predicts poor outcomes in employment. That would be one reason, it is not that every black youth is labeled with that, but many, many, many are and that’s due to a lot of different factors, primarily discrimination, racism, mislabeling and things like that. (Individual Interview, 7/12/2016)

This is specific to the school system, as VR does not identify students as having an emotional/behavioral disability. Participant 8 presented school resources as a systemic barrier to success for African American youth stating, “Many of the schools don’t have enough supports even beyond not having enough supports to do case management or on-the-job support or job coaching for some of the more severe kids” (Individual Interview, 7/6/2016).

The VR counselors brought up two concerns in relation to barriers within the school system. First, both participants explained that status 30 closures were because students “don’t want to be stereotyped anymore with the label” of disability (Participant 1, Individual Interview, 7/26/2016). Secondly, the transient population in Chicago was offered as an explanation for status 30 closures, “kids don’t come back, some of them transfer, some of them dropout, some of them move to different schools” (Participant 2, Individual Interview, 7/26/2016). Each believed these to be system-wide issues that need to be addressed within CPS.

2. **Research question 2a**

In regard to the discrepancies between youth with disabilities who attain status 26 or status 28 outcomes, participants discussed three overarching themes including (1) family support, (2) community and agency supports, and (3) resources, opportunities, and services. While these themes are similar to those in research question 1a, these themes still emerged for youth that receive services in the system beyond ineligible or no service closures. That is, participants believed these to be the most critical pieces to success or lack thereof within the VR system. See Figure 4, Appendix A for an illustration of the reduction of themes.

a. **Family support**

Participants discussed family support as it related to gender and race/ethnicity of youth with disabilities' employment status within the VR system. That is, one participant believed that females have worse outcomes within the system because "Typically, parents tend to let young men be more independent than the young ladies. They're more willing to let young men travel alone as opposed to letting their daughter who has a disability travel by herself" (Participant 2, Individual Interview, 7/26/2016). That is, she was discussing that parents felt it was not safe to allow their female children independence and linked this to the infantilization of females with disabilities.

Race/ethnicity was a large category within family support with almost all participants suggested this as an important factor for success. One participant believed that family involvement is lacking within the African American community for multiple reasons. First, she examined government assistance and parents resistance to "let go of the check" stating "Unfortunately, a lot of kids, they get SSI. Their parents don't understand that SSI is social supplemental income, and it's the income that's used for—and I don't even know how—for

everything” (Participant 6, Individual Interview, 7/10/2016). Further, she discussed how many African American parents believe “He doesn’t have a disability,” and that when they do, they are not participating in transition activities at home. That is, “I’ll say do they do daily living activities at home? Do they make their own appointments? Do they know how to balance a checkbook or however? Can they use an ATM? Oh no. Can they travel independently? Oh no” (Participant 6, Individual Interview, 7/10/2016). Ultimately, she linked these issues back to parents not wanting to lose their child’s SSI check “No, they don’t need any of that because he gets SSI” (Participant 6, Individual Interview, 7/10/2016). One participant made the distinction between African American and Latino youth with disabilities that receive services from VR, that the success differences are due to family involvement, “I don’t know if there is no involvement from the family. That’s a possibility because in the Latino culture, there is a tendency for the family to get involved, so they might be getting help” (Participant 7, Individual Interview, 7/6/2016). This sentiment was reiterated by Participant 6 stating that Latino parents “They encourage the students to—did you call? Did you go to the orientation? The black students aren’t getting that” (Individual Interview, 7/10/2016).

Moreover, one difference in employment discrepancies between Latino youth and African American youth was explained as:

Latinos, I think the thing about them, a lot of them out west and even north. I think they’re more open to taking whatever kind of job they can get, to get the experience. Whereas, you have a lot of black kids, I don’t want to go on the west side. I don’t want to go that far. They tend to find reasons. The parents, I believe, assist in that, and don’t really understand—and it could be this. (Participant 3, Individual Interview, 7/29/2016)

When referring to the actual process within the VR system, Participant 6 suggested, “Latino students, if they connect with someone that’s Latino that they feel that they can trust, the parents are more apt to sign things. They’re more apt to just ask more questions. Then once they have a basic understanding, then they’ll go ahead” (Individual Interview, 7/10/2016). Moreover, one DRS administrator described the family support in the Latino family:

It becomes a group family activity in which the individual goes through the rehabilitation process. It’s not just the Latino customer with the disability that’s going through the rehabilitation process. It’s the whole family that’s going through the rehabilitation process with them. When you have every member of your family knowing that you’re a VR customer and you’re going through the process, and they’re learning about the supports that he’s getting, they’re also acquiring this knowledge and they’re also benefiting from it indirectly.

(Participant 4, Individual Interview, 7/15/2016)

Participant 2 summarized the success of Latino(a) youth with disabilities in transitioning from CPS to adult VR services and obtaining a successful rehabilitation outcome:

With the Latino youth, I think these students typically have more family support. In my experience in the schools they get more information and they’re conditioned at a young age to work even if it’s not a requirement to go to college. Even if it’s a job where it requires labor, they’re taught at an earlier age to work. I think that’s across the board. (Individual Interview, 7/26/2016)

b. **Community and agency supports**

Community and agency supports were discussed as important issues for youth with disabilities based on their race/ethnicity and type of disability. Specific to African American youth with disabilities, one DRS administrator believed that:

Once again the lack of community supports, the lack of opportunity and just the total distrust of the black community with the institutions and the systems. Young kids and young black men will end up coming to VR and questioning, “You guys are the government. You are this.” There’s this lack of, are they actually going to help me? They come with poor experiences in working with any kind of institutional system. (Participant 4, Individual Interview, 7/15/2016)

Additionally, two issues emerged surrounding employment opportunities for African American youth with disabilities. First, Participant 3 discussed lack of employment options in neighborhoods concentrated with the African American population:

Especially in the black communities, there’s not a lot of part-time jobs. Mom and pop stores have disappeared, with the—in Chicago, I don’t even know if you have the big chain stores, especially on the south side, now. I know you have Jewel that’s right on the Dan Ryan and everything else, but Chicago is—even though it’s not a huge city, it’s a lot of people. You got a lot of competition, even for those part-time jobs. (Individual Interview, 7/29/2016)

Secondly, one CPS transition specialist explained that many African American youth with disabilities have unrealistic employment expectations:

What are you bringing—you’re not bringing anything to the table. Because they come up with dollar amounts. Oh, I’m not going to take less than \$14.00 an hour.

Based on what? Because you don't have any social skills. You don't have any work skills. You don't have any work tolerance skills. You don't have any work ethic. I could help you create a resume, but it's not going to have anything on it except for your high school and you volunteered at the church or something like that. (Participant 6, Individual Interview, 7/10/2016)

When discussing youth with mental disabilities, the general belief was that the mental health system in Illinois is broken "In the area of mental health, it's very important to understand that our mental health system is very fragmented" (Participant 4, Individual Interview, 7/15/2016). He expanded on the disjointed mental health system:

If we had a map of the State of Illinois and we were able to chart where every mental health clinic or access to mental health services throughout the State of Illinois existed, we would see that in most parts of the State of Illinois, there are not enough or we're basically in a desert of mental health services in the State of Illinois in most counties in the state. There are at best maybe four or five counties that we could say in the whole State of Illinois that has enough mental health resources to be able to serve the population located in that geographical area. I think we need a lot of work to do in that field, in that area. (Participant 4, Individual Interview, 7/15/2016)

Speaking more specifically to VR services for youth with mental disabilities, Participant 4 explained:

What most of the counselors have shared with me is that it's a challenge with people with mental illness because of the lack of ongoing supports in the mental health service sector that are structured enough to help people with mental illness

to sustain their stability for a constant period of time so that they can secure employment and then be on their own. (Individual Interview, 7/15/2016)

Speaking specifically to CPS, one UIC facilitator suggested “Although best practices is supported employment for adults with mental illness, my perception is that supported employment has not been used very widely, at least not in CPS, with this population. It makes it very difficult for them to actually succeed” (Participant 7, Individual Interview, 7/6/2016). Furthermore, Participant 7 stated in reference to youth with mental disabilities, “The complexity of that disability and the lack of community-based support for rehabilitation, mental care, professionals that can take care of these children, psychiatrists that can medicate these kids, etcetera-it's a hard combination of very challenging factors that lead many kids to struggle” (Individual Interview, 7/6/2016). However, in an effort to correct some issues surrounding serving youth with disabilities one DRS administrator explained, “It actually gave us the opportunity, with CRP agency X, to identify those kids with mental illness who were able to work, because they specialize in that” (Participant 3, Individual Interview, 7/29/2016). Finally, youth with IDD and mental disabilities were discussed by one participant in relation to community and agency supports stating that these supports:

Seem to be more intact for individuals with developmental disabilities and intellectual disabilities, and seem to be for mental health issues as well. You also have to think that maybe that person’s experiencing holes in other parts of services that they probably need, just due to underfunding and just agencies not focusing on that. (Participant 5, Individual Interview, 7/19/2016)

c. **Resources, opportunities, and services**

Resources, opportunities, and services emerged as a theme across participants based on the likelihood of status 26 or status 28 outcomes for gender, race/ethnicity, VR services received, and the school system. Participant 8 expressed that in relation to services for males and females:

I think it is twofold, I think that females are under identified. I also think that there are many disabilities that exhibit themselves in males and not in females. That just depends on the facility. Certainly for learning disabilities there's quite a difference there where there are lots of hidden things that happen in females and we are conditioned in a certain way in schooling where females are identified at a much later time or possibly never at all. (Individual Interview, 7/12/2016)

That is, females being under identified, never identified, or not exhibiting a certain characteristic means that female youth with disabilities are not receiving the opportunity or access to services to increase successful employment outcomes. Moreover, one DRS administrator believed the reason for less females in the system and less successful females in the system is the opportunity and insistence to attend college because females are “primarily the ones that go get their associate's degree, then go on and get the college degree, or have skills and the verbal skills to go out and communicate better” (Participant 3, Individual Interview, 7/29/2016). That is, females who attend college often do not feel that they need VR services once they have graduated (Participant 1 & 3, Individual Interview 7/26/2016, 7/29/2016).

In terms of school resources, Participant 5 believed this to be a major reason why African American youth with disabilities do poorly. She suggested:

I think if you look at students that are African American in Chicago Public Schools, especially depending on which neighborhood that they're coming from, too, and which part of the city that they live in as well, you'll find that this is also a demographic, this lower achieving in test scores and graduation rates as well. Again, we could think about why that may be. (Participant 5, Individual Interview, 7/19/2016)

That is, she explains that African American youth with disabilities are concentrated in low-performing schools, low-income neighborhoods, and have lower graduation rates.

Participants spoke to vocational rehabilitation and guidance, job search assistance, and job placement as crucial to the success or lack thereof for youth with disabilities entering the VR system. One DRS administrator thought that “For youth, and the three services you have here is job placement services, job search assistance, and vocational rehabilitation and guidance, the reality here is that these are the core services or the core aspects of supports that anybody that is looking towards entering employment will need in their lifetime” (Participant 4, Individual Interview, 7/15/2016). Participant 7 believed vocational rehabilitation and guidance to be important for youth with disabilities stating, “...this is the core of the vocational rehabilitation counselor's job, which is to help the kids understand the process” (Individual Interview, 7/6/2016). In further evaluating this service, Participant 7 suggested, “That means that the VR counselors are doing their jobs because they are counseling” (Individual Interview, 7/6/2016). One counselor explained the importance of this service:

For rehabilitation and guidance, I would think that because you're helping the student to set realistic goals they are setting goals that they are actually able to achieve like you have some students who are very good with cooking and decide

to go into culinary arts. That's something that they have sometimes taken in school and are familiar with and actually can do as opposed to someone who has a disability in math and decides that they want to become a mechanical engineer. We know that engineering requires a lot of math. As a counselor it's up to you to kind of guide your student in the right direction. Maybe if that student instead of doing mechanical engineering can do something closely related or in that field, but that doesn't require that type of math. That way they can achieve their goal. (Participant 2, Individual Interview, 7/26/2016)

She expanded her sentiments to job search assistance and job placement:

With the job search assistance and with the job placement assistance, I think the rates are higher because they have information. I mean they have assistance, they have help... We have the resources to be able to assist with this, which is why they're more successful. (Individual Interview, 7/26/2016)

One UIC facilitator was surprised to see students with higher rates of success based on these services are "such vague and broad terminology" and it is specifically unclear "what vocational rehabilitation and guidance means from one office to the next" (Participant 8, Individual Interview, 7/12/2016). However, she was clear that:

If someone is writing vocational rehabilitation and guidance on a plan versus a counselor who is not writing it on a plan, sure it's more likely that the client, the individual with the disability, if their plan says VR and guidance, is going to get something rather than the person where it's not on that plan and they're just going to get nothing. (Participant 8, Individual Interview, 7/12/2016)

While there are mixed beliefs about what services mean, Participant 4 specified, “Young people that receive these three services, they’re going to be more successful. They’re going to have the knowledge. They’re going to have the guidance. They’re going to have the structure and the path” (Individual Interview, 7/15/2016).

Regardless of age, gender, race/ethnicity, type of disability, or services received, one UIC facilitator explained, “Who is getting help is actually very small because 582 kids in 8 years is a tiny group” (Participant 7, Individual Interview, 7/6/2016). Moreover, one DRS administrator summarized how demographic and service level variables affect the opportunities for youth with disabilities in the VR system:

These are experiences through the vocational rehabilitation process, experiences through accessing these services that these different components of our society, whether they’re black, white, women, or Latino, or Asian, each one of the backgrounds of the experiences that they bring to the process is going to be distinct, and I think that has a tremendous influence on the overall outcome of how they access the services and at the end, benefit from them, and to what level of outcome they actually reach. (Participant 4, Individual Interview, 7/15/2016)

### 3. **Research question 3**

Participants were first asked to explain the purpose of the partnership before delving into the third research question. Participants explained that the original purpose of the partnership was to repair the relationship that was broken as a result of the cancellation of the DRS-CPS contract in 2010 (3, 4, 5, 7, & 8). Moreover, the goal was to build an actual partnership rather than just a contractual obligation through the utilization of a facilitator (UIC), provide training/continuing education, build a new referral process to serve youth with

disabilities, create a common language amongst organizations, improve communication between organizations, bring the organizations together in collaborative meetings, educate parents and students on VR services, and to develop a partnership brochure for youth with disabilities and their families (1, 2, 3, 4, 5, 6, 7, & 8).

Participants were asked a series of questions to better understand what has happened, what was currently occurring at the time of the interviews, and the future goals of the partnership, as well as how the outcomes of youth are affected by this interagency collaboration initiative. Four main themes emerged and included: (1) basic requirements of interagency collaboration, (2) systemic challenges, (3) the current partnership, and (4) future partnership goals to better serve youth with disabilities. Within basic requirements of interagency collaboration two sub-themes were identified as communication and stakeholder qualifications. Additionally, CPS challenges and DRS challenges were sub-themes of systemic challenges preventing the best possible services to youth with disabilities. The current partnership was broken down into the sub-themes of partnership successes and current challenges within the partnership. See Figure 5, Appendix A for theme distillation.

a. **Basic requirements of interagency collaboration**

Communication and stakeholder qualifications were two sub-themes of basic requirements of interagency collaboration.

i. **Communication**

Under basic requirements of interagency collaboration, “open and positive communication” was identified as essential to the relationship and to successfully serving youth with disabilities. One counselor simply stated, “communication is key” to building the relationship (Participant 2, Individual Interview, 7/26/2016). Moreover, in discussing their

relationship with DRS supervisors, both counselors believed communication was a necessity. Participant 2 argued, “I think communication, good and open communication is key to a good relationship with your supervisor...communication and task completion” (Individual Interview, 7/26/2016). Participant 1 believed, “If you have a good rapport with your supervisor, you cannot complain, but you can voice your concerns about certain things” (Individual Interview, 7/26/2016). One CPS transition specialist discussed transparency as an important piece of open communication, “Step 1, knowing what you’re talking about. Step 2, just being responsive and open and good collaborators. Answering the phone, replying to emails, it’s also really important, ‘cause we’re trying to model as well how we would like to be worked with. That’s important” (Participant 5, Individual Interview, 7/19/2016). Additionally, the role of the UIC facilitators was seen as crucial to open communication in the partnership. One DRS administrator explained, “UICs role was to bring everyone together and make sure everyone understood what each were talking about, and to try to develop a process that would work to the benefit of the students in the system” (Participant 3, Individual Interview, 7/29/2016). One DRS administrator summarized the importance of open communication:

With the university’s support and with the openness of being able to open a dialogue with Chicago Public Schools and first coming to the realization that we were doing a terrible job, because we were doing a terrible job. I think that we needed to first accept that. Once we accepted the fact that we needed to revamp the system, I think that CPS came closer to developing the partnership and the relationship. As it’s going today, I think we still have that relationship. It’s changed somewhat over the last year because of external factors, but I think that the dialogue has had a great impact. The partnership has had a great impact. It has

impacted office supervisors, special education coordinators in different schools, counselors. (Participant 4, Individual Interview, 7/15/2016)

Within communication, two participants believed that “in-person interaction” was important for the partnership. That is, one VR counselor believed that for successful interactions, “It’s that face-to-face. I think that’s the most important, when you’re looking at someone, body language, knowing if they are understanding what you’re talking about, knowing if they are receptive to what you’re saying” (Participant 1, Individual Interview, 7/26/2016). One UIC facilitator also explained that in regard specifically to working with DRS professionals, “I think face to face contact, I think phone calls. The emails were not super successful in terms of organizing counselors or administrators from the DRS side of things. I think all of that face-to-face time that I logged with DRS professionals was a helpful strategy in fostering a good rapport” (Participant 8, Individual Interview, 7/12/2016). Further, Participant 2 spoke to the collaborative meetings as a safe space to have each other’s voices heard “It was nice that it was open forum, where we were able to express our self in a constructive manner. I know how hostile it can get with certain staff” (Participant 1, Individual Interview, 7/26/2016).

The DRS administrators explored the idea of “giving a voice to those on the ground.” One participant said that stakeholders learned that “Sometimes you let the people who are actually going to do the work do most of the talking” (Participant 3, Individual Interview, 7/29/2016). Additionally, a DRS administrator explained that when working in the collaboration with other members of DRS:

I think the counselors; we got them more engaged in the process. We had various meetings with them and discussed this initiative with them. We had given them the opportunity to participate and we realized that this was key because they were

actually going to be doing the work, so to develop a process or institute something in which they had no participation in or voice in was obviously not going to work. We felt that if they were engaged, they participated from the start, from the beginning, had the opportunity to shape it and say, “You know what? This is what we’re doing. I participated in it. This is how we chose to do this,” we would have a better outcome of what we wanted to accomplish through the process.

(Participant 4, Individual Interview, 7/15/2016)

Participants noticed “improvements in communication” throughout the progress of the partnership. Some participants suggested strategies to improve communication. One DRS counselor suggested that it’s important to voice “Not just your concerns, but I’m the type—I feel like if you have an issue with something, or if there’s a problem, I feel that you should bring a possible solution to the table as well” (Participant 1, Individual Interview, 7/26/2016). One CPS transition specialists utilizes a minimalist strategy, “We’ve learned along the way that you need to be very clear with just one or two points of conversation each time” (Participant 5, Individual Interview, 7/19/2016). This strategy keeps it simple and avoids a situation in which “Everybody leave more confused than when they came in” (Participant 5, Individual Interview, 7/19/2016). Participant 4 described how DRS leadership improved communication:

When I’m communicating with them, I always try to share what I’ve learned in terms of what are the best practices in VR, what are the best practices that we’ve acquired to transition through this process. (Individual Interview, 7/15/2016)

Further, he believed that significant changes within DRS occurred just by improving communication and engaging in in-person interactions:

It has impacted me tremendously because I had an opportunity to hear from the counselors directly during this process, the supervisors also. Not only did I get to know them better through this process, but I know some of them to the point that I know which counselors have what skills and which ones have certain limitations in certain areas or their interests are different. I know which supervisors are the ones that are more active in the community, which ones are the ones that are more active internally, administratively, in their office, what their styles are.

(Participant 4, Individual Interview, 7/15/2016)

While there were clearly positive impacts on communication both within and between the agencies, there were also “communication barriers.” One VR counselor explained that there were too many people that believed they were in charge, which led to “a breakdown in communication at some point and I think that there was a lot of tension” (Participant 2, Individual Interview, 7/26/2016). She clarified that this communication barrier does not affect the counselors anymore because:

The higher-ups meet together, and we’re not necessarily involved with that, which I think is a good thing because it takes out some of that, I don’t know, that red tape that everyone—too many people in the mix. The higher-ups now deal with all that, and then just give us the instruction and I think it works better that way.

Individual Interview, 7/26/2016)

That is, Participant 3 made clear that communication barriers have been present at all levels of DRS, “Sometimes we’re our own worst enemy. Then, you have the same thing at CPS” (Individual Interview, 7/29/2016). That is there is interagency and intra-agency communication barriers, which prevented youth from being served to the best ability of these two organizations.

ii. **Stakeholder qualifications**

Commonly throughout the individual interviews, the necessity for qualified employees came up as essential to successfully serving youth with disabilities in the VR system starting in high school. Specifically, one of the biggest hindrances to the process of collaboration and serving youth in the school system was unqualified DRS employees.

Participant 7 stated, “There are very diverse levels of quality among the staff, from very good people to very bad people” (Individual Interview, 7/6/2016). Moreover, One CPS transition specialist explained that counselors are not qualified to help students set employment goals:

This is the thing, this is no different than what you were doing before. You’re a VR counselor. Now you just have a different client base. Some of the counselors that are just totally opposed to seeing you, I don’t get that. Now I get some when I witness that what do you want to do when you graduate from high school? Oh, I’m going to become a chemical engineer. I write that down. I’m sitting there, like ask another question. Look at the IEP. Is this a realistic vocational goal?

(Participant 6, Individual Interview, 7/10/2016)

One UIC facilitator described the issue of personnel qualification:

I think DRS as a whole have issues of quality control of their personnel. People that become bureaucrats, basically. They have a very strong union, very difficult to manage, very difficult to educate. There are issues of training of some of these people because some of these people have been out of college for many years, and they were not exposed to best practices. They haven't learned what's going on in terms of what are the best models that we have now, best practices, state of the art. Some of these people have been in their jobs forever, and they keep doing

whatever they learned 20, 30 years ago. (Participant 7, Individual Interview, 7/6/2016)

Additionally, another UIC facilitator explained:

They were really unqualified to do that level of work. Trying to work with administrators within the DRS system who are significantly unqualified content knowledge wise. They have no idea what interagency collaboration is. They have no idea what secondary education looks like in the city of Chicago. Those factors contribute to significant barriers in terms of setting up streamlined citywide systems that are going to support kids and families getting what they need from the VR system. (Participant 8, Individual Interview, 7/12/2016)

Ultimately, participant 8 suggested the biggest barrier in stakeholder qualification was that:

VR counselors don't know what to do on the ground, and then they certainly don't know what to do when it comes to transition and working in secondary education, which is a completely different thing than what every other VR counselor does working with just adults who are out of school. (Individual Interview, 7/12/2016)

Based on participant statements, it seems that one missing piece for many VR transition counselors is understanding the school environment, the role of teachers and case managers, and the role of the family in the rehabilitation process of the participating youth which is different from the adult caseload. However, three participants in this study had worked in one of the other agencies during their career. That is, one VR counselor was a former special educator in CPS, which she believed made her qualified to serve youth with disabilities in the secondary school system:

Well, that's fairly easy for me, because I was a former CPS teacher for about a decade. I know the ins and outs. As far as with principals, with teachers, I understand what they're up against, I understand what they have to do and I do understand when someone's coming in saying oh, could you do this? On top of everything else they have to do. It's extremely stressful. I do understand that.

(Participant 1, Individual Interview, 7/26/2016)

One CPS transition specialist previously worked in DRS, which helped her because she knows the system, which was particularly useful when DRS denied having a form for social security numbers:

Somebody mentioned stuff with the social—first of all, all the Social Security number back and forth, I said from the very beginning, that's a DRS requirement. I've worked caseloads. You sit in front of a person. DRS requires a Social Security number... Why wouldn't you give us this before? It can be a part of the packet... The form existed all along. I knew it existed. I was like excuse me. This is what I've been asking you for. (Participant 6, Individual Interview, 7/10/2016)

Similarly, one UIC facilitator was a former CPS special educator, which she believed “gives me a certain edge and angle around being able to lend consultation and expertise in these areas (Participant 8, Individual Interview, 7/12/2016). Moreover, she expanded, “I am not a DRS professional, but from the school side and working very closely with DRS as a school professional I understand it very well” (Individual Interview, 7/12/2016).

Lastly, VR counselors, VR supervisors, and UIC professionals were discussed in relation to receiving support to gain knowledge. That is, one DRS administrator stated in regards to the benefits of the partnership,

I think it was really important for them to understand that we were there to support them and to help them do their job better. I think that a lot of supervisors of vocational rehabilitation services enter the field not having the full array of supervisory skills that they need in order to supervise staff. (Participant 4, Individual Interview, 7/15/2016)

In regard to VR counselors, one CPS administrator suggested that counselors need more support:

I'm going to start from the counselor level and just say that they are a group of people in need of a huge amount of support. I don't know what they're getting. Some of the symptoms indicate that they're not getting enough, because they don't seem to understand the intricacies of how this works in CPS, even though they've been doing it for several years. (Participant 5, Individual Interview, 7/19/2016)

Additionally, one CPS administrator felt that in the beginning, it took time for UIC to understand the capacity of CPS, "You've got great ideas. I do think you do most of the time, but not everything is just you get to wave your magic wand over there in academia, as opposed to being attached to the boots on the ground aspect of what some of the work is;" however, she believed, "That's the part I think sometimes was a little difficult in the beginning. I would say that that was tempered way lower by the time—by that end of the relationship or the end of the UIC part of it" (Participant 5, Individual Interview, 7/19/2016).

b. **Systemic challenges**

Systemic challenges were mentioned by all participants as issues that affected the success of the partnership and ultimately hurt the ability of the agencies to serve

youth with disabilities transitioning into adulthood. In particular two sub-themes of systemic challenges developed, (1) systemic challenges in CPS and (2) systemic challenges in DRS.

i. **Systemic challenges in Chicago public schools**

Challenges within the CPS system ranged from the top of the system down to the individual school level. At the top level, Participant 7 mentioned, “CPS is just massive. It's too big. Not enough money. Not enough resources” (Individual Interview, 7/6/2016). Participant 1 felt that CPS did not deliver appropriate services to their youth with disabilities:

I think there's a problem with how they're doing that. Meaning I think CPS does not want to provide needed services that the students need while they're under their umbrella, in their care. Now I know when students graduate from CPS they're our responsibility now. I feel like CPS doesn't take that full responsibility with the students because they're in their care and it's like you all are doing this. You all are doing that. Talking about the state workers, the state employees, when I feel like a lot of those services they are responsible for doing. (Individual Interview, 7/26/2016)

As explained by one DRS administrator, school level challenges were present within the system:

The biggest barrier is the fact that the CPS system is—their chain of command is not like many people would think. You have a person who's a director and under that person you have administrators and then principals. It's not that kind of a structure. You have the administration and they guide and they develop initiatives and then you have the schools. In the school, you have a principal, you have the

people in there, you have the coordinators. One school can be totally different from another school. Maybe that's the way education should be...but you have to have some sort of consistency to be able to work with a system like ours.

(Participant 4, Individual Interview, 7/15/2016)

He expanded discussing the funding within each individual school:

The resources—I'm not being critical of the principals or the schools. I think they do the best work that they can, given the resources that each school has because, as we indicated, not every school is equivalent. They're not all equal. Some schools in the city of Chicago, you can go two, three, four, five blocks. One school five blocks down the road can have tremendous AP programs and specialized programs and then the other school five blocks down the road is struggling to survive and has no resources. I think that in itself really administratively and process and implementation really gave us an eye opener in terms of what we've learned and how we're dealing with it today. (Participant 4, Individual Interview, 7/15/2016)

At the level of the schools, one UIC facilitator suggested one barrier was CPS removing a transition incentives program, "They pull out things that are working all the time, like getting the incentives to teachers to do the work, which was eliminated—basically, the system disappeared one day" (Participant 7, Individual Interview, 7/6/2016). This program gave teachers a stipend on top of their salary to deliver a transition-specific curriculum to youth with disabilities in CPS. As a part of the program, emphasis was placed on job development and on-the-job- supports that allowed youth to work in the community and attain successful closures.

Finally, in regard to the partnership, barriers were discussed in relation to the referral process. One UIC facilitator elucidated referral challenges during the development of the partnership:

There are barriers in CPS because it is a massive unhealthy organization, so those barriers yes. For example, trying to set up the online referral system with the original team with the original CPS transition manager, there were things that we couldn't do online. There were things around social security numbers for students and sitting down in a room and actually looking at a screen of what the template would look like online when a case manager went in and tried to fill out an online referral. (Participant 8, Individual Interview, 7/12/2016)

ii. **Systemic challenges in the division of rehabilitation services**

Overwhelmingly, all participants identified many systemic challenges within DRS. Barriers were mentioned in all levels of the organization. Two stakeholders brought up the VR union as a challenge to success in the partnership. When discussing the needs of CPS, one CPS transition specialist explained:

I think when somebody needs potentially some sort of redirection or employee process, 'You're not doing your job, you need to do this, you need to do this,' I think they're scared to do it because I think that there's, from what I understand, a lot of union protections that make it possible for people to not really do their work anyway. (Participant 5, Individual Interview, 7/19/2016)

One UIC facilitator expanded, "It's very difficult. If you have a bad employee, you can write him up, but get rid of them? Very difficult" (Participant 7, Individual Interview, 7/6/2016).

One CPS transition specialist discussed communication barriers, “From the leadership standpoint, the highest level, so the bureau chief and the director, I said before, communication is very firmly intact on our CPS end. It doesn’t seem to be firmly intact within their own organization” (Participant 5, Individual Interview, 7/19/2016). Moreover this CPS transition specialist argued a major communication issue between leadership and the office level of DRS, “Still seems to be the same issue, that while it’s clear and the working relationship is great on this very highest level, it does not seem to translate to feet on the ground. That seems to be the ongoing issue” (Participant 5, Individual Interview, 7/19/2016). Additionally, a CPS transition specialist mentioned counselors’ lack of understanding around the process of serving youth with disabilities:

We sent them a letter. They didn’t respond, they didn’t come into the office. What are you talking about? You’re supposed to be going to the school. You don’t even need to send them a letter. Take your ass to the school. They’re not going to come to your office at 10:00 in the morning because they’re at school. (Participant, 6, Individual Interview, 7/10/2016)

Another issue that arose surrounded moving students through the VR status progression in a timely fashion:

That’s the problem. I mean I have some students that have already been seen by two agencies for their orientation and their gathering their paperwork and getting ready to put them in front of employers to do entry work at Dunkin Donuts, Soldier Field, whatever. Those cases haven’t been opened yet and we’ve already referred them. We referred them over a month ago and they’re in referral and application status. (Participant 6, Individual Interview, 7/10/2016)

In addition, participant 5 described counselors failing to transfer students to adult services after finishing high school:

When I am now doing this data lookup, and I have kids that graduated in 2015, and they're still in your STEP caseload. That means they graduated with nothing, because you didn't move them where they were supposed to be moved. If you would've done that, then they would be in a different status and they wouldn't show up on my list anymore. (Individual Interview, 7/19/2016)

One DRS administrator went on to discuss office level barriers within the VR system:

First, it was the issue of, why are we getting involved with these young people? I've got a lot of work. The supervisors were thinking, "You know I only have so many counselors and you want me to go to all these schools and you want me to do this and do that." I think the resistance that we received was due to the fact that we have implanted in their way of functioning or assessing their productivity based on the number of individuals they put into employment every year. They don't see this population as helping them reach that goal immediately. (Participant 4, Individual Interview, 7/15/2016)

One VR counselor agreed that not receiving an outcome for successful students was a systemic challenge, "Once I put them on a transfer list that doesn't count. I mean it counts, but it doesn't count for me. It counts for them, of course. Because they're being connected to adults, so that's my main goal" (Participant 1, Individual Interview, 7/26/2016). When discussing a case counting for her, she was referring to her rehabilitation rate and transferring the adult caseload.

One VR counselor believed that DRS administration has unreasonable expectations for counselors, "They have no understanding of the timeline. They think that we can move the case

the same day and it's impossible with 250 cases. It's just unrealistic. We're told that we can move them through plan, but when you get 30 to 50 cases all at one time, it's unrealistic" (Participant 2, Individual Interview, 7/26/2016). As this VR counselor described, many referrals were coming to the counselors leading to large caseloads. One CPS administrator discussed the contract for fiscal year 2017, "They want us to have 2,000. They can only work—I think that they can realistically work 800. I think that's a real number to go and meet with and work with. Anything above that just seems to get out of control. Eight hundred might even be out of control; I don't even know" (Participant 5, Individual Interview, 7/19/2016). At the time, there were only five VR counselors providing transition services in CPS and in order to serve 2,000 students DRS would need to hire many more counselors.

Furthermore, one current barrier is the decentralization of the transition counselors. When UIC exited the partnership in June of 2015, the transition counselors were under the supervision of one transition supervisor while also working out of their respective offices. The point of this centralization was to ensure that CPS had one supervisor as the point of contact and that counselors were receiving information from one person rather than from multiple supervisors. One DRS administrator detailed the problem with decentralization meaning there is "no transition unit" and "They're reporting right back to their supervisors." Each one of them now reports to the supervisor where they're housed. It means you got more players involved. One thing is being told different to each counselor. You have six supervisors, six specific counselors" (Participant 3, Individual Interview, 7/29/2016). However, the only positive outcome of the decentralization was "It allowed us to remove one of the counselors who was awful" (Participant 3, Individual Interview, 7/29/2016).

c. **The current partnership**

Under the current partnership, partnership success and barriers/challenges within the partnership developed as sub-themes.

i. **Partnership success**

At the most basic level, one VR counselor said that the partnership gave her “More insight about how the process goes when serving a person with a disability from outside of the school system” (Participant 1, Individual Interview, 7/26/2016). The partnership in the current state was seen as having success by one UIC facilitator because:

I think the referral system is very well done. That will be our lasting legacy there in terms of that—our partnership in that. It’s well done, it’s working, students are being referred, case managers and CPS know how to do it. They know how to use the system. I think that’s amazing, so I think that’s really positive. CPS has worked their tail off to provide professional development and guidance around using that referral system and disseminating that information throughout the entire district and they’ve done a phenomenal job. (Participant 8, Individual Interview, 7/12/2016)

A DRS administrator explained the importance of the role of UIC in creating sustainable practices, “We really value their capacity to bring to us the different models, the different methods, the different ways of interpreting what our day-to-day activities are and our engagement with our customers, with our community partners, and institutions like the educational system” (Participant 4, Individual Interview, 7/15/2016). Participant 8 reiterated:

I think that the women, the VR counselors who started with us at the inception of this partnership know what they’re doing. Some of them surely are better

counselors than others, but those transition VR counselors that started with us that got kind of supported by UIC to work within the secondary system and do transition specifically. (Individual Interview, 7/12/2016)

Ultimately, Participant 7 suggested that a success of the partnership was the foundation, “The good news is that we were able to set up the stage and the framework” (Individual Interview, 7/6/2016).

One DRS administrator believed that as a result of the partnership there is more “intra-agency support” in that:

The strategy that we took was that we were going to approach the supervisors, express the fact that we were there to support them, help them in their leadership role, and provide them with any kind of supports and training that they needed in order to improve their ability to manage their offices. (Participant 4, Individual Interview, 7/15/2016)

Additionally, DRS and CPS provide “reciprocal support” utilizing two DRS liaisons within the CPS school system. One VR counselor spoke about working with a DRS liaison, “We both worked well together, whatever it is that she needs, I try to accommodate. The same thing for her. If I need something she will try to do the same” (Participant 1, Individual Interview, 7/26/2016). One CPS transition specialist expanded this sentiment:

We have two content experts that are facilitating this on our end. They know, they’ve both done casework; they both know what it is to be a DRS counselor. They have both done that work. They also get the CPS side of it and prefer the CPS side of it, which is why they’re working on our end and not their end. Working with two people that know it as intimately as they do has provided a

phenomenal wealth of knowledge for being able to identify when things are not going well. (Participant 5, Individual Interview, 7/19/2016)

One DRS administrator explained the change in the partnership:

With the partnership, it changed that whole process because we were wanting a relationship that would be functional and one that would be working towards the goal to help youth with disabilities. That allowed us to engage that process, so professionally I think that in the past we just had a professional relationship trying to meet our obligations as two institutions. Today, we know each other through this process. We work closer. We share more information. We know more about each other's needs and each other's barriers. I work with them at a closer, more professional manner of speaking in a way that's more direct and we're not guessing on each side who's doing what anymore. (Participant 4, Individual Interview, 7/6/2016)

ii. **Barriers/challenges within the partnership**

While participants revealed multiple successes of the partnership, barriers were faced that challenged the progress. In the beginning of the partnership, one VR counselor expressed:

It was a lot of resistance coming from—I guess you would say both agencies, but I think that was also lack of understanding. Like I was saying earlier, lack of understanding with deadlines and timelines that we were up against and you're thinking we don't want to do the work, but the truth of the matter is that we have 30 days to referral, 60 days to eligibility, 90 days to plan. You add that all up at six months. You want us to do six months worth of work in a week, which is

unrealistic, but you're not hearing the people who are really doing the work.

Yeah, it got tense. (Participant 2, Individual Interview, 7/26/2016)

In regard to the collaborative meetings participant 2 said that counselors had "large caseloads" so as a result:

It was like I don't really want to meet with you because I have all this stuff to do and a lot of it was repetitive. If it had been new information or new trainings, that would've been great, but because it wasn't, it was like oh my God, I got all this stuff to do, but now I got this meeting. (Individual Interview, 7/26/2016)

Unfortunately, this participant felt that meetings were not giving her new information, but were instead taking away from her time assisting youth with disabilities. One CPS transition specialist suggested as issue with the meetings, "When you just have people that won't participate, it doesn't matter what you do" (Participant 5, Individual Interview, 7/19/2016). That is, a lack of participation by multiple stakeholders was a barrier to the progress of the partnership. Finally, one VR counselor was concerned about the practicality of the referral process:

Before we were able to pick up those referrals, put those referrals in a system immediately when we got them, as opposed to now, we have to wait and we're at the will of CPS. Whereas before, we would get our referrals and we could possibly have those referrals in by December. Now we're going through the whole school year, and we're getting referrals all the way up through May, which is—yeah, it makes it more difficult. A lot more difficult. Then now we have a higher number of cases as well, so it's a lot more difficult that way. (Participant 2, Individual Interview, 7/26/2016)

d. **Future goals of the partnership**

Stakeholders were asked to evaluate the process of this interagency collaboration partnership including strengths and limitations in serving youth with disabilities in the CPS system entering the Illinois VR agency. As an important piece, stakeholders gave insight into the future goals and evolution of the partnership. That is, under future goals of the partnership some stakeholders thought the partnership would evolve negatively, while others believed there was potential for positive evolution; however, most expected there would be tension between the two.

Unfortunately, some stakeholders did not feel that the impact of the partnership has been enough to convince them of the success in the future for youth with disabilities. One VR counselor believe the evolution will be:

Negative. Only because it's always, to me, seems like finger pointing. No one should point fingers, because no one does everything perfectly. No one does everything the way it should be done. I think we should just work through those issues. Okay, we know that maybe cases aren't being moved as fast. Maybe if we can help you, what we need to do to help move those cases a little. Just offer some solutions other than problems. (Participant 1, Individual Interview, 7/26/2016)

Participant 1 offered a suggestion, "Hopefully it gets better. I don't want to say it's bad, but it could be so much better if everyone understands what their roles are. Really, to me, it seems like its CPS. It seems like every time they always start with something negative" (Individual Interview, 7/26/2016). That is, she does not believe that each stakeholder know their responsibilities in the partnership and serving youth, and that negative attitudes are not going to

solve the problem, rather will heighten the tensions. One UIC transition specialist gave her perspective based on the end of UICs involvement in the partnership:

I mean contractually they will have contracts signed and whatnot, but I would say overall the partnership between CPS and DRS will be very poor. I don't think that we effectively set up strong supports and connections there to last them a lifetime. I think there was certain things set up, that referral system rock solid, awesome, but I think that there will be trouble. There already has been trouble since UIC left there already has been trouble. That's what I think about that. (Participant 8, Individual Interview, 7/12/2016)

Moreover, one CPS administrator was conflicted about the evolution of the partnership; "I am not convinced that the impact of having a DRS counselor in high school makes an impact on you as an adult right now. I'm just not convinced of that" (Participant 5, Individual Interview, 7/19/2016). However, multiple stakeholders discussed the addition of five new CRP agencies in the Chicago area. The functionality of the partnership will change in that CPS will refer 2,000 students to DRS, and DRS will pay the five CRP agencies to help a minimum of 200 of these 2,000 referrals gain employment while in high school. One CPS administrator was hopeful:

If all of those agencies can figure out how to make this work with DRS, and we can support them in doing that. We get 200 kids employed at the end of this year because of that. Then, I'm hoping that that's something that it's just going to become just a regular activity towards—every year, that it's not all of the newness and all of the changes. (Participant 5, Individual Interview, 7/19/2016)

However, while there are bi-monthly collaborative meetings between each partner, "the counselors were only at that one first meeting, where it was just the overview of what we're

trying to do; the kick-off” (Participant 5, Individual Interview, 7/19/2016). More specifically, she discussed the importance of the meetings:

The nuts and bolts meetings that have come after that, whereas specifically who enters the work site form, who approves it, who writes the CRP and IPE all of those nuts and bolts pieces, which I think that the counselors really, really, really need, was just supervisors. I guess the assumption then is the supervisors then go back and make sure the counselors know what to do. (Individual Interview, 7/19/2016)

An additional concern raised by one VR counselor involved understaffing of the agencies, If it evolves into something bigger and greater than what it already is, I think that would be great. I think, before it does evolve into something that can really truly work, CPS would need to hire some people as well as DRS needs to hire some more counselors. Otherwise, we’re never going to work in an optimal rate. It’s just five counselors. (Participant 2, Individual Interview, 7/26/2016)

One DRS administrator explained, “The good thing was CPS laid people off. I was able to make some changes” and as a result, “It may give us more people assigned to Chicago. We may end up with six to ten people assigned to Chicago, especially if CPS is going to make 2,000 referrals this year, compared to 1200 last year” (Participant 3, Individual Interview, 7/19/2016). Currently there are only five DRS transition counselors serving all of CPS. As a result of the funding that is now being used for CRPs, participant 3 expected increased employment outcomes for youth with disabilities while in high school:

I believe we’ll probably get more than 250 because the CRP 1, CRP 2, and CRP 3 have said they’re just going to place kids. If they get the—if their contract says

50, and they get 60 or 70, they know they're not going to get paid for it, but what harm does it do to go ahead and place them? (Individual Interview, 7/29/2016)

Moreover, one CPS administrator felt that "Yeah. I think the new model could work. We'll see if they even get the cases," meaning as long as referrals are moved through plan" (Participant 6, Individual Interview, 7/10/2016).

One CPS administrator described her vision for the future, "I see it being less of a struggle, and I see it being more of just a well-oiled machine. I don't know if we'll ever get there, but that's what I see. I see being able to back out of it, because it's just working, I hope. That's what I see" (Participant 5, Individual Interview, 7/19/2016). She hoped that her involvement in the partnership would lessen as a result of growth. Ultimately, one DRS administrator summed up the progress and future goals of the partnership:

It's evolving right now and it's going to be evolving to improve the quality of services that CPS provides to the students, the opportunities. I can see today that CPS is taking a step forward to creating specific employment opportunities for youth with disabilities within their programs, and we're taking advantage of that. The way we're developing our contractual relationship is also changing. We're working now with younger kids in the schools than we were before. In the past, we were just dealing with seniors, maybe some juniors. Now, we're dealing with sophomores. We're looking at getting more engaged in the pre-employment aspects of transition, something that we avoided always in the past. Today, we're engaged in pre-employment skills training. It's evolving. I think it's going to get better in terms of processes, but there's still a lot of changes that need to occur on both ends. There is a great deal of uncertainty at this point with our budget and

with our funding in Illinois, but if that becomes stabilized and we begin to see some of these issues resolved, I think that we're going to be in a good position, both us and CPS, to be able to continue to improve transition services for youth in Illinois. (Participant 4, Individual Interview, 7/15/2016)

## V. DISCUSSION

This study examined the employment outcomes of youth with disabilities entering the VR system while in CPS, the beliefs of stakeholders about the individual and systemic reasons for these outcomes, and the way in which interagency collaboration can impact the outcomes of youth with disabilities. A large scale VR database of CPS youth with disabilities' was examined from fiscal years 2005 through 2012 to understand factors related the their employment outcomes. The insights of interagency partners from DRS-VR, CPS, and UIC were included in order to delve deeper into their understanding of how each individual characteristic and systemic factor affects the employment outcomes of participating youth. Finally, in order to understand how to move forward and better serve youth with disabilities, each stakeholder's perspectives of the successes, barriers, and needs of the partnership were included in this research.

The following chapter will address in detail the key themes resulting from the quantitative and qualitative analyses to address the overarching question of what is happening within the VR system for CPS students seeking services in order to transition to adulthood. Themes are organized at the individual and systems levels. Gender, race/ethnicity, and type of disability emerged at the individual level. Moreover, systems level key themes included status progression outcomes, VR services, communication, employee qualifications, and partnership goals. Limitations of the study, implications for practice, implications for policy, and implications for research are included.

### A. **Individual Level**

#### 1. **Gender**

The results of the study suggest that females are faring worse in the VR system than males. In general, females had similar status progression closures to males except with

regards to rehabilitation rates. That is, females had a lower rehabilitation rate than was seen in males. Stakeholders explained that males were identified with disabilities more in the secondary school system and therefore entered the system and saw higher rehabilitation rates. The finding that males are seeing more success in the system reiterates the findings within the literature (Balcazar et al., 2013; Fabian, 2007; Gold et al., 2013; Hasnain & Balcazar, 2009; Rabren, Dunn, & Chambers, 2002). Additionally, the research literature shows that females with disabilities have worse employment outcomes than males (Balcazar et al., 2013, Fabian, 2007; Gold et al., 2013; Hasnain & Balcazar, 2009; Rabren et al., 2002). Further, consistent with Balcazar et al. (2013), one stakeholder explanation suggested that females have high rates of postsecondary education attendance while males are more likely to go straight into employment after high school. In addition, not allowing female youth with disabilities to gain independence and under-identification of disabilities by the school system were specified as reasons for their lower employment success. Finally, it was a commonly held belief that jobs that require only a high school degree or less are designed primarily for males.

## 2. **Race/ethnicity**

The research literature has consistently suggested that African American youth do worse than other youth with disabilities (Awsumb et al., 2016; Balcazar et al., 2013; Flexer et al., 2011). Here it was found that African American youth with disabilities have higher status 30 and status 3 closures, lower employment success, and lower rehabilitation rates. Stakeholders elucidated that African American youth lack family encouragement in seeking services and are hindered by depressed communities and schools that lack sufficient resources. African American/Black youth with disabilities had a lower chance of achieving rehabilitation outcomes than youth that did not identify as African American. As seen in the literature, failure in the VR

system was linked to receiving government subsidies (Dutta et al., 2008; Fabian, 2007; Luecking & Wittenberg, 2009). However, Honneycutt et al. (2014) found that youth in the VR system have increased employment outcomes and decreased dependence on social security. Additionally, participants believed that African American families have a distrust of government systems. Consistent with the literature on income and socioeconomic status, youth living in low-income communities with few resources and employment opportunities experienced more unsuccessful employment outcomes (Hasnain & Balcazar, 2009; McDonald et al., 2007; Murray & Naranjo, 2008; Parish et al., 2010). Participants also noted the discrepancy in secondary education for African American youth in schools lacking resources.

Moreover, the results showed that Latino(a) youth with disabilities have high status 3 closures, but also have the highest rehabilitation rate of any race/ethnicity category. Again, status 3 closures according to participants are likely because youth do not understand the system or benefits. Additionally, the immigration status of some Latino(a) youth may lead to closures due to ineligibility (Wagner et al., 2014; Sima et al., 2015). In contrast to the data, one participant noted that there have been issues with Latino(a) youth dropping out of the system because issues with social security numbers and fear of undocumented families being identified.

Additionally, participants explained that Latino(a) youth have strong family support, which increases the success rate of these youth. In fact, participants believed the success of Latino youth with disabilities in VR to be purely due to family support. The existing literature on high family involvement of Latino(a) families supports the finding regarding involvement of the family in the VR process as a strong indicator of student success (Hogansen et al., 2008; Keel et al., in press; Landmark et al., 2007; Povenmire-Kirk et al., 2010; Rueda et al., 2005; Shogren,

2012). Further, participants suggested that Latino(a) families have employment expectations and do particularly well when working with a Latino(a) counselor.

### 3. **Type of disability**

Youth with LD were found to have high status 30 closures while having the highest number of VR referrals. One reason for the higher closure at status 30 was a lack of family involvement, which is supported by the literature (Murray & Naranjo, 2008; Powers et al., 2009; Trainor, 2008). However, it was also believed that youth with LD might leave the VR system before plan because they do not believe they need services or are trying to become an adult without the disability label. As supported by the literature, youth with LD had a rehabilitation rate higher than the average, which suggests that youth with LD are faring better than some other disability groups entering VR (Awsumb et al., 2016; Carter et al., 2011; Fabian, 2007).

Youth with IDD entering the VR system had high percentages of status 3 and status 30 closures, but also had the highest rehabilitation rate of any disability group and the second largest number of referrals. Participants indicated that youth with IDD had more service opportunities and well-rounded supports when compared to other disability groups. Alternatively, Balcazar et al. (2012) found that youth with more severe disabilities often have worse employment outcomes. However, participants were not clear as to why youth with IDD have high status 3 and status 30 outcomes. Though, it is possible that counselors believed these youth would not be able to work, these youth engaged with a different service agency, the youth could not be contacted as adults, or counselors did not know how to work with or aid youth with IDD in obtaining employment. This is a topic that needs further examination.

Finally, youth with mental disabilities were predicted to have lower employment outcomes than youth without mental disabilities. Resoundingly across participants, it was suggested that youth with mental disabilities have less success because of systemic failures. That is, the mental health system in Illinois does not have the capacity to give youth with disabilities comprehensive and potentially long-term multi-agency coordinated services. Poppen et al. (2016) suggested that lack of appropriate services for youth with mental disabilities is a common occurrence with multi-agency collaboration often missing.

## B. Systems Level

### 1. Status progression outcomes

The results of the descriptive analysis suggest that based on demographic factors, youth with disabilities are disproportionately represented across the different status progression outcomes. In particular, students in general were overrepresented in status 3 and status 30. General reasons for closure at these statuses included DRSs inability to effectively communicate its' purpose, poor intra-agency communication about the purpose of serving youth with disabilities, and counselors' presumptions about student work capacity. Moreover, the transient population in Chicago, the stigma of disability labels, and minimal community employment opportunities in low-income neighborhoods were offered as reasons for status 3 and status 30 closures. More specifically the high status 30 closures for youth with disabilities at ages 16, 17, and 18 is concerning. As reported by stakeholders, these youth may not understand the purpose of VR or may not want to have a disability label as they begin to exit the secondary school system. Another reason may be the lack of VR counselor attendance at IEP meetings during these critical transition ages. However, looking at employment outcomes (status 26), youth that were 14, 15, 16, or 17 at time of referral had the highest percentage of rehabilitation suggesting

that transition planning at a younger age is essential which is in line with the requirements of the IDEIA (IDEIA, 2004). Additionally, youth that were referred at ages 15 or 21 had the highest rehabilitation rates. Stakeholders believed that youth 15 years old may have family support or understand the process and benefits of VR, while youth with 21 know they must get services before they are pushed out of the school system. In the end, the literature does not suggest age to be a significant factor in determining student success (Awsumb et al., 2016; Balcazar et al., 2013; Carter et al., 2012; Wehman et al., 2014).

In addition, systemic issues occurred because there are discrepancies in the process of moving a case from referral through plan. That is, CPS and DRS administrators, and VR counselors all had different accounts of when and how a student's case is to be moved from referral through plan. CPS believed that a case should be moved to plan status (not through plan) as soon as the counselor meets with the student after referral. DRS administrators explained that students should be moved through plan as soon as the referral is received. Moving a student through plan means that a student is ready to receive services in high school if necessary, but more likely as soon as the case is moved to an adult counselor. Counselors follow the adult process which means counselors have 30 days to move a case from referral to application, 60 days to move the case to plan, and 90 days to move the case through plan. With this inability to set a standard practice for transition youth and communicate across partners, it is not surprising that the rehabilitation rate of youth with disabilities is under 50%. An additional issue was that some students have not been moved to adult services, but have graduated and need to receive services to gain employment.

## 2. **Vocational rehabilitation services**

The results of the logistic regression model suggest an increased likelihood of employment when youth receive job placement services, job search assistance, and vocational rehabilitation and guidance. According to participants, it is not surprising that youth do better when receiving these services because they are the foundation of VR services. Plotner et al. (2012) found that two domains that VR counselors were most confident in serving youth with disabilities included (1) vocational rehabilitation and guidance and (2) employment preparation and exploration. However, one participant was surprised that youth do so well, particularly when receiving vocational rehabilitation and guidance because there is no standard definition of what must be included in this service. Though one VR counselor made it clear that goals for employment are set under this service.

## 3. **Communication**

Communication was discussed as a strategy and a challenge in the partnership. Reciprocal communication is vital to a functioning collaboration (Noonan, 2014); however, Oertle et al. (2013) believe this to be a common barrier. In this partnership, effective communication occurred between the DRS liaison and VR counselors, through the use of a partnership facilitator, and collaborative meetings. Nonetheless, leadership often silenced the voices of those on the ground and ignored their needs and concerns. Unfortunately, one major barrier in unified messaging is the decentralization of the transition unit, which was originally developed during the original partnership and dismantled shortly after the removal of UIC and addition of a new DRS regional director.

#### 4. **Employee qualifications**

Resoundingly, participants believed that VR counselors were not qualified to be working with youth in CPS. This is often suggested in the literature as a serious impediment to successfully serve youth with disabilities (National Council on Disability, 2010; Oertle et al., 2007; Oertle et al., 2013; Plotner et al., 2012; Plotner et al., 2014). That is, VR counselors lack the secondary education knowledge to provide age-appropriate employment services. Moreover, many participants explained the lack of understanding of the purpose of serving youth with disabilities, which compounds the issue of education. Plotner et al. (2014) suggested that counselors were not clear of their role in serving youth with disabilities while in high school. Another problem was ineffective services in transition programming within CPS. As suggested by Morningstar et al. (2008), many teachers lack formal transition training.

#### 5. **Partnership goals**

While the partnership has not reached full collaboration, improvements have occurred. As participants discussed, a referral system is in place, students are being referred for services, partners know who to contact in each agency, more support is being given to VR offices, and there are two CPS employed DRS liaisons. The partnership has the potential to improve if some critical pieces are addressed such as the status progression process, the development of the attitude of being partners rather than competitors, increased professional development, greater understanding of each agencies' role, and increased staffing of both agencies (particularly VR counselors). Though many improvements are necessary, it is encouraging that five new CRP agencies have been added making this a multi-agency partnership, which has been suggested as crucial to grater employment success of referred students (Noonan, 2014). Moreover, as another promising practice, collaborative meetings are

occurring between partners, though the VR counselors need to be involved more (Noonan, 2014).

C. **Conclusions**

Although the results of this study suggest that some groups of students are doing better than others, overall, it is clear that students with disabilities in CPS being referred to VR must receive better services in order to attain their employment goals. Important themes identified when looking at the outcomes of youth with disabilities were the need for family involvement and support, more resources, opportunities, and services, and community and agency supports, without which participants believed students had worse employment outcomes. Additionally, acting as a catalyst for failure, systemic barriers were identified by all participants. In regards to interagency collaboration, four themes emerged that either supported the success of or created challenges in the partnership to serving youth with disabilities: (1) the basic requirements of interagency collaboration, (2) systemic challenges, (3) the current partnership, and (4) future partnership goals to better serve youth with disabilities. The consensus among participants was that student employment outcomes are dismal, changes in the partnership could help these outcomes, and that there is hope and change occurring within the partnership that will lead to better outcomes in the future.

D. **Limitations**

While the current study's findings contributions are significant to better serving youth with disabilities, several limitations must be examined. One limitation is missing or poorly collected data evidenced by counselor mistakes in the database, which led to the removal of some student data. In addition, if a student entered the system, left the system, and returned, they would often receive a new identification number making it impossible to connect the student in

the de-identified dataset. Additionally, because improper procedures are followed sometimes, many cases receive a new identification number when entering adult services. Unfortunately, many codes that are available in the system are not used by counselors, but would allow student's cases to be tracked through the system. Additionally, the dataset contains many more variables than the ones that were examined within the present study; however, this study only examined the variables that appear most relevant to answer the research questions and could not examine all of the possible variables in the database.

Within the VR system, students are only considered status 26 when employment is maintained for 90 days after high school. First, 90 days of employment is a short-term outcome and there is no follow-up to determine if a student is still in the job for six months, one year, or longer. Second, it is unknown what happens to students when they are closed prior to 90 days as they will become status 28 closures if they are terminated prior to the minimum time allowed. Finally, students that attend college do not receive a successful outcome unless they return to the system after school and gain employment for 90 days. However, as was noted by one participant, most students that attend postsecondary education do not have a need to return to VR.

Chicago Public Schools is a unique system that contains over 20,000 youth with disabilities with Independent Education Programs. That is, while this study is an important insight into CPS and the nation's third largest school district, the small number of interviewees does not necessarily generalize to the larger population. This should be noted as both a strength and limitation of the study. Moreover, the qualitative study was conducted within one-month and while member checks were completed, being able to interview participants at the beginning and then the end of the school year would have strengthened the results. The researcher originally intended to conduct a focus group with the five current transition counselors, but was only able

to recruit two to participate. A focus group with all five counselors and follow-up interviews may have resulted in a more comprehensive understanding of the VR counselors' explanations for student outcomes and experiences being part of an interagency collaboration initiative. Finally, a potential limitation of the study was that the researcher was from UIC and was a facilitator in the interagency partnership. That is, participants were asked to describe their experiences working with UIC, which may have yielded different results had the researcher not previously worked with the participants. On the other hand, counselors in particular were fairly open to critique the university and pinpoint some of the limitations of the partnership.

E. **Implications for practice**

1. **Implication for teacher training**

The results of this study allow for implications for practice within the school system, specific to the way in which teachers are trained to educate youth with disabilities transitioning to adulthood. First, as examined in the literature, it is clear that future special educators' postsecondary curriculum must include courses in transition programming (Morningstar et al., 2008). Moreover, CPS is a unique system that educates students from many different background and often, students of similar backgrounds are concentrated within the same school. For example, this research showed that African American youth from low-income communities are clustered in under-resourced schools. Therefore, it is important that within teachers' training programs, there must be courses on educating urban minority youth with minimal resources.

As was a major theme of this research, families must be involved in the educational process for youth with disabilities; therefore, teacher training should include instruction on how to conduct effective outreach and inclusion of families and students in the transition process. As

a piece of outreach to families and disability identification, it is crucial that educators receive cultural competency training. Additionally, multiple participants in regard to early intervention, over-identification, under-identification, and stigma mentioned disability identification. We must better prepare our schools to appropriately identify disabilities, particularly for African American youth, females, and youth labeled with LD. Specific to disability labels, there needs to be continuing education around helping students feel empowered and to become self-determined rather than to feel stigmatized by their disability. Lastly for teacher training, school case managers must be educated within the school system on how to best work with outside agencies for the benefit of youth with disabilities. That is, currently, the only involvement is often within the IEP meeting, if at all, but there needs to be more collaboration and identification of the best referral to outside agencies for each individual student.

2. **Implications for vocational rehabilitation training**

The findings of this study suggest there are many implications for increased training within VR. As was discussed at length by participants, there is a necessity for VR counselors to receive training in secondary education specific to youth with disabilities. Ideally, postsecondary programs training VR counselors should add secondary education courses to the curriculum. Further, within the system, current VR counselors must engage in regular professional development related to the secondary education system, with a focus on working with low-income minority populations and how to involve families. Moreover, as was also a result of this study, it appears that many counselors and even supervisors do not understand the purpose or their role in serving youth with disabilities; therefore, an essential component of continuing education must be included. Two implications for VR training, which would ultimately benefit youth with disabilities, is education on how to translate ITPs into achievable

IPE goals and how to deliver individualized services. These two pieces should be taught within the DRS system and come from CPS transition specialists that are experts in the ITP and are extremely knowledgeable about the IPE. It also appears that there are discrepancies in understanding the process of VR when working with youth with disabilities; hence, professional development sessions are necessary. As with case managers, VR counselors also need training in working with outside agencies including the school system and CRP agencies. Finally, in order to ameliorate some of the issues surrounding mistrust within the government, training in cultural competency at all levels of DRS-VR would ultimately benefit the consumers of VR services.

### 3. **Implications for interagency collaboration**

Within interagency collaboration several implications for improvement were identified. First, as a team, the agencies must come to consensus on the best way to communicate the purpose of the partnership to youth with disabilities and their families. Moreover, the agencies need to develop a plan for connecting with families and students and educating them on the process of transitioning to adulthood and their options for support after high school. Within the school system, CPS transition specialists along with VR counselors should provide the continuing training to case managers regarding the referral process. As of now, only CPS transition specialists deliver these trainings. The purpose of this collaborative training is twofold: (1) to present a unified team and (2) introduce case managers to the VR counselor they will be referring their students to. Finally, professional learning community meetings need to be reinstated with all partners including the CRP agencies. This was seen as beneficial when it was not repetitive; therefore, important tenants of this meeting would be to have a neutral facilitator, collaborative planning of the agenda between agencies, and a unified message. That is, in the

past, some members of the agencies' leadership have delivered different or confusing messages to stakeholders, which harms the collaborative process.

F. **Implications for Policy**

1. **The education system**

Three main policy implications emerged in relation to CPS as a result of this research. First, the school system (and the state government) needs to examine the ways in which resources are allocated to each school as participants identified significant discrepancies between schools even within the same neighborhood. That is, how can schools become more creative with the resources that do exist? How can schools engage community partners to more effectively serve youth with disabilities transitioning to adulthood? Secondly, requirements for new CPS transition specialist hires should include having knowledge or experience working in or with DRS or CRPs. Thirdly, given that 90 days of employment is not a long-term outcome, it is important that indicator 14 be better implemented and utilized by the school system. Keel et al. (in press) found that educators believed indicator 14 could be an important tool for understanding what happens to youth with disabilities after high school.

2. **Implications for the vocational rehabilitation system**

Based on the results of this study, six implications for the VR system are being proposed. The agency urgently needs to create a manual of policies and procedures for serving youth with disabilities. Two pieces that must be included are a timeline for progressing students through plan and procedures for transferring students to adult services. Of course, adult VR counselors must also understand the transfer process. Within the status progression, there needs to be a further examination of status 3 and status 30 closures. Consensus among participants is that students are eligible, which means there should be very few status 3 closures, and far too

many youth are being closed at status 30. Policy must dictate that counselors need to give detailed reasons for closing students at each of these statuses. That is, just clicking student is not eligible in the drop down menu is not sufficient. While 90 days of employment is success for the RSA, 90 days is not successful employment; therefore, a system should be developed to track students' long-term employment outcomes. In addition, transition counselors serve a unique population that does not immediately meet RSA outcome requirements. The DRS leadership must work with RSA to change the necessity of counselors to meet rehabilitation rate quotas and transition counselors should not have adult cases in order to meet this requirement. Further, within DRS it is necessary for transition to be a separate unit similar to VR, developmental disabilities, and mental health. Moreover, better tracking of consumers needs to occur so that if a consumer leaves the system and returns they are not new, their new services should be included under the original identification number. As described by participants, job search assistance, job placement services, and vocational rehabilitation and guidance are "core services." If these are considered foundational to VR services, then policy should dictate that all consumers entering the system seeking employment must receive these services at a minimum. Likewise, VR needs to develop a better explanation of what each service may include. Next, VR counselors must attend at least one IEP meeting of each student on their caseload over their time in high school. The connection of youth to VR services does not work if youth do not connect face-to-face with an actual counselor. However, more creative outreach strategies need to be implemented such as having a connection day for parents and students to come and meet outside agencies and counselors. Ultimately, more VR counselors must be hired to serve the large number of students in the CPS system. VR counselors with large caseloads are very busy and, therefore, become less likely to attend IEP meetings and/or engage in regular contact with the students and/or their

families. This is of course a funding issue but a responsibility for DRS administrators to consider. With that said, all new counselors must have secondary training, education, or experience to come into the position of transition counselor and effectively serve youth with disabilities.

### 3. **Implications for interagency collaboration**

As a result of the in-depth information derived from individual interviews, many implications for the policy around interagency collaboration between DRS, CPS, and CRPs were identified. The partnership needs to go back to the beginning and establish a vision of how the partnership will function to better serve youth with disabilities, and must include short-term, intermediate, and long-term goals (Noonan, 2014). This will allow partners to refer back to the vision whenever making decisions around service delivery. Additionally, it is important that CPS, DRS, and the CRPs become a unified team in providing information to individuals not directly involved in the partnership such as VR case managers. Both CPS and VR need to use their data available on students to evaluate service delivery and implement necessary changes.

Moreover, it is unlikely that the mental health system in Illinois is going to develop comprehensive services for youth with mental disabilities; therefore, CPS, DRS, and CRPs must work together and develop a basic manual for serving youth with mental disabilities. Participants made it clear that most service providers do not understand how to work with youth with mental disabilities, though progress is being made with the addition of a CRP that focuses on providing services to people with mental disabilities.

As partners, it is critical that a shared understanding be developed regarding referral timelines. As it stands now, CPS refers year-round while DRS expect referrals to stop at the end of February each school year. There must be consensus on referral timelines or periods of time

when referrals will not be accepted because too many students are being lost in the system as a result. It also appears that policy may need to be implemented around family and youth engagement, potentially at a younger age. Again, creative strategies for student and family engagement need to be employed such as full day transition events, engaging community organization, and holding events in community spaces (i.e., parks, restaurants, or youth centers). Finally, policy should dictate that continual outreach to new businesses should occur as the largest employers include businesses such as Walmart, Walgreens, Costco, Jewel-Osco, and McDonalds. Many youth have aspirations beyond working in these businesses and just getting a job is not the goal nor does it indicate or warrant a long-term successful employment outcome.

G. **Implications for Research**

Along with implications for practice and policy, implications for research were also identified for the future directions of research. It is important that the intersectionality of different demographic factors as well as service level variables be examined. That is, for example, what do employment outcomes look like for African American males with learning disabilities? Moreover, is there a specific set of services in combination that yield better employment outcomes for certain types of disability? Document comparison of student's ITP and IPEs would yield important information about the function of VR counselors in helping youth set goals, delivering services, and gain employment. Further, future research should look at the quality of employment outcomes for youth with disabilities served by the VR system including whether or not services were individualized or if students are happy with their employment status. Additionally, an important area of research would be to track students longitudinally from referral through young adulthood employment, ideally up to five years after

graduation. This would yield rich information about the growth of youth with disabilities from the public school system through the VR system and into adulthood.

In relation to the partnership, families and students should be included in studies about their experience with an interagency partnership and the resulting service delivery experiences. Specific to this study, future research should compare the quantitative employment outcomes of youth with disabilities based on demographic characteristics and service level variables before the partnership, during the initial partnership, and the post-initial partnership. A beneficial addition to the research base would be to conduct comparative studies on the differences between successful and unsuccessful interagency collaboration initiatives, which would illuminate additional strategies and barriers to successful partnerships. Finally, while this study examined the development over time, it is not longitudinal; however, it is essential that a longitudinal examination of the evolution of interagency partnerships occur.

#### H. **Summary**

Through the use of a mixed methodology research design, the employment outcomes of youth with disabilities entering the VR system were examined. Further, a large-scale database of CPS students that were served by VR was analyzed to understand how demographic and service level variables affected employment outcomes as well as stakeholder beliefs about the reasons for these differences. An interagency partnership was also examined through in-depth individual interviews to better understand the adulthood employment of youth with disabilities.

This research was situated within a Disability Studies framework, which views disability as “the product of social injustice” (Siebers, 2008, p. 3). Further, Siebers (2008) explains, “people with disabilities insist on the pertinence of disability to the human condition, on the value of disability as a form of diversity, and on the power of disability as a critical concept for

thinking about human identity in general” (p. 3). While transition is only discussed from high school to adulthood, this researcher considers transition to be a lifelong process. For example, it was recommended that the 90-day employment outcome observed for youth in the VR system is not indicative of transition or employment success, as it is too short-term. Moreover, though employment is the ultimate outcome, the goal is for each student to find their identity, which will lead to more a fulfilling adulthood. There are many pieces that lead to students finding their own identity such as the involvement of their family, the removal of stigma surrounding the label of disability, and empowerment through helping students set and reach goals. Situating this research within Disability Studies principles led to recommendations, which focused around youth with disabilities developing their own identity and vision for their future.

It was found that many challenges exist at the individual and systemic levels that must be addressed. That is, gender, race/ethnicity, type of disability, family involvement and support, and community supports affect the process of transitioning to adulthood for youth with disabilities. Moreover, services received, resources and supports, systemic challenges, communication, employee qualifications, and partnership goals were important themes in successful or unsuccessful service delivery. As a result, several recommendations for practice, policy, and research emerged. First, the three main implications for practice emerged: (1) better preparation for both educators and VR professionals, (2) cultural competency training for educators and DRS-VR professionals, and (3) training on non-traditional family and youth outreach strategies. Second, essential policy recommendations included (1) developing a manual of policies and procedures for serving youth with disabilities, (2) a separate VR transition unit, and (3) a unified vision and path for the interagency partnership. Lastly, three significant implications for research were (1) family and student studies on quality of services and satisfaction, (2) comparative

studies of successful and unsuccessful collaboration initiatives, and (3) a longitudinal study from referral through young adulthood employment.

## APPENDICES

## Appendix A

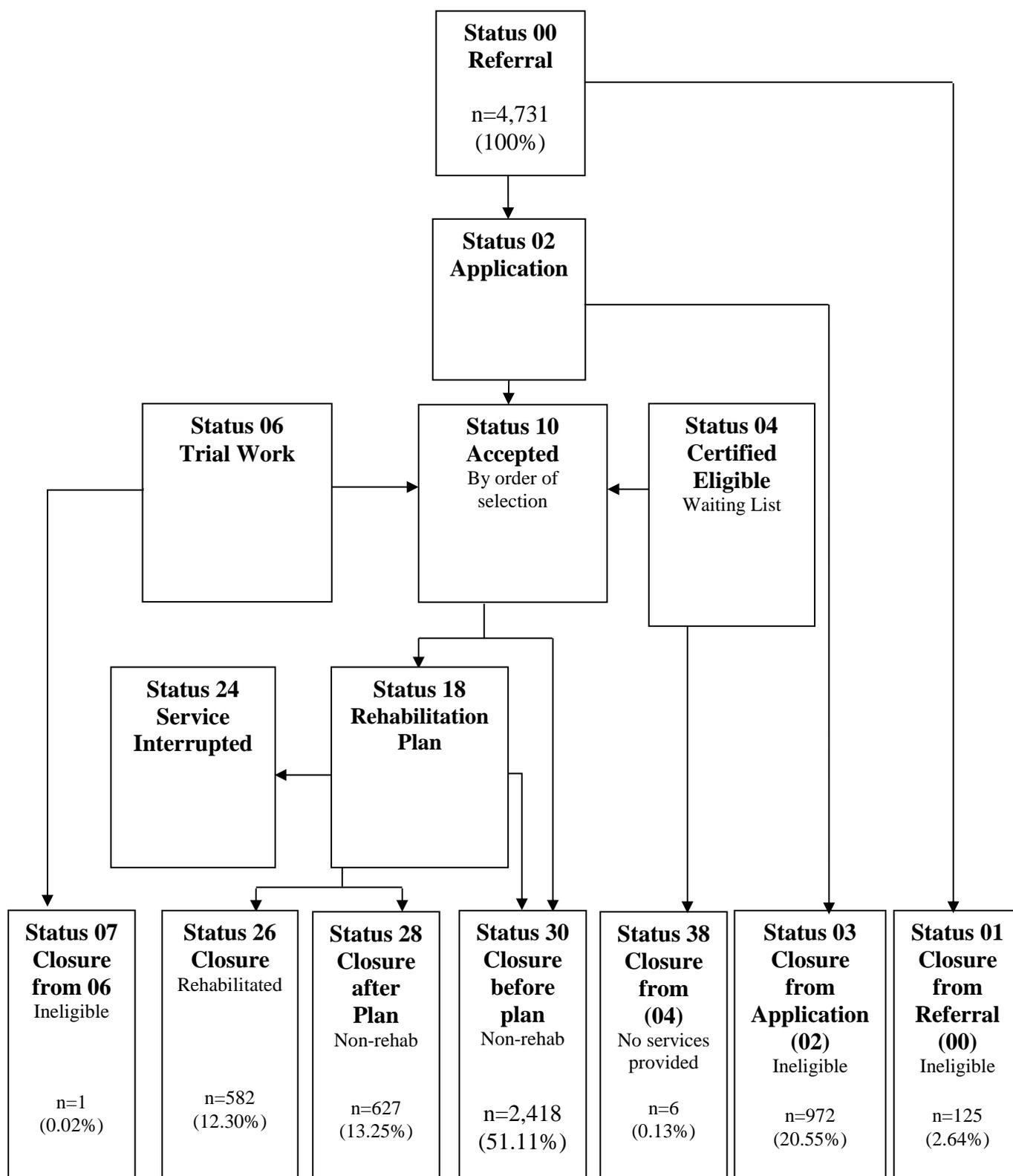


Figure 2. VR status progression chart of youth with disabilities for fiscal years 2005-2012

## Appendix A (continued)

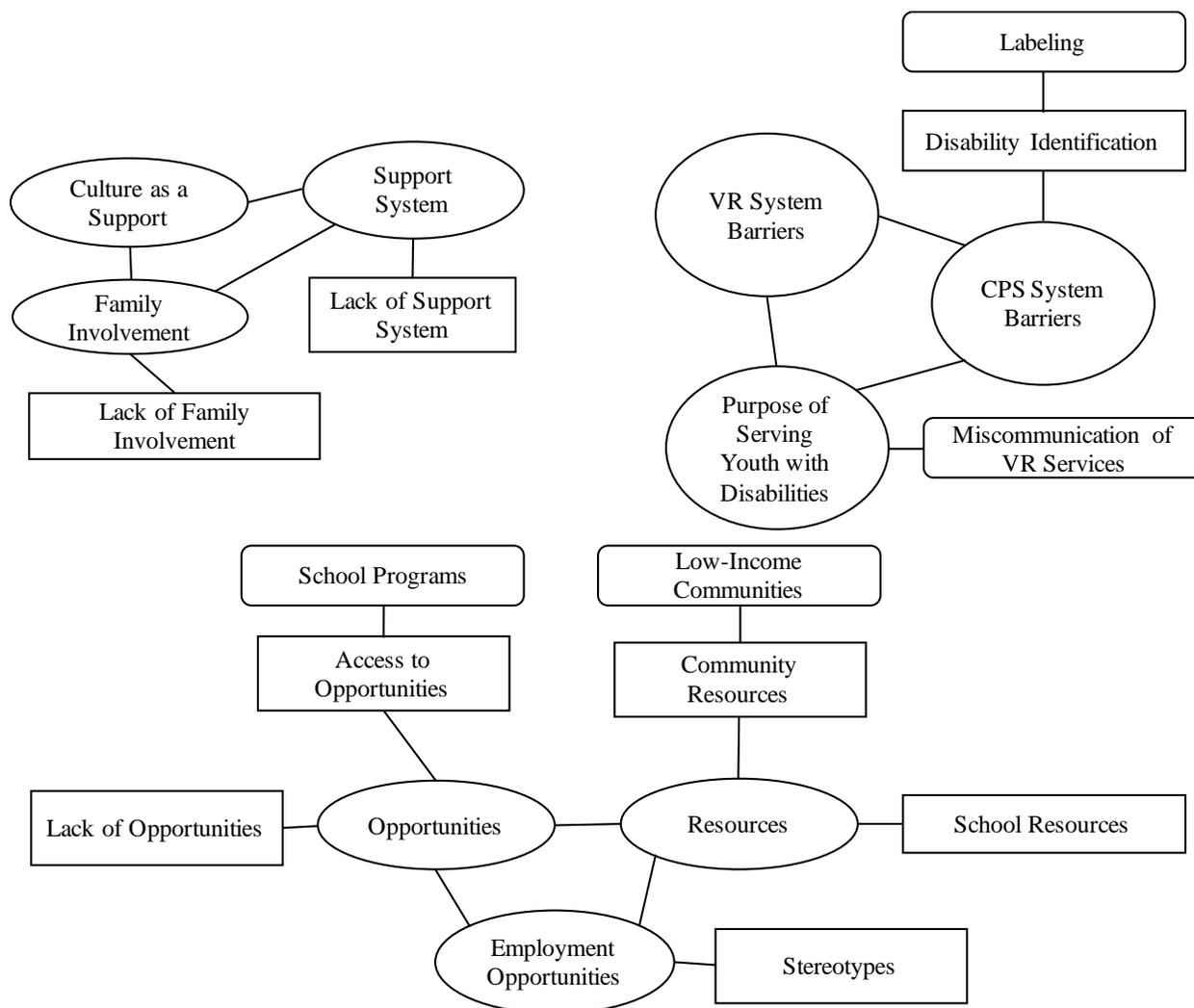


Figure 3. Initial map of identified themes for research question 1a. Ovals depict main themes (nine), rectangles are sub-themes (seven), and rounded squares are initial codes (four).

## Appendix A (continued)

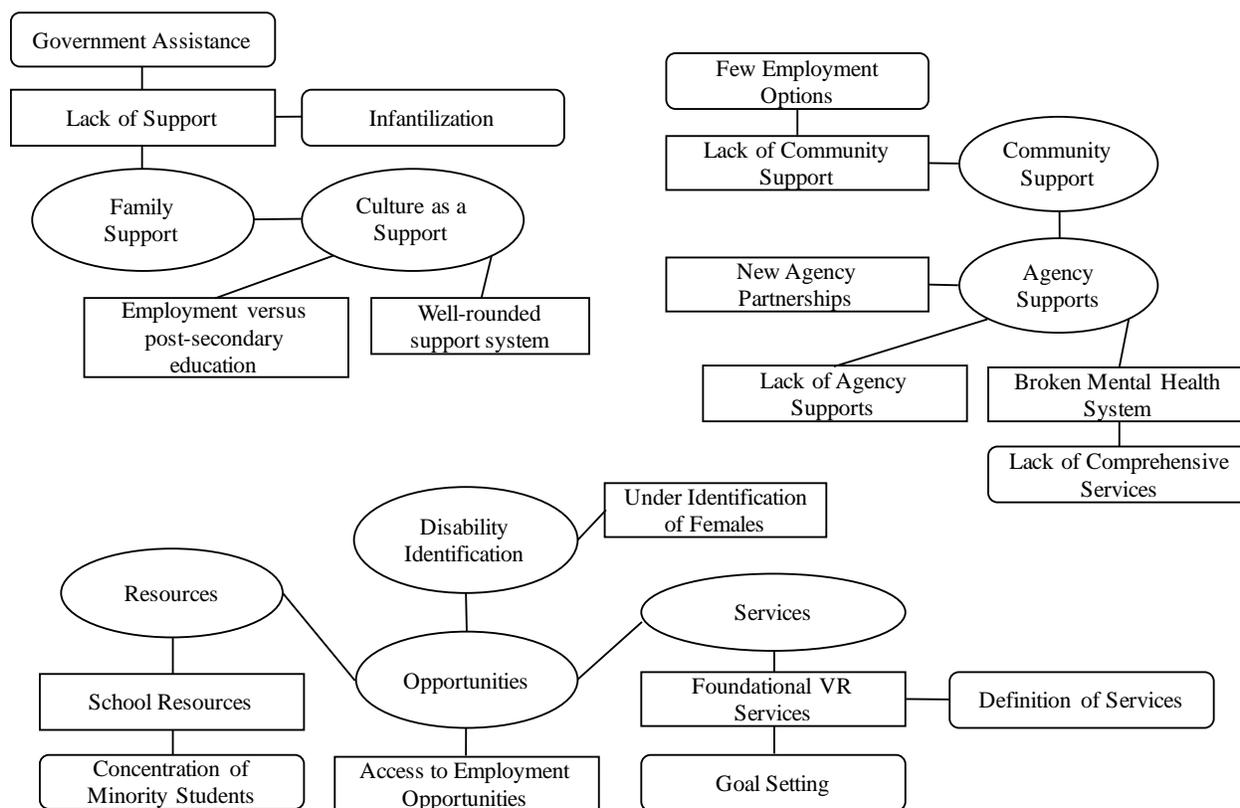


Figure 4. Initial map of identified themes for research question 2a. Ovals depict main themes (eight), rectangles are sub-themes (eleven), and rounded squares are initial codes (six).

Appendix A (continued)

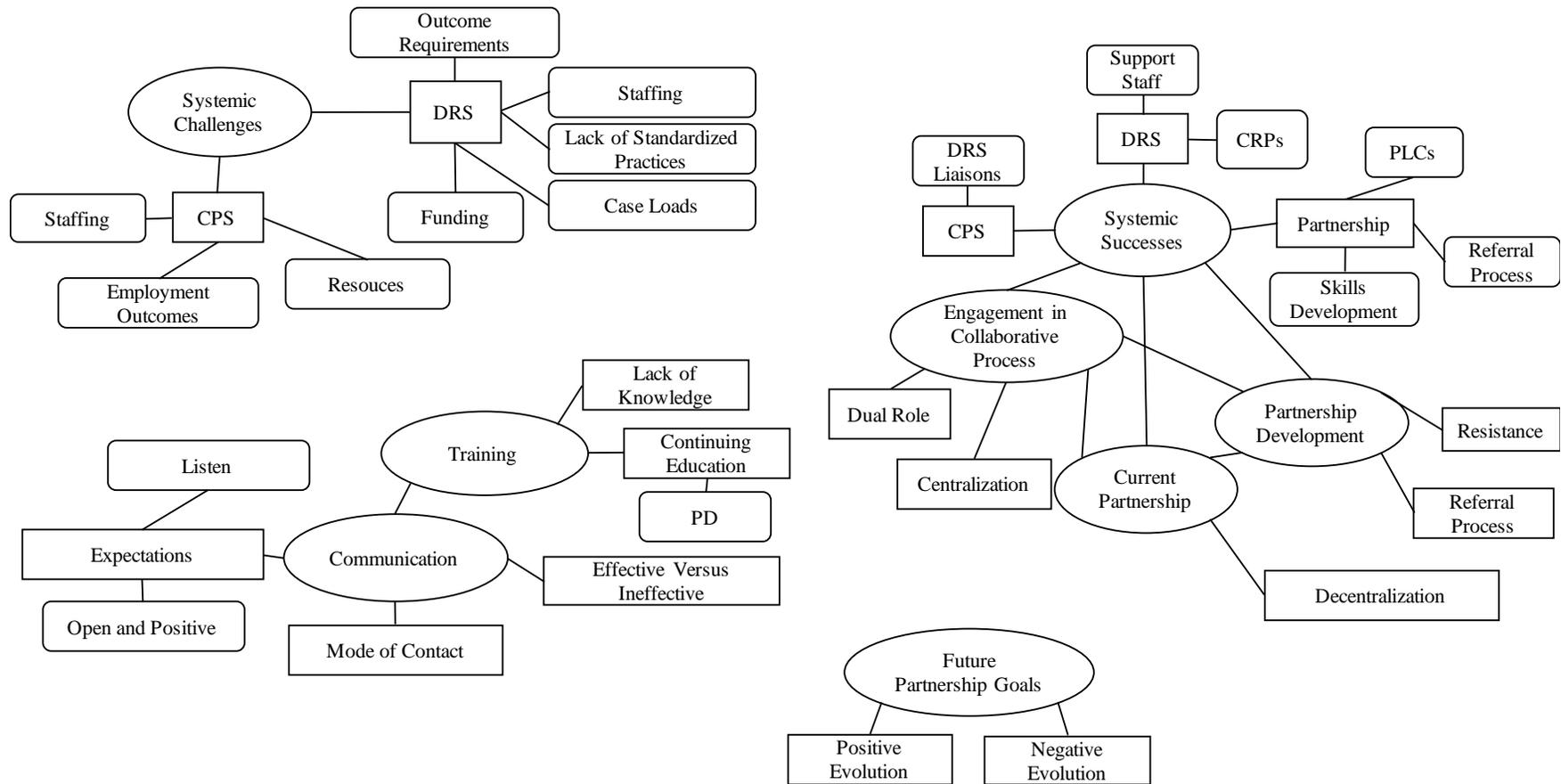
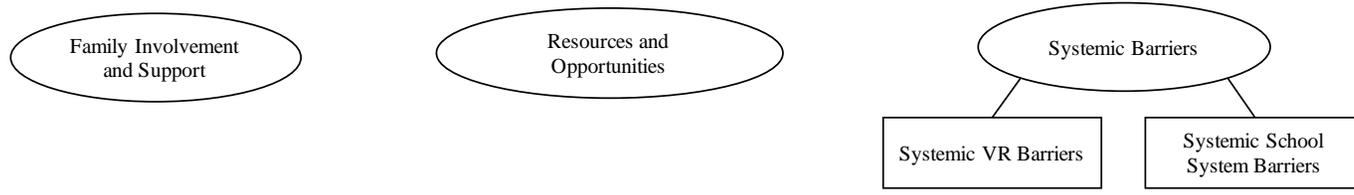


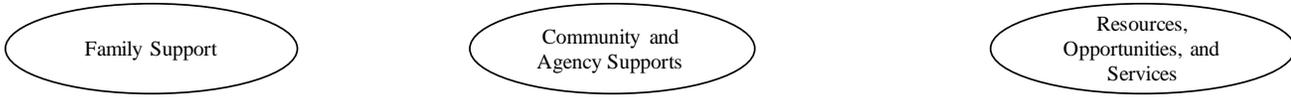
Figure 5. Initial map of identified themes for research question 3. Ovals depict main themes (eight), rectangles are sub-themes (fifteen), and rounded squares are initial codes (thirteen).

**Appendix A (continued)**

**RQ 1A**



**RQ 2A**



**RQ 3**

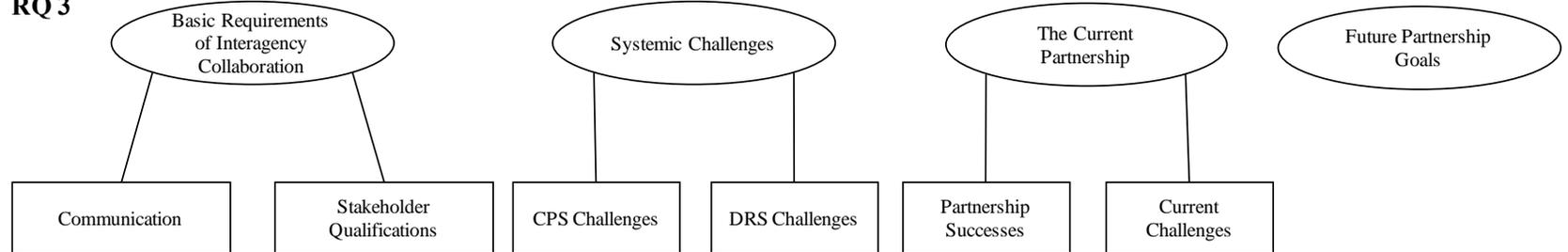


Figure 6. Final map of identified themes for each research question. Ovals represent final themes (ten) and rectangles represent final sub-themes (eight). Codes are not included in the final map.



**Appendix B (continued)**

identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.

It is understood that this research will only involve the analysis of de-identified data initially collected under UIC Research Protocol #2009-0965, which is currently in the data analysis only phase.

All the documents associated with this proposal will be kept on file in the OPRS and a copy of this letter is being provided to your Department Head for the department's research files.

If you have any questions or need further help, please contact the OPRS office at (312) 996-1711 or me at (312) 355-2908. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,

Charles W. Hoehne, B.S., C.I.P.  
Assistant Director, IRB #7  
Office for the Protection of Research Subjects

cc: Tamar Heller, Disability and Human Development, M/C 626  
Fabricio Balcazar, Disability and Human Development, M/C 626



**Appendix B (continued)**

→ Use your research protocol number (2013-0374) on any documents or correspondence with the

IRB concerning your research protocol.

→ Review and comply with all requirements on the guidance,  
**"UIC Investigator Responsibilities, Protection of Human Research Subjects"**  
(<http://research.uic.edu/irb/investigators-research-staff/investigator-responsibilities>)

**Please note that the UIC IRB #2 has the right to ask further questions, seek additional information, or monitor the conduct of your research and the consent process.**

**Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.**

We wish you the best as you conduct your research. If you have any questions or need further help, please contact the OPRS at (312) 996-1711 or me at (312) 413-0241. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,  
Ibraheem Oguntade  
IRB Coordinator, IRB # 2  
Office for the Protection of Research Subjects

cc: Tamar Heller, Disability and Human Development, M/C 626

42 W. Madison | 3<sup>rd</sup> Floor | Chicago, IL 60602  
Telephone: (773) 553-4444  
Fax: (773) 553-2421

## Appendix B (continued)

March 3, 2016

Jessica M. Awsumb  
University of Illinois at Chicago  
2204 W. Walton Street | Unit 1  
Chicago, IL 60622

Dear Ms. Awsumb,

Thank you for your interest in conducting research in The Chicago Public Schools. The Research Review Board of the Office of Accountability has reviewed your proposal for research entitled: Transition Model Implementation.

The Research Review Board has completed the review of your resubmission and has approved your request to conduct this research. Although your study is approved, school principals have final authority over activities that are allowed to take place in the school. If data collection continues beyond a year from this approval, please complete the Modification & Continuing Review Process Form which can be found on the research website.

Upon completion of the research study, a copy of the final report or summary of the results must be provided to the Research Review Board. The Board reserves the right to use the information in the research report or summary for planning, solicitation or grants, and staff development. Please note that your study has been assigned Project ID # 1133. If you have any questions, please contact our office by email at [research@cps.edu](mailto:research@cps.edu).

Sincerely,



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Stacy Norris  
Chair, Research Review Board

## Appendix C

University of Illinois at Chicago

DRS-UIC-CPS

Interagency Partnership

**Semi-Structured and Focus Group Interview Consent Form**



**Why are you asking me to participate in this research?**

You are invited to participate in a research study, conducted by Jessica Awsumb at the University of Illinois at Chicago (UIC). This is an exploratory study to gather information about the outcomes of youth with disabilities and collaboration between the Division of Rehabilitation Services (DRS), Chicago Public Schools (CPS), and the UIC in creating better service delivery to CPS students with disabilities. You are being asked to participate because you are a vocational rehabilitation (VR) counselor or administrator or a CPS transition specialist who works with students with disabilities in the DRS-UIC-CPS partnership. This research is voluntary and your decision whether or not to participate will in no way affect your relationship with UIC or your employer.

**What is the purpose of the research?**

The purpose of this study is to understand what happens when youth with disabilities are referred to VR for services while in high school through the examination of their outcomes, personal characteristics, and key stakeholders' perspectives.

**What does participation entail?**

If you decide to participate, you will be asked to:

- 1) Respond to a semi-structured interview, which will be audio recorded.  
OR
- 2) Respond to a focus group interview, which will be audio recorded. Additionally, you will be asked to participate in a follow-up phone interview.

**Estimated participation time:**

- 1) The semi-structured interview will take approximately 60 to 90 minutes.
- 2) The focus group interview will take approximately 90 minutes to 2 hours.
  - a. The follow-up phone interview will take approximately 30 minutes.

**What are the potential risks and benefits from involvement in this research?**

There are minimal known risks of participation in the research study including potential discomfort with some of the questions asked. There is a small risk that a breach of privacy (others will know you are participating) and a breach of confidentiality (accidental disclosure of identifiable data) may occur. You may skip any questions that you feel uncomfortable answering. Focus group participants will be asked to respect each other's privacy and not repeat what is said in the focus group, however, this privacy and confidentiality cannot be guaranteed. There are no direct benefits to participating in the study. Indirectly, you will be contributing your opinions to the improvement of the current support for DRS-UIC-CPS in serving students with disabilities in CPS.

## Appendix C (continued)

### DRS-UIC-CPS

#### Interagency Partnership

#### Semi-Structured and Focus Group Interview Consent Form

##### What about my privacy and confidentiality?

No identifying information about you will be used in reports or presentations of this research. Research staff will know that you are participating in the research and will have access to the data you provide. Information which identifies you and the consent form signed by you may be looked at and/or copied for the State of Illinois Auditors. Once the audio recording is transcribed, the audio file will be deleted. The transcript of the recording will have a unique code identifier, but will not contain personal identifying information. Ms. Awsumb will maintain all of the confidential data gathered. Only Dr. Balcazar, Ms. Awsumb, their research colleagues, and the UIC Institutional Review Board will have access to your data. The Institutional Review Board reviews and monitors all university research in order to assure that UIC researchers are doing everything possible to protect research participants and minimize risks. All information will remain confidential and will be disclosed only with your permission or as required by law.

##### Will I receive compensation for my participation in this study?

Yes, you will receive \$50 in compensation for your participation in the individual interview or focus group interview.

##### Can I decide not to participate or leave the study at any time?

You may choose to stop and leave the study at any time you wish. This research is voluntary and your decision whether or not to participate will in no way affect your relationship with UIC or your employer.

##### What are my rights as a research participant and who can I call if I have a question?

If you have any questions about this research, or have any problems as a result of this research, you should call the researcher, Jessica Awsumb, M.S., at (312) 413-4149 or email her at [jhunne2@uic.edu](mailto:jhunne2@uic.edu) or contact her faculty advisor Fabricio Balcazar, Ph.D. at (312) 413-1646 or email him at [fabricio@uic.edu](mailto:fabricio@uic.edu). If you have any questions about your rights as a research participant, you may call the Office for the Protection of Research Subjects (OPRS) at (312) 996-1711 (local) or 1-866-789-6215 or email OPRS at [uicirb@uic.edu](mailto:uicirb@uic.edu).

##### Signature

I have read and understand the study being conducted by Ms. Jessica Awsumb. She or one of her research colleagues has offered to answer any questions I may have regarding the procedures involved with this research and has explained to my satisfaction the nature of the research. In signing this document, I confirm that I am granting permission to participate in this research. I have also received a copy of this document.

\_\_\_\_\_  
Participant signature

\_\_\_\_\_  
Researcher signature

\_\_\_\_\_  
Printed name of participant

\_\_\_\_\_  
Printed name of researcher

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

## Appendix C (continued)

University of Illinois at Chicago

DRS-UIC-CPS  
Interagency Partnership  
Semi-Structured Form-UIC



**Why are you asking me to participate in this research?**

You are invited to participate in a research study, conducted by Jessica Awsumb at the University of Illinois at Chicago (UIC). This is an exploratory study to gather information about the collaboration between the Division of Rehabilitation Services (DRS), Chicago Public Schools (CPS), and the UIC in creating better service delivery to CPS students with disabilities. You are being asked to participate because you are a member of the UIC transition team. This research is voluntary and your decision whether or not to participate will in no way affect your employment with UIC.

**What is the purpose of the research?**

The purpose of this study is to understand what happens when youth with disabilities are referred to VR for services while in high school through the examination of their outcomes, personal characteristics, and key stakeholders' perspectives.

**What does participation entail?**

If you decide to participate, you will be asked to:

- 1) You will be asked to respond to a semi-structured interview, which will be audio recorded.

**Estimated participation time:**

- 2) The semi-structured interview will take approximately 60 to 90 minutes.

**What are the potential risks and benefits from involvement in this research?**

There are minimal known risks of participation in the research study including potential discomfort with some of the questions asked. There is a small risk that a breach of privacy (others will know you are participating) and a breach of confidentiality (accidental disclosure of identifiable data) may occur. You may skip any questions that you feel uncomfortable answering. There are no direct benefits to participating in the study. Indirectly, you will be contributing your opinions to the improvement of the current support for DRS-UIC-CPS in serving students with disabilities in CPS.

**What if I am a UIC employee?**

Your participation in this research is in no way a part of your university duties, and your refusal to participate will not in any way affect your employment with the university, or the benefits, privileges, or opportunities associated with your employment at UIC. You will not be offered or receive any special consideration if you participate in this research.

## Appendix C (continued)

**DRS-UIC-CPS  
Interagency Partnership  
Semi-Structured Form-UIC**

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**What about my privacy and confidentiality?**

No identifying information about you will be used in reports or presentations of this research. Research staff will know that you are participating in the research and will have access to the data you provide. Information which identifies you and the consent form signed by you may be looked at and/or copied for the State of Illinois Auditors. Once the audio recording is transcribed, the audio file will be deleted. The transcript of the recording will have a unique code identifier, but will not contain personal identifying information. Ms. Awsumb will maintain all of the confidential data gathered. Only Ms. Awsumb, her research colleagues, and the UIC Institutional Review Board will have access to your data. The Institutional Review Board reviews and monitors all university research in order to assure that UIC researchers are doing everything possible to protect research participants and minimize risks. All information will remain confidential and will be disclosed only with your permission or as required by law.

**Will I receive compensation for my participation in this study?**

No, you will not receive compensation for your participation in the individual interview.

**Can I decide not to participate or leave the study at any time?**

You may choose to stop and leave the study at any time you wish. This research is voluntary and your decision whether or not to participate will in no way affect your employment with UIC.

**What are my rights as a research participant and who can I call if I have a question?**

If you have any questions about this research, or have any problems as a result of this research, you should call the researcher, Jessica Awsumb, M.S., at (312) 413-4149 or email her at [jhonne2@uic.edu](mailto:jhonne2@uic.edu) or contact her faculty advisor Fabricio Balcazar, Ph.D. at (312) 413-1646 or email him at [fabricio@uic.edu](mailto:fabricio@uic.edu). If you have any questions about your rights as a research participant, you may call the Office for the Protection of Research Subjects (OPRS) at (312) 996-1711 (local) or 1-866-789-6215 or email OPRS at [uicirb@uic.edu](mailto:uicirb@uic.edu).

**Signature**

I have read and understand the study being conducted by Ms. Jessica Awsumb. She or one of her research colleagues has offered to answer any questions I may have regarding the procedures involved with this research and has explained to my satisfaction the nature of the research. In signing this document, I confirm that I am granting permission to participate in this research. I have also received a copy of this document.

\_\_\_\_\_  
Participant signature

\_\_\_\_\_  
Researcher signature

\_\_\_\_\_  
Printed name of participant

\_\_\_\_\_  
Printed name of researcher

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

## Appendix D

### VR Counselors Interview Script

Time	Section	Script/Directions
3 min	Introduction	The purpose of this research study is to understand what happens when youth with disabilities are referred to VR for services while in high school by examining student outcomes, personal characteristics, and the perspectives of service providers working with these students. In the end, I hope that this data will allow for a better understanding of what works and does not work for (1) youth with disabilities entering the VR system while in school and (2) CPS and VR professionals working in partnership to serve these youth.
2 min	Introduction	Can you share your role at DRS and in the DRS-UIC-CPS partnership?
5 min	Opening	What do you think is the purpose of youth getting VR services while in high school?
2 min	Data Explanation	So, you have three sheets in front of you including (1) outcome statuses, (2) worksheet 1, and (3) worksheet 2. The outcome statuses give you a short description of each closure status in VR, the number and percentage of youth in each of these closure statuses, and the way rehabilitation rate was calculated. Worksheet 1 and worksheet 2 shows outcome data for CPS students that were referred to VR while in high school. Worksheet 1 shows the differences in rehabilitation outcomes and rehabilitation rates for age, gender, race/ethnicity, and disability. Worksheet 2 shows further analysis, which allows for a better understanding of whether certain ages, genders, races/ethnicities, disabilities, and VR services predict successful or unsuccessful rehabilitation outcomes.
10 min	R1-A	You have had some time to review worksheet 1. You can see that there are certain groups of youth that have more success in the VR systems than others such as youth that are <ul style="list-style-type: none"> <li>• Ages 15 and 21</li> <li>• Males</li> <li>• White, Latino(a) or Asian,</li> <li>• Or youth with Intellectual/Developmental Disabilities or Learning Disabilities.</li> </ul>
		What are your thoughts about why this is happening?  Probe: You can see that youth ages 15-17, of both genders, identifying as black, or

**Appendix D (continued)**

		<p>have LD or mental health disabilities are being closed at status 30 more than 50% of the time.</p> <p>What are your thoughts about why this is happening? School vs. VR?</p>
10 min	R2-A	<p>After looking at worksheet 2, you can see again that some groups are doing better than others like youth that are</p> <ul style="list-style-type: none"> <li>• Male</li> <li>• Latino(a)</li> <li>• Or receive job placement services, job search assistance, or vocational rehabilitation and guidance</li> </ul> <p>Whereas some groups are doing worse including youth that are</p> <ul style="list-style-type: none"> <li>• Black</li> <li>• Or have mental health disabilities</li> </ul> <p>What are your thoughts about why this is happening?</p> <p>Probe: What do you believe is happening that leads some groups or some services to contribute to students' rehabilitation or unsuccessful rehabilitation?</p>
3	Data End	What questions are still unanswered for you about the data?
Seconds	Transition	Now I am going to transition away from the data, and talk about the partnership that occurred between VR-UIC-CPS and the partnership that is still occurring between VR-CPS.
5 min	R3	<p>Can you describe the collaborative relationship that occurred between VR-UIC-CPS?</p> <p>Can you describe the current relationship between VR-CPS?</p>
5 min	R3	<p>What types of strategies helped to foster successful interactions between you as a VR counselor and CPS professionals?</p> <p>Probe: Like the transition specialists, DRS liaisons, teachers, and case managers?</p>

**Appendix D (continued)**

		<p>What types of strategies helped to foster successful interactions between you and VR supervisors/administrators (leadership)?</p> <p>What types of strategies helped to foster successful interactions between you and UIC professionals?</p>
5 min	R3	<p>What types of barriers have you faced in your interactions with CPS professionals?</p> <p>What types of barriers have you faced in your interactions with VR supervisors/administrators (leadership)?</p> <p>What types of barriers have you faced in you interactions with UIC professionals?</p>
5 min	R3	Has the collaboration made your job more difficult? How?
5 min	R3	Has the collaboration (past and present) helped you do your job as a VR counselor serving youth with disabilities in CPS? How?
5	R3	How do you see this collaboration evolving between DRS and CPS over the next few years?
3 min	Ending	<p>Is there anything we missed?</p> <p>Is there anything you'd like to add?</p>

**Appendix D (continued)**

The Division of Rehabilitation Services Administrators Interview Script

Time	Section	Script
2-3 min	Introduction	The purpose of this research study is to understand what happens when youth with disabilities are referred to VR for services while in high school by examining student outcomes, personal characteristics, and the perspectives of service providers working with these students. In the end, I hope that this data will allow for a better understanding of what works and does not work for (1) youth with disabilities entering the VR system while in school and (2) CPS and VR professionals working in partnership to serve these youth.
3 min	Introduction	Can you share your role at DRS and in the DRS-UIC-CPS partnership?
4 min	Opening	What do you think is the purpose of youth getting VR services while in high school?
2 min	Data Explanation	You have three sheets in front of you including (1) outcome statuses, (2) worksheet 1, and (3) worksheet 2. The outcome statuses give you a short description of each closure status in VR, the number and percentage of youth in each of these closure statuses, and the way rehabilitation rate was calculated. Worksheet 1 and worksheet 2 shows outcome data for CPS students that were referred to VR while in high school. Worksheet 1 shows the differences in rehabilitation outcomes and rehabilitation rates for age, gender, race/ethnicity, and disability. Worksheet 2 shows further analysis, which allows for a better understanding of whether certain ages, genders, races/ethnicities, disabilities, and VR services predict successful or unsuccessful rehabilitation outcomes.

**Appendix D (continued)**

10 min	R1-A	<p>You have had some time to review worksheet 1. You can see that there are certain groups of youth that have more success in the VR systems than others such as youth that are</p> <ul style="list-style-type: none"> <li>• Ages 15 and 21</li> <li>• Males</li> <li>• White, Latino(a) or Asian,</li> <li>• Or youth with Intellectual/Developmental Disabilities or Learning Disabilities.</li> </ul> <p>What are your thoughts about why this is happening?</p> <p>Probe: You can see that youth ages 15-17, of both genders, identifying as black, or with LD or mental health disabilities are being closed at status 30 more than 50% of the time.</p> <ul style="list-style-type: none"> <li>• What are your thoughts about why this is happening?</li> </ul> <p>Probe: School vs. VR?</p>
10 min	R2-A	<p>After looking at worksheet 2, you can see again that some groups are doing better than others like youth that are</p> <ul style="list-style-type: none"> <li>• Male</li> <li>• Latino(a)</li> <li>• Or receive job placement services, job search assistance, or vocational rehabilitation and guidance</li> </ul> <p>Whereas some groups are doing worse including youth that are</p> <ul style="list-style-type: none"> <li>• Black</li> <li>• Or have mental health disabilities</li> </ul> <p>What are your thoughts about why this is happening?</p> <ul style="list-style-type: none"> <li>• Probe: What do you believe is happening that leads some groups or some services to contribute to students' rehabilitation or unsuccessful rehabilitation?</li> </ul>
3 min	Data End	What questions are still unanswered for you about the data?
	Transition	Now I want to transition away from the data, and talk about the partnership that occurred between DRS-UIC-CPS and the partnership that is still occurring between

**Appendix D (continued)**

		DRS-CPS.
5 min	R3	Can you describe the collaborative relationship that occurred between DRS-UIC-CPS? Can you describe the current relationship between DRS-CPS?
5 min	R3	What types of strategies helped to foster successful interactions between you and CPS professionals? <ul style="list-style-type: none"> <li>• Probe: Like the transition specialists, DRS Liaisons, teachers, or case managers?</li> </ul> What types of strategies helped to foster successful interactions between you and VR supervisors/VR counselors? What types of strategies helped to foster successful interactions between you and UIC professionals?
5 min	R3	What types of barriers have you faced in your interactions with CPS professionals? What types of barriers have you faced in your interactions with VR supervisors/counselors? What types of barriers have you faced in you interactions with UIC professionals?
5 min	R3	Are you performing your job differently as a result of the collaboration (both past and present)? <ul style="list-style-type: none"> <li>• Probe: Are there differences now in how youth are being served in relation to</li> <li>• (1) Before any collaboration,</li> <li>• (2) During the DRS-UIC-CPS collaboration,</li> <li>• And (3) during the current DRS-CPS partnership?</li> <li>• Probe: Are there any differences in the referral process (past and present)?</li> <li>• Probe: As a result of the changes in the referral process, are fewer students being closed as ineligible?</li> </ul>
5 min	R3	How do you see this collaboration evolving between DRS and CPS over the next few years?
2 min	Ending	Is there anything we missed? Is there anything you'd like to add?

**Appendix D (continued)**

Chicago Public School Interview Script

Time	Section	Script
2-3 min	Introduction	The purpose of this research study is to understand what happens when youth with disabilities are referred to VR for services while in CPS by examining student outcomes, personal characteristics, and the perspectives of those working with these students. In the end, I hope that this data will allow for a better understanding of what works and does not work for (1) youth with disabilities entering the VR system while in CPS and (2) CPS and VR professionals working in partnership to serve these youth.
3 min	Introduction	Can you share your role at CPS and in the CPS-UIC-DRS partnership?
4 min	Opening	What do you think is the purpose of youth getting VR services while in high school?
2 min	Data Explanation	You have three sheets in front of you including (1) outcome statuses, (2) worksheet 1, and (3) worksheet 2. The outcome statuses give you a short description of each closure status in VR, the number and percentage of youth in each of these closure statuses, and the way rehabilitation rate was calculated. Worksheet 1 and worksheet 2 shows outcome data for CPS students that were referred to VR while in high school. Worksheet 1 shows the differences in rehabilitation outcomes and rehabilitation rates for age, gender, race/ethnicity, and disability. Worksheet 2 shows further analysis, which allows for a better understanding of whether certain ages, genders, races/ethnicities, disabilities, and VR services predict successful or unsuccessful rehabilitation outcomes.
10 min	R1-A	<p>You have had some time to review worksheet 1. You can see that there are certain groups of youth that have more success in the VR systems than others such as youth that are</p> <ul style="list-style-type: none"> <li>• Ages 15 and 21</li> <li>• Males</li> <li>• White, Latino(a) or Asian,</li> <li>• Or youth with Intellectual/Developmental Disabilities or Learning Disabilities.</li> </ul> <p>What are your thoughts about why this is happening?</p> <p>Probe: You can see that youth ages 15-17, of both genders, identifying as black, or with LD or mental health disabilities are being closed at status 30 more than 50% of the time.</p>

**Appendix D (continued)**

		<ul style="list-style-type: none"> <li>• What are your thoughts about why this is happening?</li> <li>• Probe: School vs. VR?</li> </ul>
10 min	R2-A	<p>After looking at worksheet 2, you can see again that some groups are doing better than others like youth that are</p> <ul style="list-style-type: none"> <li>• Male</li> <li>• Latino(a)</li> <li>• Or receive job placement services, job search assistance, or vocational rehabilitation and guidance</li> </ul> <p>Whereas some groups are doing worse including youth that are</p> <ul style="list-style-type: none"> <li>• Black</li> <li>• Or have mental health disabilities</li> </ul> <p>What are your thoughts about why this is happening?</p> <ul style="list-style-type: none"> <li>• Probe: What do you believe is happening that leads some groups or some services to contribute to students' rehabilitation or unsuccessful rehabilitation?</li> </ul>
3 min	Data End	What questions are still unanswered for you about the data?
	Transition	Now I want to transition away from the data, and talk about the partnership that occurred between CPS-UIC-DRS and the partnership that is still occurring between CPS-DRS.
5 min	R3	Can you describe the collaborative relationship that occurred between CPS-UIC-DRS? Can you describe the current relationship between DRS-CPS?
5 min	R3	<p>What types of strategies helped to foster successful interactions between you and DRS professionals?</p> <ul style="list-style-type: none"> <li>• Probe: like the transition counselors, transition supervisor, and the administration?</li> </ul> <p>What types of strategies helped to foster successful interactions between you and UIC professionals?</p>

**Appendix D (continued)**

5 min	R3	<p>What types of barriers have you faced in your interactions with DRS professionals?</p> <ul style="list-style-type: none"> <li>• Probe: Like counselors, supervisors, and administrators</li> </ul> <p>What types of barriers have you faced in you interactions with UIC professionals?</p>
5 min	R3	<p>Are you performing your job differently as a result of the collaboration (both past and present)?</p> <ul style="list-style-type: none"> <li>• Probe: Are there differences now in how youth are being served in relation to</li> <li>• (1) Before any collaboration,</li> <li>• (2) During the CPS-UIC-DRS collaboration,</li> <li>• And (3) during the current CPS-DRS partnership?</li> <li>• Probe: Are there any differences in the referral process (past and present)?</li> <li>• Probe: As a result of the changes in the referral process, are fewer students being closed as ineligible?</li> </ul>
5 min	R3	<p>How do you see this collaboration evolving between CPS and DRS/VR over the next few years?</p>
2 min	Ending	<p>Is there anything we missed? Is there anything you'd like to add?</p>

**Appendix D (continued)**

The University of Illinois at Chicago Facilitators Interview Script

Time	Section	Script
2-3 min	Introduction	The purpose of this research study is to understand what happens when youth with disabilities are referred to VR for services while in CPS by examining student outcomes, personal characteristics, and the perspectives of those working with these students. In the end, I hope that this data will allow for a better understanding of what works and does not work for (1) youth with disabilities entering the VR system while in CPS and (2) CPS and VR professionals working in partnership to serve these youth.
3 min	Introduction	Can you share your former role at UIC in the CPS-UIC-DRS partnership?
4 min	Opening	What do you think is the purpose of youth getting VR services while in high school?
2 min	Data Explanation	You have three sheets in front of you including (1) outcome statuses, (2) worksheet 1, and (3) worksheet 2. The outcome statuses give you a short description of each closure status in VR, the number and percentage of youth in each of these closure statuses, and the way rehabilitation rate was calculated. Worksheet 1 and worksheet 2 shows outcome data for CPS students that were referred to VR while in high school. Worksheet 1 shows the differences in rehabilitation outcomes and rehabilitation rates for age, gender, race/ethnicity, and disability. Worksheet 2 shows further analysis, which allows for a better understanding of whether certain ages, genders, races/ethnicities, disabilities, and VR services predict successful or unsuccessful rehabilitation outcomes.
10 min	R1-A	<p>You have had some time to review worksheet 1. You can see that there are certain groups of youth that have more success in the VR systems than others such as youth that are</p> <ul style="list-style-type: none"> <li>• Ages 15 and 21</li> <li>• Males</li> <li>• White, Latino(a) or Asian,</li> <li>• Or youth with Intellectual/Developmental Disabilities or Learning Disabilities.</li> </ul> <p>What are your thoughts about why this is happening?</p> <p>Probe: You can see that youth ages 15-17, of both genders, identifying as black, or with LD or mental health disabilities are being closed at status 30 more than 50% of the time.</p>

**Appendix D (continued)**

		<ul style="list-style-type: none"> <li>• What are your thoughts about why this is happening?</li> </ul> <p>Probe: School vs. VR?</p>
10 min	R2-A	<p>After looking at worksheet 2, you can see again that some groups are doing better than others like youth that are</p> <ul style="list-style-type: none"> <li>• Male</li> <li>• Latino(a)</li> <li>• Or receive job placement services, job search assistance, or vocational rehabilitation and guidance</li> </ul> <p>Whereas some groups are doing worse including youth that are</p> <ul style="list-style-type: none"> <li>• Black</li> <li>• Or have mental health disabilities</li> </ul> <p>What are your thoughts about why this is happening?</p> <ul style="list-style-type: none"> <li>• Probe: What do you believe is happening that leads some groups or some services to contribute to students' rehabilitation or unsuccessful rehabilitation?</li> </ul>
3 min	Data End	What questions are still unanswered for you about the data?
	Transition	Now I want to transition away from the data, and talk about the partnership that occurred between CPS-UIC-VR and the partnership that is still occurring between CPS-DRS.
5 min	R3	<p>Can you describe the collaborative relationship that occurred between CPS-UIC-DRS?</p> <p>Can you describe the current relationship between DRS-CPS? (If applicable/based on your current knowledge)?</p>
5 min	R3	<p>What types of strategies helped to foster successful interactions between you and DRS professionals?</p> <ul style="list-style-type: none"> <li>• Probe: like the transition counselors, transition supervisor, and the administration?</li> </ul> <p>What types of strategies helped to foster successful interactions between you and CPS professionals?</p> <ul style="list-style-type: none"> <li>• Probe: like the transition specialists?</li> </ul>

**Appendix D (continued)**

5 min	R3	<p>What types of barriers have you faced in your interactions with DRS professionals?</p> <ul style="list-style-type: none"> <li>• Probe: Like counselors, supervisors, and administrators</li> </ul> <p>What types of barriers have you faced in you interactions with CPS professionals?</p> <ul style="list-style-type: none"> <li>• Probe: like the transition specialists?</li> </ul>
5 min	R3	<p>Now that UICs involvement has ended, how do you see the collaboration between CPS and DRS/VR evolving over the next few years?</p>
2 min	Ending	<p>Is there anything we missed? Is there anything you'd like to add?</p>

Appendix E

<p style="text-align: center;"><b>Outcome Statuses</b>  <b>2004-2012</b>  <b>Total N=4,731</b></p>						
<p><b>Status 1</b>                      Closure                      from                      Referral</p>	<p><b>Status 3</b>                      Closure                      from                      Application</p>	<p><b>Status 7</b>                      Closure                      from Trial                      Work</p>	<p><b>Status 26</b></p>	<p><b>Status 28</b>                      Closure                      After Plan</p>	<p><b>Status 30</b>                      Closure                      before Plan</p>	<p><b>Status 38</b>                      Closure                      from                      Waiting List</p>
<i>Ineligible</i>	<i>Ineligible</i>	<i>Ineligible</i>	<i>Rehabilitated</i>	<i>Not Rehabilitated</i>	<i>Not Rehabilitated</i>	<i>No Services Provided</i>
<p>n=125 3%</p>	<p>n=972 21%</p>	<p>n=1 0%</p>	<p>n=582 12%</p>	<p>n=627 13%</p>	<p>n=2418 51%</p>	<p>n=6 0%</p>

$$\text{Rehabilitation Rate} = \frac{\text{Status 26}}{(\text{Status 26} + \text{Status 28})} \times 100$$

## Appendix E (continued)

### Worksheet 1

#### Differences in outcomes and rehabilitation rates for:

- Age
- Gender
- Race/ethnicity
- Disability

#### Overall Rehabilitation Rate

- 48.14%

#### Age

- 50% of 14 and 21 year olds were closed as status 3
- 51% of youth across age are being closed at status 30
  - 57% of 16 year olds, 53% of 17 year olds, and 52% of 18 year olds

Rehabilitation Rate for Age	
Age 14	40%
Age 15	58%
Age 16	48%
Age 17	49%
Age 18	48%
Age 19	50%
Age 20	32%
Age 21	55%

#### Gender

- Overall, more males (62%) are entering the system than females (38%)
- 50% of males and 53% of females are being closed at status 30

Rehabilitation Rate for Gender	
Male	51%
Female	43%

#### Race/ethnicity

- Across race for all closure statuses, most of the youth are being closed as status 30
- *White*
  - Folks who identify as non-white have LESS status 26 closures
- *Black*
  - 54% of folks who identify as black are closed as status 30
  - 28% of folks who identify as black are closed at status 3
- *Latino(a)*
  - 47% of Latino(a) folks were closed status 30
- *Asian*
  - 35% of folks who identify as Asian were closed as status 30

### Appendix E (continued)

Rehabilitation Rate for Race/Ethnicity	
White	54%
Black	37%
Latino(a)	57%
Asian	53%

#### Disability Type

- Across disability for all closure statuses, the highest percentage of youth are being closed at status 30
- *Blind*
  - 33% of youth that are blind were closed as status 30
  - 28% of youth that are blind were closed as status 28
- *Deaf*
  - 47% of youth that are deaf were closed as status 30
  - 23% of youth that are deaf were closed as status 28
- *IDD*
  - 48% of youth with IDD were closed as status 30
  - 29% of youth with IDD were closed as status 3
- *LD*
  - 54% of youth with LD were closed as status 30
- *Mental disability*
  - 56% of youth with mental disabilities were closed as status 30
  - 23% of youth with mental disabilities were closed as status 28
- *Physical disability*
  - 33% of youth with physical disabilities were closed as status 30
  - 29% of youth with physical disabilities were closed as status 28
- *TBI*
  - 41% of youth with TBI were closed as status 30
  - 31% of youth with TBI were closed as status 3

Rehabilitation Rate for Disability Type	
Blind	29%
Deaf	46%
IDD	52%
LD	49%
Mental Disability	40%
Physical Disability	39%
TBI	38%

**Appendix E (continued)****Worksheet 2****After further analysis, certain demographic variables predict different VR outcomes****Status 26 and 28 Only****Demographics Variables**

- Males are 24% more likely to be successfully rehabilitated than females.
- Youth that identify as Black have a 41% lower chance of achieving a rehabilitated outcome than youth that do not identify as Black.
- Latino (a) identifying youth are 38% more likely to be successfully rehabilitated than youth that do not identify as Latino (a).
- Youth with mental disabilities have a 44% lower chance of achieving a rehabilitated outcome than youth without mental disabilities.

**Case Level Variables**

- A higher likelihood of rehabilitation is seen in youth that receive:
  - Job placement services (71% higher)
  - Job search assistance (86% higher)
  - Vocational rehabilitation and guidance (1.46 times higher).

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## VITA

NAME: Jessica M. Awsumb

EDUCATION: Ph.D., Disability Studies University of Illinois at Chicago, Chicago, Illinois, 2012-present

M.Ed., Measurement, Evaluation, Statistics, and Assessment, University of Illinois at Chicago, Chicago, Illinois, 2016

M.S. Disability and Human Development, University of Illinois at Chicago, Chicago, Illinois, 2012

B.A., Psychology, DePaul University, Chicago, Illinois, 2009

### **Research Experience**

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RESEARCH: Project Coordinator, Center for Capacity Building on Minorities with Disabilities Research, University of Illinois at Chicago, Chicago, Illinois: Vocational Rehabilitation Quality Assurance Project, 2015

Project Coordinator, Center for Capacity Building on Minorities with Disabilities Research, University of Illinois at Chicago, Chicago, Illinois: The Division of Rehabilitation Services Transition Model Implementation Project, 2012-2015

Graduate Research Assistant, Center for Capacity Building on Minorities with Disabilities Research, University of Illinois at Chicago, Chicago, Illinois: Jobs for Youth: A Partnership to Promote Employment of Inner-City Youth with Disabilities, 2012, 2016

Graduate Research Assistant, Center for Capacity Building on Minorities with Disabilities Research, University of Illinois at Chicago, Chicago, Illinois: The Division of Rehabilitation Services Transition Model Implementation Project, 2011

Graduate Research Assistant, Center for Capacity Building on Minorities with Disabilities Research, University of Illinois at Chicago, Chicago, Illinois: Asians with Disabilities Outreach Project Think-Tank (ADOPT), 2010-2011

Research Assistant, Center for Community Research, DePaul University, Chicago, Illinois: Risk Factors Associated with Chronic Fatigue Syndrome and Chronic Fatigue Prognosis, 2009-2010

Research Assistant, DePaul University, Chicago, Illinois: Perceptions of Parental Involvement, 2009

Research Assistant, DePaul University, Chicago, Illinois: Cultural Perspectives of Parenting, 2008

TEACHING: Instructor, Department of Disability and Human Development, University of Illinois at Chicago; Disability and US Society, 2016

Teaching Assistant, Department of Disability and Human Development, University of Illinois at Chicago; Disability and US Society, 2016

Guest Lecturer, Department of Disability and Human Development, University of Illinois at Chicago; Disability and US Society, 2016

Teaching Assistant, Department of Disability and Human Development, University of Illinois at Chicago; Disability and US Society, 2015

Guest Lecturer, Department of Disability and Human Development, University of Illinois at Chicago; Disability and US Society, 2015

PUBLICATIONS: Keel, J. M., Cushing, L. S., & Awsumb, J. M. (in press). Post-school visions and expectations of latino students with learning disabilities, their parents, and teachers.

Awsumb, J. M., Balcazar, F. E., & Alvarado, F (2016). Vocational rehabilitation transition outcomes of youth with disabilities from a midwestern state. *Rehabilitation, Research, Policy, and Education*, 30 (1), 48-64.

Langi, F. G., Oberoi, A., Balcazar, F. E., & Awsumb, J. (2015). Vocational rehabilitation of transition-age youth with disabilities: A propensity-score matched study. *Journal of Occupational Rehabilitation*, 25 (4), 675-782.

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Jason, L. A., Brown, M., Evans, M., Anderson, V., Lerch, A., Brown, A., Brown, A., Hunnell, J., & Porter, N. (2011). Measuring substantial reduction in functioning with chronic fatigue syndrome. *Disability and Rehabilitation*, 33 (7), 589-598. doi:10.3109/09638288.2010.503256

Jason, L. A., Evans, M., Brown, M., Porter, N., Brown, A., Hunnell, J., Anderson, V., & Lerch, A. (2011). Fatigue scales and chronic fatigue syndrome: Issues of sensitivity and specificity. *Disability Studies Quarterly*, 31.

Jason, L. A., Porter, N., Hunnell, J., Brown, A., Rademaker, A., & Richman, A. J. (2011). A natural history study of chronic fatigue syndrome. *Rehabilitation Psychology*, 56 (1), 32-42. doi: 10.1037/a0022595

Jason, L. A., Porter, N., Hunnell, J., Rademaker, A., & Richman, J. (2011). CFS prevalence and risk factors over time. *Journal of Health Psychology*, 16 (3), 445-456. doi: 10.1177/1359105310383603

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Jason, L. A., Evans, M., Brown, A., Brown, M., Porter, N., Hunnell, J., Anderson, V., Lerch, A. (2010) Sensitivity and specificity of the CDC empirical case definition. *Psychology*, 1, 9-16. doi:10.4236/psych.2010.11002

Williams, T., Sanchez, B., & Hunnell, J. (2010). Aligning theory with practice: Understanding parental involvement in an inner-city high school. *Children and Youth Services Review*, 33 (5), 689-697. doi:10.1016/j.childyouth.2010.11.012

Jason, L. A., Porter, N., Brown, M., Anderson, V., Brown, A., Hunnell, J., & Lerch, A. (2009). CFS: A review of epidemiology and natural history studies. *Bulletin of IACFS/ME*, 17, 88-106.

POSTER  
PRESENTATIONS:

Awsumb, J. M. (2015, November). Rehabilitation outcomes of transition age youth with disabilities receiving vocational rehabilitation services. Presented at the 19<sup>th</sup> International Division on Career Development and Transition Conference. Portland, OR.

Awsumb, J. M., & Balcazar, F. E. (2013, June). Vocational rehabilitation outcomes of youth with disabilities from a midwestern state. Presented at the Society for Community Research and Action Biennial Conference. Miami, FL.

Awsumb, J. M., & Balcazar, F. E. (2013, May). A roadmap to personal success: Youth with disabilities' futures. Presented at the annual Midwestern Psychological Association Conference. Chicago, IL.

Jason, L. A., Porter, N., & Hunnell, J. (2010, August). CFS prevalence and risk factors over time. Presented at the 2010 American Psychological Association Annual Convention. San Diego, CA.

Feldhaus, C., Hunnell, J., Porter, N., & Jason, L. A. (2010, May). Chronic fatigue syndrome mortality. Presented at DePaul Psych Night. Chicago, IL.

Damrongvachiraphan, D., Hunnell, J., Porter, N., & Jason, L. A. (2010, May). Chronic fatigue syndrome etiology. Presented at DePaul Psych Night. Chicago, IL.

Hunnell, J., Jason, L. A., & Porter, N. (2010, April). Chronic fatigue syndrome: Risk factors as predictors. Presented at the annual Midwestern Psychological Association Conference. Chicago, IL.

Williams, T. T., Sanchez, B., & Hunnell, J. (2010, April). Aligning theory with practice: Understanding parental involvement in an inner-city high school. Poster presented at the 31st Annual Meeting of the Society of Behavioral Medicine. Seattle, WA.

Brown, A., & Hunnell, J., Porter, N., & Jason, L. A. (2009, October). A natural history study of chronic fatigue syndrome. Poster Presented at the 22<sup>nd</sup> annual Midwestern Ecological Conference. Chicago, IL.

Hunnell, J., Porter, N., & Jason, L.A. (2009, May). Differences between Myalgic Encephalomyelitis/chronic fatigue syndrome: Why a new definition is needed. Poster Presented at DePaul University Psychology Night. Chicago, IL.

Hunnell, J. (2008, May). Effects of parenting and child disability on stress. Presented to the Department of Psychology at DePaul University. Chicago, IL.

ROUNDTABLES AND SYMPOSIUM: Cushing, L., Parker-Katz, M., Balcazar, F., Keel, J., Awsumb, J., Hovland, J., Buren, M. (2015, November). Multi-level urban-based transition education research: Studies addressing students, parents, and agencies in one urban setting. Symposium presented at the 19<sup>th</sup> International Division on Career Development and Transition Conference. Portland, OR.

Awsumb, J., Keel, J., Balcazar, F., Parker-Katz, M., Cushing, L., & Athamanah, L. (2015, October). Meaningful involvement of home-school-community in the transition planning process in urban settings. Symposium presented at the 11<sup>th</sup> annual Illinois Statewide Transition Conference, Chicago, IL.

Balcazar, F., Awsumb, J., Keel, J., Oberoi, A., Langi, F., Dimpfl, S., & Maass, A. (2015, May). Interagency collaboration: An examination of university/community partnerships. Symposium presented at the annual Midwestern Psychological Association Conference. Chicago, IL.

Reed, J., Brown, A., Jantke, R., Jason, L., Lara, B., Nicholson, L., O'Connor, K., Sunquist, M., Williams, Y., Wise, S., Zdunek, M., Anderson, V., Awsumb, J., & Mclindon, K. (2014, October). Walking the line between advocacy and research: Real world examples of the community psychologist's dilemma. Roundtable discussion at the 27<sup>th</sup> annual Midwestern Ecological Conference. Naperville, IL.

Balcazar, F. E., Awsumb, J. M., & Keel, J. (2013, October). Interagency collaboration: Improving transition services and outcomes for students with disabilities through a university partnership. Symposium presented at the University of Illinois at Chicago College of Education's 5<sup>th</sup> annual Research Day. Chicago, IL.

Awsumb, J. M., Balcazar, F. E., Sanchez, J., Keel, J., Turner, C., & Clay-Wilson, P. (2013, May). Improving outcomes for youth with disabilities: An interagency collaboration model. Roundtable discussion at the annual Midwestern Psychological Association Conference. Chicago, IL.

Awsumb, J. M., Balcazar, F. E., Dimfl, S., Oberoi, A., Cariño, S., & Arellano, R. (2012, October). Multiagency collaboration for the successful transition of students with disabilities. Symposium presented at the 25<sup>th</sup> annual Midwestern Ecological Conference. Hickory Corners, MI.

Hunnell, J., Jason, L. A., Balcazar, F. E., Porter, N., Anderson, V., Brown, A. (2010). Health and public policy. Round Table Discussion at the annual Midwestern Psychological Association Conference. Chicago, IL.

Hunnell, J., Balcazar, F., Howe, S., Jason, L. A., Keys, C., Porter, N., et al. (2009). Public policy roles for community psychologists. Round Table Discussion at the 22<sup>nd</sup> annual Midwestern Ecological Conference. Chicago, IL.

Williams, T. T., & Hunnell, J. (2009). Reducing barriers for African American parental involvement in their child's education through interdependent relationships. Symposium presented at the 12th Biennial

Conference of the Society for Community Research and Action.  
Montclair, NJ.

PROFESSIONAL  
MEMBERSHIP:

Division on Career Development and Transition (DCDT)

Council for Exceptional Children (CEC)

Society for Community Research and Action (SCRA)

Midwestern Psychological Association (MPA)

American Psychological Association (APA)

AWARDS:

Health Professional Student Council Travel Grant, 2016

University of Illinois at Chicago Graduate Student Council Travel Award,  
2015

Student Presenter Award, 2015

President's Research in Diversity Travel Award, 2013

University of Illinois at Chicago Graduate Student Council Travel Award,  
2013

Student Presenter Award, 2013

Psi Chi National Honor Society, 2009

Psychology Honors Program, 2009

Deans List- DePaul University, 2008-2009